

PHENOMENON of VIOLENCE

(FROM DOMESTIC TO GLOBAL)

View from the Position of Prenatal and Perinatal Psychology and Medicine

> Edited by Prof. Grigori I. Brekhman and Prof. Peter G. Fedor-Freybergh

INTERNATIONAL SOCIETY OF THE PRENATAL AND PERINATAL PSYCHOLOGY AND MEDICINE (ISPPM)

INTERNATIONAL ACADEMY OF ECOLOGY, MEN AND NATURE PROTECTION SCIENCES (IAEMNPS)

INTEGRATIVE RESEARCH INSTITUTE OF EANS IVANOVO STATE MEDICAL ACADEMY MINISTRY OF HEALTH RUSSIA

PHENOMENON of VIOLENCE

(FROM DOMESTIC TO GLOBAL)

View from the position of prenatal and perinatal psychology and medicine

Edited by Prof. Grigori I. Brekhman, M.D., Ph.D. and Prof. Peter G. Fedor-Freybergh, M.D., Ph.D.

Israel 2017

PHENOMENON of VIOLENCE (FROM DOMESTIC

TO GLOBAL). View from a position of prenatal and perinatal psychology and medicine. Eds. Prof. G. Brekhman & Prof. P. Fedor-Freybergh. First publication: Haifa, News Agalil, 2005. 240 p. (in English and Russian languages). Reprinted - Israel 2017.

ISBN 9-78965-908-14-17

The given collective monograph includes articles of the conducting scientific different countries working in the field of new interdisciplinary science - prenatal and perinatal psychology and medicine. From a position of this science the scientists investigate a phenomenon of the increased aggression and violence in the world. The disclosing of the important role prebirth and birth impressions in an origin of violence allows to approach to a question of its preventive measures. The influence on one of parts of a vicious circle of violence will allow in the certain measure to lower its level in family and society. Intends for a wide range of the readers.

Review: Prof. M. Fel, Prof. G. Klevitzki, M. Zhuravski (Israel)

Prof. A. Baranov, Prof. R. Shyliaev (Russia)

Copyright © 2003 by Grigori Brekhman.

All right reserved. No portion of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical, without written permission of the author and writer. C

Contact Information - grigorib@013.net

Foreword to the edition of 2017

Dear Reader!

This collective monograph first published in English in 2005 (Haifa: News Agalil). Specialists showed the great interest in it, its edition was sold out within one year. Over the years, the problem of violence has retained its high relevance.

Violence as a phenomenon probably accompanies the whole history of mankind. In the beginning it was used as a way of fighting for food and water sources, against the opponents of the tribe, the clan. Violence was directed not only against the opponents, but against their loved ones - family members: wives, children in order to maintain a level of fear and obedience. Over time, this experience has expanded and spread against to citizens of the country (the adjacent countries).

The motives for violence changed, and aggression has justified by the need to conquer natural resources for the survival of its people. In parallel, it was transformed into violence against its fellow tribesmen in the form of terror towards the true or imaginary opponents of the leader, as a method of intimidation, as a way of fighting for personal elevation of leader, for power. History knows the horrors of violence for religious, national, ideological domination within the country, and beyond its borders.

Gradually, violence began to be directed against those who had not yet been born, who were either involuntarily or involuntarily conceived, but not at the time when it was necessary and convenient for parents, against those who did nothing wrong to people and could not defend themselves, against unborn children in the form of an abortion. The prevalence of abortion in the world is quite high (more than 40 million per year - data of WHO), as well as the number of births (the millions) - in case of an unwanted pregnancy. Experts explain this phenomenon by social and economic transformations in human society, which changed the attitude of people towards parenthood in favor of the education of women for their maximum inclusion in the social life of society.

Meanwhile, unwanted children experience suffering, psychological discomfort during their lifetime. They try to prove their worth, and in this case they often use aggression and violence, even criminal behavior. Some of them direct this violence against themselves. The increased prevalence of suicide among adolescents may be a manifestation of autoaggression and a confirmation of the origins of this phenomenon.

Studies in the field of prenatal and perinatal psychology have found that the unborn child has emotional perception and memory, which allows him to remember the events most emotionally experienced by the mother and even her not voiced thoughts from the moment of conception. These impressions form the basis for the thinking and behavior of the children and adult during the whole subsequent life.

The development of quantum physics, quantum mechanics, the theory of corpuscular-wave dualism of matter, wave genetics have highlighted the way of wave prenatal transmission of information from the mother to the unborn child, including information about love and hatted. Epigenetics explained how the perceived information can be fixed in the genes, and thereby confirmed the possibility of a transgenerational transmission of information from generation, which was discovered by psychologists of different countries.

Experts suggest that the causes of violence are the socio-economic, political conditions of life and the spiritual crisis observed in society. Supporting this opinion, prenatal psychologists try to draw the public attention also to the prenatal sources of violence. This collective monograph includes articles by leading scientists from different countries who study the phenomenon of increased aggression and violence in the world from the perspective of prenatal and perinatal psychology and medicine.

Some authors of the articles left us: Paula Ingalls, David Chamberlain, John Sonne - let the memory of them be bright! This publication is a sign of the memory about them and of the important things they have done for people.

In general, the authors of the monograph, considering the phenomenon of violence from the point of view of prenatal psychology, express the opinion that the impact on one of the links of the vicious circle of violence - on the prenatal phase of human development - will allow to a certain extent to reduce its level in the family and society. This requires a wide awareness of the people of the planet about the role of the prenatal period of life in the origin of such a disgusting phenomenon as violence in its various manifestations. These ideas were the motivation for the second publication of this collective monograph in the Internet.

Prof. Dr. Grigori Brekhman

Contents

1	
Preface.	6
Grigori Brekhman, Peter Fedor-Freybergh	
2	
Prenatal and Perinatal Psychology and Medicine: New Interdisciplinary Science	7
in the Changing World.	
Peter Fedor-Freybergh (Sweden, Chech Republic)	
3	
The Prenatal and Perinatal Roots of a Later Disposition Towards Violence.	19
Ludwig Janus (Germany)	
4	
Birth and Violence.	25
Thomas Verny (Canada)	
5	
Psycho-spiritual Roots of Human Violence and Insatiable Greed	33
Stan Grof (USA)	
6	
The Vulnerable Prenate.	47
William R. Emerson (USA)	
7	
Abortion Survivors At Columbine.	59
John C. Sonne (USA)	
8	
Baby about Violence.	71
David Chamberlain (USA)	
9	
Mother's Experiences - Ours Prenatal Impressions.	82
Jon RG & Troya Turners (Netherlands)	
10	
Violence Begets Violence	89
Paula M.S. Ingalls (USA)	
11	
Domestic Violence: Prevalence among Women in a Primary Care Center - A	94
Pilot Study.	
Mirta Grynbaum, Aya Biderman, Amalia Levy,	
Selma Petasne-Weinstock (Israel)	
12	
Prevalence of the domestic violence among the woman - visitors of specialized	98
polyclinic obstetricians advice.	

Marina V. Kuligina, Lubov V. Posiseeva, Grigori I. Brekhman (Russia, Israel)	
13	
Mechanisms and ways of interaction between the mother and unborn child.	103
Mother as a "transmitter" of the violence to the child. Violence against the	
women – Violence against the new generation of people	
Grigori I. Brekhman (Israel, Russia)	
14	
Conclusion Remarks	131
Grigori I.Brekhman, Peter G.Fedor-Freybergh	
15	
References	134
16	
About the Authors	147

THE PREFACE

Dear reader!

This book is devoted to one of the most urgent problems of modernity: aggression and violence. During the 20th century mankind has gone through two World wars and innumerable interstate wars and conflicts, revolutions and cataclysms. Mankind protests and vainly tries to find ways to counteract disastrous displays of state violence, street violence, religious violence, domestic violence, interpersonal violence. Humanity met the 21st century with hope for peace. But, the terrorist attack of September 11, 2001 on the USA, and terrorist (as a matter of fact) war against mankind have shown, that a new turn of violence began with methods even more refined and severe, connected with cool mass murders of peaceful citizens, women, children and elderly men.

People devise terrorist acts and make them happen. That is why terrorist personalities intentionally attract special attention to themselves. What makes him act out such violence? Experts believe, that social, economic, pedagogical, as well as genetic factors lay in the foundation of terrorism. They connect the occurrence of killing and suicidal tendencies in the terrorist with his inadequate education, the impact of an aggressive environment, and psychological trauma received by an individual in childhood. All this is correct. But, today, science has opened new aspects, which give additional understanding of the terrorist threat.

During last third of the 20th century, a new interdisciplinary science – Prenatal and Perinatal Psychology and Medicine dedicatedly began to develop. It has united psychologists, psychotherapists, psychoanalysts, and other specialists, who have discovered that, quite often, psychological trauma is programmed into people even before birth. Stress which mother is experiencing during pregnancy and labor, as well as her personal attitude towards the child (love or rejection, wanted or unwanted) remain in his memory, and then, after birth, her diminishing patterns define his thinking and style of behavior. In combination with genetic memory, the prenatal experience becomes a background template, on which, after birth, the personality is formed. That is why when we are speaking about the role of environment and education in the formation of aggressive and violent character, it is necessary not to miss the important role of the prenatal background and whatever it forms. Experts give special attention to the problem of stressed, injured and unwanted children.

The common portrait of the unwanted children includes such features as: uncertainty in themselves; massive dependency; difficulties of adaptation in a social environment; bad feelings of attachment and responsiveness; emotional 'deafness'; neurosis; mental disorders (Matejcek e.a., David e.a., Zakharov, and others). These 'unwanteds' can be ambitious; vindictive; have pointed requirements for recognition with criminal ways of the realization of this

need, and at any costs. Not being wanted, even from the moment mother realizes she is pregnant, can initiate criminal tendencies, etc. The reader will find detailed characteristics of unwanted children in many papers of this book. These psychological features of unwanted children, in many respects, coincide with an integrated psychological portrait of the terrorist, which J. Antonyan described: a high level of aggression and readiness to use any means for achievement of their purpose; feelings of unconscious anxiety; constant readiness to think that he is threatened with danger; constant readiness for protection from attack; infantilism plays a great role in it; the unconscious threat to remain one on one with the world strengthens their aggression, etc. This pathology in children who kill children and adults is called Reactive Attachment Disorder.

All these diminishing, even destructive perceptions induce us to reflect on the role of 'undesirability' as the background for the increased level of aggression in the world. The value of this factor is difficult to overestimate when we take into account that a third of children in the world were born unwanted (the United States Department of Health, 1990). There is evidence that the figure could have substantially increased if not in numbers at least in pathological consequences. In this group of the of terrorists, individuals are identified whose feelings of self-value are lost; there is an aspiration to death; with an indifference not only for their own lives, but also for lives of other people. Such individuals appear in the group of the destructively inclined people, who aspire to satisfy their excessive ambition by the global violent change of the world. They can appear in the roles of ideologists and/or executors through killing and/or suicidal actions on very large scales.

Increasing research and publications of scientists, analysts, state and public figures are devoted to aggression and violence. In this book, the assembled materials consider aggression and violence from a position of prenatal and perinatal psychology and medicine. The authors of the book are known experts in their areas of expertise. Analysing numerous examples of violence, the authors come to coinciding conclusions: violence invoked

on the unborn, and subsequently, to the born child can transform him into an aggressor and criminal violator. The consequences of that behavior depend on the level of his intelligence, education and the place he occupies in a community. The conclusions made by the authors from many countries, having great vital and professional experience, working independently from each other, allows us to take them with definite authority.

Some papers were published in other editions, and with the sanction of the authors and publishers are included in this book. The sense of the publication of these works in one book, located under one cover is that the authors add, develop and support one another's urgent message. All together, they hope to evidence to the reader, that, alongside already known causes, there is one more important factor – prenatal - supporting violence on a high level. We hope, that the contents of this book will allow the reader to recognize the importance of prenatal sources of violence. And, once acknowledged, to direct their resources to a way of prevention and reduction of the level of violent aggression. Actually, we want to underline that the prenatal period is '...unique time in preventing later illness or disturbances' (Fedor-Freybergh P.).

This book is addressed, first of all, to a wide public, but professionals also will find it of substantive interest. For example, parents, teachers, tutors and psychologists will find help explaining abhorrent behavior of children. Lawyers can better understand the mentality and violent style of behavior of criminals: correctly form accusation, to strengthen protection, and to plan parameters for punishment of the defendants. Psychotherapists will find in this book an explanation of the failures as well as substantiation for other (non-verbal) methods of psychotherapy. Obstetricians will receive data about the perinatal trauma and the basis to change harmful and unnecessary technology in birth care. State and public servants will find in this book useful information that will help them with a choice of priorities deciding policies for beneficial improvement of society.

Grigori Brekhman, Peter Fedor-Freybergh

Prenatal and Perinatal Psychology and Medicine: New Interdisciplinary Science in the Changing World

Peter G. Fedor-Freybergh (Sweden/ Czech Republic)

Abstract: The prenatal stage of life represents a unique opportunity for the primary prevention of psychological, emotional and physical disorders in later life. At this stage we can also develop preventive procedures to decrease premature birth and perinatal morbidity and mortality. In order to understand the enormous potential power of the prenatal processes and their impact on the individual's prenatal and postnatal health, we have to ask ourselves what the prenatal stage of life implies.

The encounter with the unborn is the beginning of the continuum of human life towards self-realization. The key to this life impulse is for everyone and especially each one of us in psychology and medicine to extend the standard definition of life's continuum to include the prenatal experience because it is an indivisible part of life's continuum. We need to do this because the prenatal stage is what shapes us. And, it determines who we are and what we will become. For the unborn, it is primarily through the imprinting process that this experience is initiated and realized. For the mother, pregnancy, the encounter with the unborn is her chance for self-realization. For the rest of us this encounter with the unborn is the opportunity to extend and deepen our own understanding of this life continuum wherein there can be found no possible separation between the physical and psychological dimensions of our existence(1).

A New Interdisciplinary Science

Prenatal and perinatal psychology and medicine is a relatively new interdisciplinary scientific field within medical and psychological research, the practice of which attempts to integrate different disciplines dealing with the basic questions of life and its disturbances.

Emphasis is placed on the interdisciplinary character, which enables different scientific specialties such as medicine, psychology, psychoanalysis, anthropology, human ethology, sociology, philosophy and others to meet. And, in dialogue, each is able to find a common language and go through the process of a mutually creative influence or, as it were, a "cross fertilization".

Prenatal and perinatal psychology and medicine can also serve as a "psychosomatic" model stressing the indivisibility of "psychological" and "physical" processes in the continuum of human life from its very beginning and also the indivisible development of all functions of the central nervous system and the immunological and neuroendocrinological processes.

One of the important intentions of this new scientific field is the publication of different methodologies, both from experimentally oriented methods and studies and also from more introspective methods. This new attitude invites us to look for and find a common language. And, through a common language to diminish semantic misunderstandings. It also enables us to define a scientific

theory applicable to this new interdisciplinary and integrative approach. Integration linguistically means, among other things, assimilation, fusion, incorporation, combination, unification and harmony. The latter, harmony, should be stressed in particular - harmony and cooperation between different integrated approaches and views, methods and methodologies, theories, ideologies and practices, rather than confrontation and disagreement.

Society at large must encourage a sense of responsibility in parents-to-be and counsel couples long before conception about their commitment toward the new life; it is essential that this new life be highly respected from the very beginning and be considered as an equal partner in a dialogue. This dialogue begins at conception and continues through the prenatal, perinatal and postnatal stages of life(2). It influences the outcome of the birth and the way the individual during its childhood, adolescence and adult life will treat other people. And, most importantly, it contains the seed of the child's ability to love and respect others and to make commitments(3).

The prenatal stage of life represents a unique opportunity for the primary prevention of psychological, emotional and physical disorders in later life(4,5). At this stage we also can develop preventive procedures to decrease premature birth and perinatal morbidity and mortality. In order to understand the enormous potential power of the prenatal processes and their impact on the individual's prenatal and postnatal health, we must ask ourselves what does the prenatal stage of life imply(6).

Pregnancy can be conceived as an active dialogue between mother and child(7). This dialogue is not limited but is enlarged via the dialogue between the mother and the father and the mother's psycho-social environment. This discourse is part of a very active and mutually interdependent process taking place on several levels. Minimally, these include the psychological, emotional, biochemical and psycho-neuroendocrinological levels.

I have never heard a mother refer to the child in her womb as "my embryo" or "my fetus." The mother says "my baby" or even calls the child by a personal name. Generally, pregnant mothers show a high degree of sensitivity and sensibility towards their unborn child which, by contrast, many professionals lack. The child is a very active partner in the pregnancy, an "active passenger *in utero*"(8). The mother-child interaction, consequently, not only has a biological but also a psychological and social character.

This mother-child dialogue begins on an unconscious level - probably from the very beginning of the unborn child's development. From the mother's side, the dialogue will become a r eality when she, consciously or unconsciously, makes the move to experience the unborn "it" as the unborn "you". This event initiates her into the beginning of a conscious encounter with her child.

The transition from "it" to "you" is just one consequence of the sensitivity and sensibility of the unborn and the enormous creative potential in the psyche of the mother(9). The dialogical experience is independent of the degree of morphological development of the child(10).

There is a strong impact of hormonal, psychological and immunological influences already on the whole embryonal and fetal development. Birth is only a part of a comprehensive human development. The circumstances around the birth, the birth itself and the consequences for the child, the mother and the father in the postnatal period will essentially depend on the prenatal stage of life. This is especially influenced by essential bonding impacting and unifying the child, the mother and the father. It is wise not to separate the role of the father from the role of the mother and child, and also not to separate the labor from the continuum of the prenatal experience.

The father should be involved and incorporated in the entire prenatal care from the very beginning and treated as an equal partner in the process. The father's experience will vitally influence his activity during labor and his bonding abilities with the child during birth, the prenatal and postnatal periods.

The First Ecological Stage of Life

Pregnancy can be considered as the first ecological position of the human being, the womb as the first ecological environment(11,12). It is surprising to see how few professionals, even psychologists, realize this basic fact. That there are still a large number of obstetricians, gynecologists and other professionals who merely consider the womb as a "baby-carrying" anatomical organ. Despite thousand of scientific studies, there are still birth professionals unaware of the "toxic pollution" of potential psychological and social threats to the unborn child.

The dialogue between the unborn child, mother and father creates a "primary togetherness" (13), which in turn helps to foster strongly compelling psycho-physical predispositions. Potentially, any such inborn predilection has the ability to orient and shape forthcoming emotional and social responses, especially with regard to interpersonal relationships. The consequences of these experiences of primary togetherness run along a wide range, including love and ethical behavior.

Life Is an Indivisible Continuum

The human life should be considered as an indivisible continuum where each of the developmental stages is equally important; all stages interdependent and inseparable from the whole individual's life continuum. In this continuum, the individual represents an indivisible entity of all functions on both physiological or physical, psychological and social levels. The physical, biochemical, endocrinological, immunological and psychological processes represent a whole, which cannot be divided(14).

In order to understand the process during the prenatal stages of life, a new language is required and a new scientific theory is needed. Such a language must assist us in getting beyond the semantic problems and confusions, which exist in so much medical and psychological vernacular(15).

It is not possible to separate any stage of human development from the rest of an individual's life continuum. The life continuum is one of the basic needs in human life in order to maintain homeostasis and equilibrium. The disturbance of the individual's life continuum on a momentous scale would lead to illness or in extreme cases, where homeostasis cannot be regained, death is the result.

Discontinuity as a Social Disaster

Any discontinuity from outside or from inside the individual organism will violate these basic biological and psychological needs, both on prenatal and postnatal life. Discontinuity has increasingly become a more serious problem today causing the spread of ecological, social and political disturbances throughout the world. No group of people or any nation is wholly immune from the upheaval of disorienting developments on ecological and social levels(16). Many in the scientific community are very much aware of the effects of such events, and see how the discontinuity and disequilibrium beget many of today's mental and social diseases(17). In the field of prenatal and perinatal psychology and medicine, we are very much aware of the dangers which discontinuity can generate in the unborn and in the newborn.

Psychoneuroendocrinology & Psychoneuroimmunology

The latest development of two relatively new and innovative lines of medical and psychological research, namely psychoneuroendocrinology and psychoneuroimmunology, are very promising. Research in these two areas is particularly important in serving as the scientific basis for the philosophy behind prenatal and perinatal psychology and medicine.

Various highly specific biochemical functions (hormones, neuro-transmitters and other polypeptide structures) are needed in direct connection with input phenomena for the transformation and storage of both sensorial and mental types of information. Some of these functions, crucial to the formation of the primary central nervous system on the hypothalamic-pituitary-adrenal level, are already detectable at the very beginning of the development of the human being. Thus, the embryo successively develops a high sensibility and competency for the potential ability of perception and learning(18).

The intrauterine experience is also a learning process for the child(19). This learning is a vital prerequisite for survival since it makes it possible for the organism to adapt itself to new circumstances(20). Without adaptation there would be no survival and one cannot adapt without making and having had experiences upon which to base the adaptation. Such a process requires memory, whether consciously retained or subconsciously imprinted. The information processing which reaches the child from the very beginning of its development will be received via the different biochemical pathways and then transformed and stored as memory traces (this could eventually be useful to a theoretical understanding of certain psycho-therapeutical procedures, such as hypnosis, dream analysis, prenatal memories, etc.).

Function Over Structure

At this stage the embryo already shows evidence of responding to and retaining the impact or imprint of sensory experiences in a biochemical language, which remain as a potential learning source. These prebirth memory imprints may in turn be revoked as informational sources (whether negative, positive or ambivalent in character) during later life.

The implications of these preliminary findings are far reaching. These will require nothing less than radical rethinking of the standard human-embryo development paradigm wherein structure is presumed to precede function. To the contrary, as we have indicated earlier, there is strong evidence(21), which supports the primacy of function over structure, the morphological organ. It

is the morphological structure, which develops as a result of the inborn primal functional urge. An organ would not develop if there was no functional urge compelling it to do so. In the same way, the mental capacity of the human is not posterior to the completed morphological structure of the brain, nor to its subsequent introduction into and experiencing of a particular sociocultural environment after birth(22). The unborn already has its psychological processes which function long before birth; no child is tabula rasa(23).

Mother's Role as Mother

We must reaffirm that the mother is not just a "receptacle" for the child's growth, but an active initiator and participator. Today it is imperative to reestablish the woman as the primary choice * maker in this powerfully creative process. Indeed, she is involved in a procreative process with great creative powers of her own. The future mother needs to be aware of these powers and how to be in touch with them in order to be better equipped to guide and augment this creative undertaking. Pregnancy can also enable the mother to withdraw into a kind of "creative regression" in order to enter into an intimate dialogue with her unborn child. In order to make an informed and stress-free choice, family planning education must begin well before conception. Responsible parenting is not necessarily an automatically bestowed gift from

"Nature" or even an easily acquired talent. Parenting skills very often need to be taught. This requires research concerning appropriate socio-pedagogical implementation within the family and in our educational systems. It is vital that an integration of prenatal and perinatal studies into medical and psychological curricula at the universities is provided.

We need to establish a new educational system, which would prepare people for conscious parenthood. Radical change of prenatal care is necessary, where not only medical but also psychological and social life circumstances of both parents are be taken into serious consideration. The prenatal care should consider the child as an active partner in a psycho-social dialogue with his parents who are given the opportunity to have encounter with their unborn child in a free and non-violent society.

Unwanted children are morally threatened & are a moral threat to society

The ideal child should already be loved prenatally. There should not be unwanted child-ren(24,25). Unless we can achieve these mental and social conditions concerning the prenatal stage of life, all positive changes in the world would be superficial and there would also be the danger of a threat to basic human needs and rights, to cultural and traditional values, and to civilization and freedom itself(26,27,28,29).

Pregnancy can sometimes be experienced by both the mother and the father as a life crisis, which does not necessarily imply a negatively charged situation. Any crisis may be envisioned as a challenge, which can bring about creative and positive solutions or alternatives. We can quite often see during pregnancy that old, latent and unsolved conflicts become manifest. Frequently these can be worked out during the course of the pregnancy in a very constructive way. Indeed, it should be pointed out that many of the conflicts and problems that a pregnant woman may experience are not the direct result of her pregnancy or her baby. Unresolved issues may re-evoke

psychological conflicts within her own personal psyche. In this way, the pregnancy often gives the mother and father a unique opportunity to further their own inner psychological development, sometimes within psychotherapeutical settings.

Psychotherapeutic research and practice has again shown how decisive negative emotional influences and disturbances in the prenatal dialogue are on mental conditions and diseases in later life. Dr. Ludwig Janus has observed that psychological traumas and prenatal and perinatal problems have largely been shown in about two thirds of psychotherapeutic adult patients. It becomes exceedingly evident how important the emotional maturity, mental health and social awareness of the parents of the unborn child are. The need for psychotherapeutic intervention on both the pregnant mother and father-to-be is becoming more relevant(30).

No guilt or inferiority feelings should be imposed upon the pregnant parents nor any moral judgment placed upon them. We need to be aware that not all pregnant women have the opportunity or possibility to provide their unborn child with optimal nurturing conditions either economically or emotionally or within their social structures. Pregnancy is always a dynamic process of constantly fluctuating emotions, attitudes and even intellectual discourses. A mixture of positive, negative and ambivalent emotions almost always characterizes the mother-child dialogue. Society has a responsibility to ensure that the mother-father-child unit can not only survive but develop and grow in the best possible circumstances.

Risk Pregnancy

Moreover, it must be added, that a living organism has a strong propensity to adapt and even to repair damage, or to compensate for some failure from a previous developmental stage of the life continuum. What is unfulfilled in one stage of experience can be applied to the next and, eventually, worked out to the inner satisfaction of the human being. The term "risk pregnancy" is still used almost exclusively in its biological sense. This means it is reserved for somatic disturbances, physical diseases or handicaps experienced by the mother during pregnancy, which could have a bearing on the biological health of the baby. Here we can see again how firmly institutionalized medicine and medical philosophy, with its static terminology and categorizations, result in the body-mind division and result in the continued promulgation of psycho-physical parallelism. In a holistic and comprehensive view of human life, we cannot make divisions between so-called "somatic" and "psychological" phenomena. Psychologically, medically and anthropologically considered, all life events are experienced as indivisible phenomenological situations wherein body and mind (soma and psyche) represent an entity of mutual influence and interdependence within a particular socio-cultural environment. In this way, all events of either a so-called "somatic" or "psychological" character, which could adversely affect the well-being and health of the mother or her unborn child, are seen as potential or real risks. It is therefore necessary to create a new kind of prenatal care whereby all risks can be screened in good time, and where parents are given the opportunity for comprehensive care, including access to psychotherapeutic counseling. 31,32,33

Pregnancy and delivery are not diseases *per se*, only very exceptionally. But, pregnancy and birth sometimes can become a disease due to a doctor's intervention. We have to give credit to

the inner wisdom of the pregnant woman and help her with our knowledge, our empathy and the scientific information to cope with her problems and with the potential or real risks if and when they occur.

Health & Self-Realization

This brings us to the topic of health. What was said before about the holistic and comprehensive view of all human functions will be true also in considering the issues of health and disease. The last definition of health by the World Health Organization (WHO) is "a state of complete physical and mental well-being which results when disease-free people live in harmony with their environment and with one another". 34

As Zikmund³⁵ points out, this definition, though including all three dimensions of life manifestations of man, biological, psychological and social, has several shortcomings. In his analysis of the dimensions of health and disease, he accentuates the functional aspects of health and disease and defines health as a functional optimum of all of life's processes - biological, psychological and social.

The psycho-physical organism tries constantly to maintain its health. It strives toward recovery, away from destruction; it strives toward homeostasis, away from disorganization and chaos. Health has clearly a very strong dynamic and creative dimension, and in 1974³⁶ I described health as "the dynamic movement along the creative path towards self-realization." Self-realization must be understood as containing biological, psychological and social dimensions. Self-realization with regard to the constructive integration of the dialectically changing, individually depending conditions with a simultaneous maintenance of the homeostasis of the "milieu interieur," and the balance in the striving for satisfaction of the individual during the continuous confrontation and adaptation of the psychoendocrine system with and to the "milieu exterieur" of ordinary day-to-day life situations.

Adaptation means not just the adaption of the individual to the environment, but also the possibility to transform the environment to suit oneself. We must abandon the restrictive, positivistic, objective approach to the individual and to the society. These approaches ignore the subjective specificity of each individual and each society with their own soul and spirituality, their own needs, feelings and thoughts. We have to strive after the renaissance of individual human uniqueness in a world where the individual and his environment should represent a spiritual unity in ecological and ethnic peace.

This is even more true for such a subtle situation as the prenatal stage of human development. But is it not so that, from a subtle and delicate process, large and important movements in philosophy, practice and global change can result? According to the "butterfly effect," events are interdependent to that degree that the very subtle and seemingly insignificant movements of a butterfly's wing are able to set off, somewhere far away, a large typhoon. This butterfly effect can be likened to the prenatal stage of human development. With this in mind, therein lies the unique opportunity to prevent destructive evil in the world. ³⁷

Care or Carer

The next topic I wish to stress is the basic needs of the human being. Invariably these needs are described as eating, sleeping and sex. But I feel that there is one more, very basic need which has never been addressed and that is the need for taking care of someone and the need for being taken care of. The being for whom we care becomes the most important being in our life and has also become a part of our lives. It is irrelevant whether the one we care for is an adult, a child, a prenatal child, a dog, a cat or a small bird - in other words, any living thing. This being cared for and being taken care of is one of the prerequisites of our survival and provides the homeostasis and equilibrium between us and our environment. When we are being taken care of we can be healed and cured and when taking care of someone we can heal and cure as well.

Another wonderful way to express this is with the words of Antoine de Saint-Exupéry: "On ne connait que les choses que I'on apprivoise", ... "Tu deviens responsable pour toujours de ce que tu as apprivoisé." In this way the bonding process is created and feelings of reassurance and well-being are established.

Bonding Starts With Grandparents

In order to predict how successful the bonding process between mother, father and child will be, we need to have a good knowledge of the personalities of the father and mother, their past, their expectations and visions, their fears and ambivalences. The importance of individual family history is becoming increasingly more apparent. The individual's life starts at the latest in the house of its grandparents, who do or do not pass on to their children (the present parents-to-be) the basic values of morality, ethics and respect for life, who then will or will not pass on these values to their unborn child.³⁹

An Interdisciplinary Dialogue

An interdisciplinary approach invites interdisciplinary discussions where the same topic can be viewed from different aspects. It should serve as a unique opportunity for the cross-fertilization between the different sciences and practices, rather than the more traditional multidisciplinary approach. Or, it was expressed in the leading article of Lancet in 1985, "Psychiatrists and immunologists do not meet much, and when they do they tend to speak in different tongues." (Leading article, Lancet, 1985)

An interdisciplinary dialogue is not only possible but even extremely creative and vitally necessary; and that the possibility of common understanding and thought within the language of different disciplines unique the "humanistis" in a disciplinate in the language of different disciplines and a challenge, a common language is required, a language that would be understood across disciplines and also would be able to assist in getting beyond semantic problems. One of those confusions is due to the reductionism still so very much inherit in the medical and psychological vernacular and which represents one of the major epistemological problems in the science of prenatal and perinatal life.

Integration vs. Disintegration

There is a contradiction in the major tendencies in society at large as well as in the family and in individuals. On the one hand there are increasing tendencies towards integrative processes within politics, economics, etc. on a world scale while, on the other hand, there is a disintegration of the family and of micro-social structures with the consequent alienation of the individual.

Enormous progress is being made in information processing and communication with internet, e-mail and cellular telephones in most every-one's possession while, at the same time, a decrease in and deterioration of communication from person to person. Fairy tales are out; CD-ROMs are in. I certainly do not advocate nostalgia for "the good old days." When the worst atrocities of World Wars I and II took place, the internet did not exist. But, there were fairy tales and the most degenerate war criminals loved children and dogs. That is, however, another issue. What I want to talk about here is the clandestine decline and disappearance of traditions and cultural values, of good education and good manners, of sensitivity and common sense, and the ever-increasing alienation of the individual from the very beginning of his life.

The prenatal child has become an object of research and observation. He or she is born as an object in alienated surroundings, brought up as an object and lives as an object patronized by authorities. Basic values such as closeness, love, compassion, empathy, solidarity, intimacy, intuition and natural instincts are suppressed by technocratic and bureaucratic manners. In this world of uncertainty and alienation, the individual is threatened by the deprivation of his or her basic rights.

The Year of the Unborn Child

Looking back to the UN "Year of the Family" and reviewing the atrocities around the world made to families, children and to entire societies and ethnic groups, we cannot but with deep sadness acknowledge that merely to make declarations is not enough. The world can be changed only if we achieve a change in the basic understanding of respect for life from the very beginning. It starts with a deep respect for the unborn child in its first ecological position in the womb, respect for the mother, respect for the child at birth, and welcoming it with great dignity as an equal partner in society.

We strongly believe that the health of the individual is determined very early in prenatal life and that we should put emphasis on our possibilities to optimize prenatal care for mother and child worldwide. It could be worth a thought to propose that the United Nations devote one year to "The Year of the Unborn Child." In June 2001 in Vienna at a Conference organized by the United Nations, UNESCO, the Vienna Academy of Future and ISPPM we dealt with Child Care for the next millennium.

In the International Journal of Prenatal and Perinatal Psychology and Medicine we have been very conscious of the dimensions of health and disease, both in children and in families, and have stressed the importance of primary health and primary prevention as early as in the prenatal stage of life (Int. J. of Prenatal and Perinatal Psychology and Medicine, V.5(3). As we have said elsewhere (Int. J. Prenatal and Perinatal Studies, V.4(3/4), pp. 155-60), if we want to create a

healthy, non-violent, creative human being, society or economic system, we must return to the primary urges and functions of that human being, that society or that system. We must guarantee the most optimal conditions possible at the very primary stages of development, whether in a human being or in a society. Only then can we achieve a true primary prevention of illness, mental and physical disturbance, hate, intolerance, violence and war, in the individual, in the family and in society.

Respect for human life from the beginning also will bring about new ways of treating prematurely born children with dignity (Marina Marcovich, Otwin Linderkamp, Ernest W. Freud).

Empathy for Empathy

We have to come back to learning empathy for other human beings. We have said that the life of the individual begins, at the latest, in the home of its grandparents. There the parents of this individual receive all basic norms and values of ethics, morality, empathy, respect for life and others, which they will then transmit to their own children even before they are conceived. Thus, we need to review the restrictive, positivistic, objective approaches to the individual and to society — an approach which ignores the subjective specificity of each individual and of each society with their own soul and spirituality, their own needs, feelings and thoughts. We must strive for the renaissance of individual human uniqueness — that the individual and his environment should represent a spiritual unity in ecological peace.

Optimalization of Human Life

In the last few decades or, even more so, in the last few years, we have witnessed rapid changes in the world where, at great speed, most positive tendencies towards liberalization and democratization of societies have taken place. At the same time, new dangers and fears from different movements towards new totalitarianism and fundamentalism in philosophy and practice are growing. It is therefore of extreme importance in this time of philosophical, political and social transitions to stress the awareness of the optimalization of human life conditions from the beginning. We are convinced that only a change of attitude, basic philosophy and practice concerning the prenatal conditions of human life would lead to a humanization of those societies toward non-violence and common respect for life and tolerance for individual freedom and self realization.

Unless we can achieve these mental and social approaches concerning the prenatal stage of life, all positive changes in the world would stay on the surface and there would always be a danger of threats against basic human needs and rights, against cultural and traditional values, against civilization and freedom.

The optimal vision we need to hold is of a society with high respect for life expressed by every individual and hence to achieve a socially healthy, non-violent world.

A Time to Be Born

The title of the 11th ISPPM Congress in Heidelberg, 1995, "A Time to Be Born", proposed by the past president of the ISPPM, Rudolf Klimek, stressed not only the individual freedom of mother and child to decide the term of labor as the result of the creative dialogue they have had during the pregnancy, but also that it is time for the birth of a new awareness by society that the prenatal and perinatal stages are the most crucial and decisive in human life. Awareness that the unborn child is already a personality, a psychological and social partner to its parents, and, through them, to society as a whole must be brought to the fore.

Indeed, the history of humanity is also the history of children and this history begins at the very start of life, at the very latest at conception. There is a change in the consciousness of society concerning the vital importance of the events from the prenatal and perinatal periods for the physical, mental and social health of humans. There is an increasing awareness, interest and even involvement in both professional and political environments for the importance of and the need to improve prenatal life and the circumstances surrounding birth.

Studies of Psychohistory (Lloyd DeMause, Robert MacFarland, Alenka Puhar, et al.), studies in Epidemiology (Matejcek, Dytrych, Hau, et al.) and studies in Psychotherapy (Janus, the Turners, Hau, Caruso, Benedetti, et al.) have clearly shown the impact of being loved, wanted and respected by the individual and the ability to cope with their own problems as well as the problems in society.

If we can ensure that every child is loved and wanted from the very beginning, that it will be given respect and that respect for life is placed highest on the scale of human values, and if we can optimize the prenatal and perinatal stages of life without frustration of basic needs, without aggression and psychotoxic influences, the result could be a non-violent society.

The way you treat your child is the way the child will treat the world. This includes the unborn child, and this is also the whole truth about primary prevention.

18

The Prenatal and Perinatal Roots of a Later Disposition Towards Violence

Ludwig Janus (Germany)

Introduction. A variety of studies in the field of traditional criminal psychology have shown that people who commit acts of violence have had a difficult childhood and youth. Violent experiences, a broken home and a lack of positive opportunities for identification are particularly significant (Füllgrabe 1997). There are a number of observations in modern psychotherapy showing that problems begin even earlier than was previously thought (Karr-Morse and Wiley 1997). Prenatal experiences of being unwanted, in particular, determine the basic pattern of dealing with emotions and the tendency towards particular types of action (Janus 2001, 2002a). Case studies in psychotherapy have recently received convincing support from the results of research in the field of development neurobiology, demonstrating that the prenatal environment plays a role in determining the type of synapse formation that occurs (Hüther 2002). In addition, empirical studies have shown that people who experience violence before and during birth have a tendency towards violence later in life (Kandel and Mednick 1991; Raine 1994; Verny 1997).

Moreover, it is significant that the difficult childhood environments described by criminal psychologists do not provide individuals with sufficient opportunity to work through traumatic early experiences. The people they relate too are usually traumatised themselves and not fully developed, and destructive, aggressive experiences are thus repeated. It is important to note that the majority of unfavourable primary experiences are lived out in self-destructive forms of behaviour and psychosomatic symptoms and that only a minority lead to open acts of violence. The one-sided combination of being unwanted and experiencing violence at an early stage of life appears to be crucial here (Raine 1994). There is even the possibility that there has been an attack on the prenatal child by an abortion attempt, that has been survived Under unfavourable circumstances this can reenacted by the adult through an act of terrorism (Sonne 2000).

The overall social milieu in which young people grow up and its values and conflicts are also significant. During childhood and youth, the family and the surrounding group are initially important. The patterns of behaviour and values displayed here have a formative influence on children; in a dissocial milieu and under unfavourable conditions, their scope for development is limited. During puberty, young people try to find their place in society. Here, a society's conflicts and values are significant for the individual's further development. In historical societies, military and aggressive attitudes were considered an important ideal in young men, while this changed in democratic societies during the past century towards the ideal of the non-violent resolution of conflicts. Imagined or real emergencies within a society can also promote the tendency to deal with conflicts using violence.

It is important to note here that the collective conditions of early socialisation play an important role in a society's disposition towards violence. The excessively harsh conditions for children in Central and Eastern Europe formed in the last century a context that made these societies unable to manage the transition from a monarchistic and theocratic to a democratic form of society in a peaceful manner (DeMause 2001). In the same way, the violent conflicts in Yugoslavia in the

transition from dictatorship to a more democratic form of society are rooted in the very difficult and harsh conditions that prevailed for children, particularly in central and southern Yugoslavia (Puhar 2000). The problem of the early roots of a tendency towards violence later in life is therefore made up of various aspects; these will be discussed in the sections that follow.

The conditions during early life for people who turn into murderers

The connections between prenatal stress and later criminality have been dramatically illustrated in the conversation protocols published by Balthasar Gareis and Eugen Wiesnet (1974):

"When I was in the third month of the pregnancy with Anton, I wanted to get married. When my father found out — I was seventeen at the time — he became absolutely furious and beat me. I could not get married because the man was unacceptable to my father. ... From the moment he knew I was pregnant, I did not have another quiet moment. When I came home late in the evening and he realized that I had been with Anton's father, I was unable to sleep the whole night long because he had abused and beaten me so much. I would cry the whole night. I even tried to take my life at that time but I did not find the courage to do it because I remem-bered my child. ... In the time before the birth, I became so nervous that I would begin to cry over the smallest thing. ...

Finally, it got to the point that even Anton's father didn't like me anymore because I let myself get so rundown. ... Anton's birth was the worst experience of my life. After his birth, his left arm was paralysed. ... When I was breast-feeding him, I cri-ed all the time so that Anton began to cry as well. Anton was often ill. He was restless, nervous and very easily frightened.

... My other two children are completely different. But during the pregnancies with them, there weren't any unpleasant events. Nowadays I think that the pregnancy is the most important time in the life of a child. Anton has a good heart. He didn't want to murder. It is not his fault that he is the way he is." [p. 16]

As a boy, Anton had occasionally attracted attention in school because of his diffident attitude, irritability and his unpredictable behavior, everything from self-mutilation to massive aggression.

"When he was seventeen, Anton brutally murdered a sixteen-year-old girl. He killed her most cruelly by multiple strangulation, choking her for a few minutes at a time. Anton committed the crime without any emotional excitement. ... His personality disturbance can be seen in heightened irritability, tendency to mistrust and jealousy. In addition, he has moods which can rise to exhibitions of suicide. Anton reacts in a peculiar way to unusual stress and opposition in his surroundings. On the one hand, he shows the tendency to get his way at any price and on the other he avoids difficulties, is undecided and becomes sentimental." [p. 15]

Here is a second report about a 16-year-old youth called Uwe who committed robbery with grievous injury to the victim. The mother's statement:

"Actually it all began in the pregnancy. After I realised that I was pregnant with him, I went to the doctor's and just couldn't believe that I was going to have another child. My husband was also so disappointed because we only had a small apartment. You just wouldn't believe how unhappy I was about the pregnancy. I was so nervous and at the end of my tether. I was sometimes dreadfully unhappy and felt such anger towards the baby. Sometimes I even thought about abor-

tion but that would have been so unjust. I was so nervous at that time that it showed in my face. I actually got a twitch which stayed for quite a while. Even today, when I get nervous, as, for example, when I heard about the crime, the twitch starts up again. The agitation must have had an effect on the child. He was very weak after his birth and nearly died. That's when I felt a deep pity and looked at things differently. Then he could not tolerate my milk, drank badly and most of the time vomited everything out again. As a result he hardly put on weight and was often ill. He permanently had fever, sore throat and pimples. I just don't know where that came from. He was so nervous and restless that he stayed well behind in his development.

... You can still notice to this day that he is unquiet and uneasy. ... When he is nowadays agitated, then his eye always twitches. He always gets into a rage so quickly. Both of these he got from me during the pregnancy. The other three children are completely different. ... But despite everything, Uwe isn't to blame. If only I hadn't got so upset when I found out that he was on his way." [p. 18]

I imagine that some crimes are in a way the living out of prenatal suffering and agony, as if the hellish dream described above were put into practice. This always presupposes that the pre- and perinatal trauma could not be cleared up in the time after birth. In Germany, the now famous case of Jürgen Bartsch, who murdered children in a cave, bears the traces of the reactivation of an abortion trauma, a prenatal experience that is deflected onto the victim through sexual perversion. Bartsch reported that he used to hallucinate a crime many times before he carried it out (see Förster 1984). The information about the beginning of his life is sparse but does not exclude the possibility of all sorts of negative experiences. He was born outside of marriage: "He remained in a clinic during his first year of life. His mother, who in any case did not want to have him, died shortly after his birth" (p. 21).

Empirical studies on the early stages of life of violent criminals

The connection between early experiences and later acts of violence has been particularly well demonstrated for the tendency towards violent behaviour in individuals who experienced a difficult birth with medical complications (Mednick 1971; Kandel and Mednick 1991). The decisive aspect in early experiences of pain and violence leading to a disposition towards violence later in life is the fact of being unwanted, as the study by Raine (1994) shows. This also fits with observations made in individual cases. If a child is unwanted or its mother is not psychologically and emotionally fit for motherhood, the child can only form a relationship using the "fight or flight" pattern and a destructive form of defensive behaviour.

This connection between being unwanted, experiencing problems in forming primary relationships and having an unusually difficult birth is present in almost 100 per cent of violent criminals (Kandel, Mednick 1971). Here, too, it should be remembered that even if conditions are unfavourable in that a child is unwanted and experiences violence early in life, the child will not usually become violent; however, he or she will usually live a limi-ted life hampered by a lack of self-esteem, neurotic and psychosomatic symptoms and social problems and Häsing,Janus 1999; Levend, Janus 2000).

The history of risks at the beginning of life

In historical societies, pregnancy and birth were associated with a high mortality rate. Shorter (1984), in a summary of several mortality statistics, found an average mortality rate of 1.3 per cent in women giving birth and calculated an overall rate of maternal mortality of 8 per cent for women giving birth before the nineteenth century. Perinatal mortality rates among children were always high too, and combined with infant mortality in the first year of life, about a third of children did not survive these dangers. The beginning of life was therefore an extremely dangerous period for mother and child and was thus associated with basic fears, as shown by the superstitious measures that accompanied birth (Gélis 1989). A study from Yemen, where maternal mortality today is still as high as it used to be in Europe, showed that women in these conditions feel very insecure and are scared of giving birth (Kempe 1994). Even for those who coped with them and survived, these risks were often associated with a great deal of suffering and insecurity. Thus 50 per cent of infants in Bavaria died of malnutrition around 1900 (Ottmüller 1991). In addition, all social disasters, such as famine, war and disease, always hit mothers and children in the early stages of life the hardest. I believe that this distress in the early mother-child relationship is partly responsible for the low status of women in history. These difficulties at the beginning of life are no doubt one reason why relationships between parents and their children were impaired and impersonal during the Middle Ages and early modern times, and for the harshness in the way children were brought up and the tendency towards violence at that time, as reflected in the endless series of feuds and wars. The growing social and economic security of later modern times took the pressure off early mother-child relationships in Europe and the United States. Tthis led to better relationships between parents and their children, and these relationships have become increasingly personal since the end of the eighteenth century up to the present (Shorter 1986).

We often fail to realise today the extent to which the "normal" way in which infants and children were treated in historical societies undermined their sense of security. This becomes tangible if we recall that infants were left to cry and put down and children were beaten, methods that were widespread in Central and Eastern Europe well into the last century. Another indication is the book written for young mothers (Haarer 1940) that was still very widespread in Germany in the middle of the last century; its lack of empathy and the inflexible attitudes it reflects document how the education of children in Germany was marked by feelings of insecurity and of subjugation of the child right from the beginning.

A fundamental change has taken place here over the past few decades towards a more relationship-based way of dealing with pregnancy, birth and infancy. A parallel development has been the emancipation of women during the past 200 years towards more equality and greater selfdetermination. Sound knowledge about the basic needs of infants and small children and, more recently, of children before birth has only developed in the western world in the course of the past few decades (Chamberlain 1998, Janus 2001; Verny 2002).

The pressure caused by the way that cultural traditions dealt with pregnancy, birth and infancy can be better judged in this context. In doing so, it becomes clear that early socialisation in many cultures is marked by considerable stress, and opportunities for development are thus limited. DeMause (2002b) compiled some of the difficulties that exist in the Arab world. Particular fac-

tors here are the low status of women, the circumcision practiced on men and women, the wide-spread domestic violence and the distance in children's relationships with their father. Children are largely expected to conform and submit, and their individual opportunities for development are thus limited. This results in considerable tension between the Arab world and the individualistic values of western societies, tension that forms a backdrop to the events of 11 September (Janus 2002b).

The beginning of life and the formation of cultural ideals

As a result of research in the field of psychoanalysis during the past century, we are now aware that the quality of relationships between parents and their children shape children's values and dispositions. Something that was not realised to such an extent at that time is the degree to which basic values concerning relationships and behaviour are communicated to infants and small children in our actual dealings with them and are thus transferred to them. This also applies to our dealings with the unborn child and our emotional relationship with him or her. It is here that the foundations are laid for the child's self-esteem and the way it views the world; whether it feels at home and safe in the world is essentially determined by whether it felt safe and "at home" in its prenatal relationship with its mother.

For our purposes, what is decisive here is that these primal feelings are not only transferred to the parents and the family, but to society as a whole later in life. The values of a society are directly reflected by the conditions of primary socialisation. This can be seen particularly clearly in small tribal cultures: dealings with infants and children are directly intercon-nected with the values and rituals of the tribal culture (Erikson 1966). However, relevant observations can also be made in larger societies. Thus, as mentioned at the beginning, we can assume that the harshness of upbrin-ging and of dealings with children in Central and Eastern European countries was an essential factor determining the strictness and hierarchical nature of these societies and their tendency to resolve conflicts by violent means. We can also conclude that the democratic developments that have taken place in the course of the past century are interrelated with improvements in condi-tions during childhood. As already mentioned, certain aspects of the general disposition towards violence in earlier times can be better understood if we consider the excessively harsh conditions that prevailed for children (DeMause 2001). The same is true of the period of transition in Yugoslavia (Puhar 2000). This results in two levels of political influence. A society's capacity for peace can be promoted by improving mother- child relationships and relationships between parents and their children and by developing collective values. Influence has to be exerted at both levels.

Concluding remarks

One of the aims of this paper is to draw attention to the interconnectedness between primary socialisation and the way individuals live as adults later in life. In terms of individual psychology, the experience of being unwanted and of violence before, during and after birth leads to a disposition towards violent behaviour during situations of conflict and stress later in life; in terms of collective psychology, insecure mothers and children who are left alone and who lack a feeling

of security in their primary needs will later help shape the social climate within the family and within society as a whole. In historical terms, it is significant that early mother—child and father—child relationships were impaired to a much greater extent by distress, ignorance, hunger and war than is usually realised (DeMause 2000; Nyssen and Janus 2002). The transition from monarchistic and dictatorial forms of society to democratic societies corresponds to a major improvement in early relationships between parents and their children. This suggests that humans have a pro-social attitude by nature and that this can take effect under favourable, non-stressful conditions. The disposition towards violence in historical societies is closely connected with the difficulties and traumas that occurred during primary socialisation, as we can now tell from our more extensive knowledge.

This leads to very clear perspectives for action. The promotion and improvement of primary socialisation and support for parents-to-be are important and effective instruments to improve the capacity for peace and for dealing with conflicts in our societies. It seems to me to be crucial that this insight into the significance of relationships, maternity and parenthood should be taught in schools much earlier than it is at present. Our schools should not only be places where children are required to perform, but where they can prepare for life. Successful relationships and lifestyles as parents require a long period of preparation.

In terms of healthcare policy, it is important to actively approach parents-to-be from socially disadvantaged milieus and not to wait until children show behavioural disorders or adolescents begin to commit crimes. Here, too, it is clear that there is huge scope for interventions at the beginning of life to promote positive development.

Our countries are still living within the tradition that truly significant conflicts between societies are ultimately solved by military means. We may no longer have ministries of war, only ministries of defence, but what we really need are ministries of peace to promote the political developments between and within societies with the instruments of non-violent conflict management. The means to do so have been developed in the democratic institutions and in the modern social sciences (Ottmüller 2002). In politics, we need quite different psychological, psychosocial and sociological advisory and planning bodies in order to run through the psychodynamics and sociodynamics of political decisions and to develop guidelines for the implementation of targets. During the past few years, psychohistory has begun to provide ways of doing this (Janus, Kurth 2000; Kurth, Rheinheimer 2001; and Ottmüller, Kurth 2002; DeMause 2002b).

Birth and Violence

Thomas Verny (Canada)

Abstract. It takes much neglect, rejection, humiliation, physical maltreatment and sexual abuse to transform a tiny, trusting, innocent human being into a callous, cruel and vicious youth and adult. This paper will examine some of the factors that contribute to the development of the violent personality. It is suggested that the answer to street violence is not state violence. The answer is conscious parenting supported by social institutions, laws and practices, which attend to the needs of pregnant parents, particularly, the disadvantaged.

Introduction

We all decry the fact that this planet is slowly but inexorably being violated and poisoned by its inhabitants. We rail helplessly against a rising tide of child abuse, wife battering, drug addiction, serial murder, internecine warfare and suicide. We denounce, damn and blame everything and everybody in sight: the politicians, the criminal justice system, multi-nationals, the media, poverty, the decline of moral values; the list is endless. The solution escapes us because we have not looked for it in the right place. We have been blind to our beginnings. Where does a person first experience feelings of love, rejection, anxiety and sadness? Where does a person first learn about interacting with people and the world? Where are basic character traits formed? In the first school we ever attend. - our mother's womb. It is here that we receive our introduction courses in love, neglect, hate, anxiety, trust and empathy. It is here that we need to look for the roots of violence.

I have entitled my paper "Birth and Violence" because I wish to focus on factors related to birth and after birth that cause an infant to become cut off from his feelings and filled with rage. Of course, we all know that way before birth, the unborn may be exposed to physical and psychological violence.

Let us consider for a moment the histories of two notorious killers, as told by David Chamberlain (1995).

David Edwin Mason and Robert Alton Harris spent their final years on Death Row before they were gassed by the State of California in 1991 and 1993 respectively for heinous crimes of violence. The dossier on Mason reveals him to have been a sad, lonely child whose mother tried to induce a miscarriage to avoid having him in the first place, and was never allowed to forget that he was unwanted. Older sisters describe a household where hugging or laughter was

prohibited, and in which young David was beaten almost daily with his father's belt or his mother's switch or pancake turner.

When only five, the child attempted suicide by swallowing a bottle of pills and set his clothing on fire. At eight, he was taking out his hostility by setting fires at church and at school. His parents started to lock him away in a room they called "the dungeon"--a bedroom with the windows nailed shut. Persistent bed wetting, and worse, were countered by parading David with the soiled clothes wrapped around his head.

At age 23, Mason went on a nine-month killing spree in the neighborhood where he had grown up, strangling four elderly men and women. He later confessed that it was "something I have always wanted to do."

Harris's beginnings were strikingly similar. He was born three months premature after his mother was kicked so brutally in the abdomen by an angry husband, that she began hemorrhaging. As in the Mason family, both parents inflicted frequent beatings--the father with his fists, causing a broken jaw when Robert was not yet two. Sitting at the table, if Robert reached out for something without his father's permission, he would end up with a fork in the back of his hand.

For sport, father would load his gun and tell the children they had 30 minutes to hide outside the house, after which he would hunt them like animals, threatening to shoot anyone he found. The senior Harris was jailed for sexually molesting his daughters, while the mother smoked and drank herself to death.

Like Mason, young Harris soon began showing anger towards animals and people. At twenty-five he shot two San Diego teenagers to death. Prosecutors told the jury that Harris taunted the victims before they died, laughed at them after he pulled the trigger, then calmly ate the hamburgers they had bought for lunch.

In an editorial on the occasion of Mason's execution, former U.S. Congressman Lionel Van Deerlin of San Diego concluded: "Such persons must be put away, of course. But can society feel comfortable when providing the final touch to a pattern of violence, which may literally have begun in the mother's womb?" Congressman Van Deerlin has good insight. I just wish more scientists and health professionals would share it.

The womb is not always the safe, loving, oceanic bliss that we all, according to popular belief, long to return to. For many, in fact, it is a dangerous and often painful abode. Exiting from it can be quick and relatively easy or quite horrendous. Each physiological event will leave a psychological imprint.

Birth and Life Scripts

A number of studies report findings suggesting the possibility of a relationship between birth complications and violent behavior (Litt 1972). They offer the hypothesis that birth complications result in brain damage that predisposes achild to impulsive and aggressive behavior (Mungas 1983). In 1960 Mednick (1971) studied the records of violent criminals in the Danish penal system. Fifteen of the sixteen most violent criminals were found to have had an extraordinarily difficult birth and the sixteenth had an epileptic mother.

In a recent Danish study (Kandel and Mednick 1991) 15 violent criminals and 24 property criminals were compared with 177 non-offenders on pregnancy and delivery events. Delivery complications such as ruptured uterus, umbilical cord prolapse, difficult labor, etc., predicted violent offending, especially in subjects whose parents were psychiatrically disturbed.

Psychologist Adrian Raine and co-workers at the University of Southern California, Los Angeles, report a significant association between birth complications and early maternal rejection and violent crime at age 18. While only 4.5% of the subjects had both risk factors, this small group accounted for 18% of all violent crimes. The effect was specific to violence and was not observed for non-violent criminal acts (Raine et al. 1990).

These and other studies very clearly show that personality is shaped, for better or worse, by a chain of events or risk factors that start often before conception and continue through the life span. Because every biological process has a psychological correlate everything that happens to us, especially at the beginning of life, permanently affects us. Whether your mother was awake or asleep when you were born, whether you were delivered vaginally or by C-section, whether you roomed in with your mother or spent four weeks in an incubator--these things matter enormously.

Both children and adults report having memories of birth. What we observe in birth memories is consistent with what we find in modern research: the newborn's brain, nervous system, and physical senses are active and coordinated; a normal range of human emotions is felt and expressed while the infant's mind is alert, perceptive, exploring, and busy incorporating each new experience. How do we welcome into the family of humankind these new, highly aware and discerning beings? From the darkness and silence of the womb we bring them out into a blaze of blinding lights, a cacophony of noise and harsh voices. Vulnerable spines which have always been curved are whiplashed as we grab newcomers by the ankles (thank goodness a diminishing practice). We further terrify children by suctioning mucous out of their mouths and placing antibiotic drops into their eyes which not only sting but also cloud vision so that everything around becomes a blur. If the babies show any signs of jaundice, their heels are lanced to obtain blood for lab work. After a few minutes of recovery on their mothers breast (if the woman is not unconscious from the anesthetics and painkillers), the babies, whose skin at this point is extraordinarily sensitive, are wrapped tightly in cloth that to them feels like sandpaper. Finally, they are banished to the nursery to recuperate from their ordeal in the midst of twenty or thirty screaming newborns. And this is "a good birth!"

If babies are premature, born with a congenital defect, or otherwise ill, they are taken to the Neonatal Intensive Care Unit (NICU). And God helps them there! What is the effect of this painful, sensory overload on babies? Firstly, they don't thrive as well as they should. Secondly, they become psychologically traumatized. The helplessness, the grief of separation from mother, the absence of touching, the constant fear of being hurt, the rage, the anger--these are feelings permanently recorded in their memory banks. These memories do not evaporate, they do not disappear. If subsequently, the child is loved and nurtured the negative charge attached to these memories can be gradually diminished. If, on the other hand, the child is further traumatized by rejection, abuse or neglect, these early experiences will be reinforced and they will come to act like pacemakers in his mind driving him towards increasingly destructive modes of behavior.

Early Parenting and Attachment

Louise Kaplan (1996), an American psychoanalyst, when discussing the importance of mother-infant bonding, says the following: Were it for not this dialogue, the chaotic excitements and crude appetites of the infant could not be transformed into the desires and longings that enable him to live a fully human life. And then again:

In her moments of tension and need, a helpless baby can be ruthless. She possesses and destroys the breast that feeds her. She devours the arms that hold her. She rids herself of her body products without any concern. A mother's presence in a baby's life absorbs, contains, and tolerates the baby's

unruly lusts and thereby tames and humanizes them. The mother's attunement to her baby's crude and inchoate excitements transforms them into socialized human emotions and affects.

This view of the newborn as an aggressive destructive, cannibalistic creature is fairly representative of orthodox psychoanalysis in general and Melanie Klein (1952) in particular. It is based on the analyses of highly neurotic adults and severely traumatized children. It is like saying that all human livers are scarred and non-functioning on the basis of autopsies of the livers of alcoholics only.

I firmly believe that all mammalian infants including the human infant are hard-wired to develop loving relationships with their fellow species. Whether or not they do so depends entirely on how they are treated. Such an argument is strengthened by findings, which show that neural pathways for altruism and aggression may be reciprocally related, so that aggression reflects a deficit in endogenous opiates, whereas their secretion reduces aggressiveness by promoting social comfort and play.

Most of the infants who had been foundlings since birth and never experienced a human attachment, could not recover even after Spitz arranged to provide them with intimate, one-to-one attention and care. Remarkably, some of the bonding-deprived infants were still able to respond to the invitation to engage in dialogue. But their initial contacts with an animated, responsive caregiver aroused an intense and unmanageable anxiety in the bonding-deprived infants, who reacted with a violence rarely seen in children. They would tear their clothing and bedsheets into shreds. They would bite the other children in the nursery and tear their own hair out by the fistful (Kaplan 1996). Scientists began to wonder why and how infants were affected by the loss of a mother. In the 70's Harry and Margaret Harlow (Harlow and Mears 1979) began to research these and related topics in their primate laboratories at the University of Wisconsin.

In Harlow's study, eight rhesus monkeys were separated from their biological mothers immediately after birth. Each infant was placed in its own private cage containing two surrogate mothers, neither of them alive. One was a "terry cloth mother," a block of wood layered with spongy rubber and covered with terry cloth. The other was a "wire mother," a wire mesh construction of the same size and shape as the terry cloth mother. For four of the infants, only the terry cloth mother was fitted with a feeding nipple, while for the other four, only the wire mother had the feeding nipple.

In a few months, all eight rhesus infants were firmly attached to their terry cloth mothers. When, in another series of experiments with a different group of rhesus infants, Harlow added heat and a rocking motion to the terry cloth mother, she became a magnet of love. The attachment of the rhesus babies became resolute. They would cling to her for sixteen to eighteen hours a day. When Harlow's infant rhesus monkeys grew up, their repertoire of emotional responses was limited to clinging attachment and destructive aggression. Aside from an urgent and almost continual need to hold onto familiar, soft, furry-like objects, they bit and tore at paper, cloth, their own bodies, and the bodies of other rhesus monkeys as though they had no way of discriminating animate from inanimate. Some carried around shredded remnants of their original terry cloth mothers, some hugged and cuddled with their siblings, but they could not tolerate any sort of reciprocal interactive relationship (Kaplan 1996).

The majority of monkeys who survived early maternal deprivation were unable to mate as adults. Those that did or were artificially impregnated were unable to take care of their young. In fact, more often than not, they attacked them viciously.

Gradually, through the pioneering works of Bowlby, and Klaus and Kennell, we have gained a deeper understanding of the sensitive period after birth during which the baby and parents learn to know and love each other. If this period is interfered with by sickness or absence of one of the participants, or if the mother or father reject the newborn child, then the child will begin to withdraw. This does not mean, for example, that every preemie who is sent to a Neonatal Intensive Care Unit (NICU), will automatically be scarred for life, but it does mean that parents need to try harder to connect with babies in the NICU and thereafter.

The Unwanted Child

Studies of mothers who petitioned but were denied a legal medical abortion tell us a lot about the effects of prenatal rejection on children. Research from Finland, Sweden and Czechoslovakia is instructive in this respect. Blomberg (1980) observed that all the differences in the Swedish study were uniformly to the disadvantage of the unwanted children. In the Finnish study, which is still continuing, the incidence of infant mortality, cerebral palsy and mental retardation was significantly higher among the unwanted children than the controls (Myhrman 1986).

The Prague cohort (David, Dytrych, Matejcek, and Schuller 1988) follows the development of 2,290 children born in 1961-1963 to women twice denied abortion for the same pregnancy and pair-matched controls from age 9 through ages 21-23. All the differences noted were consistently in disfavor of the unwanted children. Over the years, these differences widened and many differences that had not been statistically significant at age 9 became so at age 16 or 21. The findings of the Prague study and also of the Scandinavian research support the hypothesis that children rejected prenatally will, more likely than controls, show developmental, psychological and social handicaps.

In a recently published paper (Bustan and Coker 1994), Ann Coker, epidemiologist from the University of South Carolina found that infants born of unwanted pregnancies are more than twice as likely to die within a month of being born than wanted children. The group studied were married, largely middle income women who were all receiving prenatal care.

A less extreme case of being born unwanted is the plight of children given up for adoption. Every study on adoptees shows that they are over-represented among children with behavior problems, and adult criminals and murderers. In fact, I have yet to find a serial killer or violent rapist who was a wanted child reared in a normal, loving family.

Across the land and all over the world too many children are dying after being beaten, tortured or shaken to death. The unspeakable horrors that are being inflicted on children of every age every hour of every day is barbaric. Those who are not killed are often crippled for life by neglect and physical, sexual and emotional abuse. The children who survive this process of abuse will repay the world and its inhabitants with rage and destruction.

The U.S. Advisory Board on Child Abuse and Neglect (Rivera 1995), after a two and a half year nationwide study that included hearings in ten states, found a level of deadly abuse and neglect that is far greater than experts in the field had previously estimated.

The number of violent acts against young children in the U.S. constitutes a public health crisis, annually claiming the lives of at least 2,000 children and seriously injuring upwards of 140,000 others. Abuse and neglect in the home is a leading cause of death for young children in the U.S. outstripping deaths caused by accidental falls, choking on food, suffocation, drowning or residential

fires. The vast majority of abused and neglected children are under four years old. In fact, the homicide rate among children in this age group has hit a 40-year high, a chilling trend similar in scope to the violence directed at teenagers from street gunfire.

The enumeration of violent acts is grim. What is even more disturbing is the failure of the child protective system. The report describes an alarming national environment of under-reported child abuse fatalities; inadequately trained social workers and medical professionals; inconsistent autopsy practices; and an American public that continues to regard child deaths as "rare curiosities." "When it comes to deaths of infants and small children at the hands of parents or caretakers, society has responded in a strangely muffled, seemingly disinterested way," states the panel.

It was only thirty years ago that a paper by Curtis (1963) first expressed the concern that abused or neglected children would become tomorrow's violent criminals and murders. Since then the notion of an intergenerational transmission of violence has become the premier developmental hypothesis in the field of abuse and neglect.

The scholarly literature on family violence has grown enormously. There is a consensus of opinion that the rate of abuse among individuals with a history of abuse is 30% which is approximately six times higher than the base rate for abuse in the general population (5%) (Parke and Collmer 1975). These studies also suggest the need to consider neglect as distinct from abuse, because in some reports (Rohrbect and Twentyman 1986) neglected children appear more dysfunctional than those abused.

In addition to studies of children directly victimized, the indirect effects on children observing family violence have also been investigated. Large-scale self-report surveys have found a modest, although fairly consistent, association between exposure to family violence and approval of violence or marital violence as an adult (Owens and Strauss 1975; Kalmus 1984; Kratwski 1985). Studies of the children of battered women suggest that observing abuse or extreme marital discord may be as harmful to the development of the child as physical abuse (Wolfe et al. 1985; Jaffe et al. 1986).

There is no doubt that early child abuse and neglect place one at increased risk for delinquency, adult criminality and violent criminal behavior. However, a large portion of abused or neglected children do not succumb. In one study at Indiana University (Gamezy 1985) 26% of child abuse and neglect victims became juvenile offenders; 74% did not. Eleven percent had an arrest for a violent criminal act, 89% did not.

It is essential that we learn to understand and distinguish between factors that increase destructive and self-destructive behavior and factors that build strength and competence. What are the dispositional attributes and the mediating variables that act to buffer or protect children from misfortune? I shall address that question in a future paper.

Build Babies, Not Jails

Violence does not occur in a social or cultural vacuum. Violence is endemic to our society. Our institutions, values, beliefs and rituals are a function of who we are as human beings. And who are we? There is not one of us who has not felt anxious, helpless, dejected, rejected, angry, criticised or shamed by the time we were two years old. Most of us, in addition, have suffered some form of emotional, sexual or physical mistreatment. We are the walking wounded. Considering the hurts,

the injuries to body and soul that we have all experienced in our own personal histories and the history of our species, it is a testimony to the strength of the human spirit and the power of human love that we are as civilized as we are. Our only hope for a better world lies in heightening and deepening this innate capacity to care, to nurture and to feel for others.

To achieve that, we urgently require government policies that will reduce poverty, eliminate income inequalities, eradicate homelessness, and ensure status enhancing work (if possible in paid employment) for all.

Abolishing the sexual and economic exploitation of children should be a high priority on any governments' legislative agenda. Censoring videos and television programs featuring gratuitous violence, could be expected to have a small but measurable effect.

"What is not needed is to fight street violence with state violence. We don't need more police, more courts and more jails. We need more conscious parenting. Conscious parenting leads to positive psychogenesis and is based, I suggest, on understanding and practicing the following simple rules.

Guidelines for Conscious Parenting and Positive Psychogenesis

- **1. Preconception.** Future parents must receive information about what physical and chemical toxins to avoid prior to conception and during pregnancy. Their readiness for pregnancy and raising a child needs to be assessed. If problems, be they psychological, financial or other surface, personal counseling or therapy should be available to them.
- **2. Conception.** Every child, ideally, should be a wanted child. Every child should be created as an expression of the love the parents feel for each other.
- **3. Pregnancy.** Mothers and fathers must explore their: Births. Relationships to their parents. Relationships with their partner and be willing to engage in open and honest dialogue. Mothers and fathers need to learn: To appreciate the fundamental humanity of their unborn child, their need for love and communication and how to give it. How to bond with their unborn child prenatally and postnatally through talking, singing, dancing, playing with and visualizing him. The pregnant mother should make every effort: To have a stress free pregnancy. If there is the threat of or actual violence, she must remove herself from it. To attend prenatal classes, if possible, with her partner.

To obtain the services of a midwife. To resist the unnecessary use of gyne-gadgetry (amniocentesis, ultrasound, chorionic villi sampling, etc.). To totally abstain from alcohol, tobacco, soft or hard drugs.

- **4. Labor and Delivery.** If at all possible, the mother's partner as well as a professional support person such as a midwife or doula should be present.
- Unless there is a medical problem, the birth should be as natural as possible. That means no fetal heart monitors, no anesthetics or analgesics, no episiotomies and no forceps. Only people that the parents know and trust should be present during labor and delivery. Only professionals who love and respect babies should assist at birth.
- **5. After Birth.** Say only complimentary things about your newborn. Insist on holding your newborn and rooming in with her. Resist the installation of silver nitrate eye drops and other unnecessary medicines and tests on your unborn. Oppose circumcision or genital mutilation of any kind. Leave the hospital as soon as possible. Breast feed your baby if you can.

6. First Few Months. If you are isolated, vulnerable or depressed, ask for help. Visits by nurses or social workers have a demonstrable positive impact. If the baby develops physical problems don't wait until tomorrow; take her to a doctor now. Don't feel that it's your fault or that you are an incompetent mother if the baby develops colic or cries a lot or does not sleep much. If you are a single mother and you are beginning to lose your patience with the baby, get help. Call a friend, family, women's support group, or social agency. Whatever you do, don't yell, shake, or hit the baby. Babies need a lot of attention. They cannot take care of themselves but they are a source of great joy. Have fun with your baby. Babies can teach us many important lessons. Be prepared to learn. I hope you will agree with me that to transform the violent world of today into the peaceful world of tomorrow, we need to change the way we treat our children from the very beginning of their lives. I think we could learn a lot in that respect from a tribe in East Africa (Kornfield, 1996).

There is a tribe in East Africa in which the art of true intimacy (I would call it bonding) is fostered even before birth. In this tribe, the birth date of a child is not counted from the day of its physical birth nor even the day of conception, as in other village cultures. For this tribe the birth date comes the first time the child is a thought in its mother's mind. Aware of her intention to conceive a child with a particular father, the mother then goes off to sit alone under a tree. There she sits and listens until she can hear the song of the child that she hopes to conceive. Once she has heard it, she returns to her village and teaches it to the father so that they can sing it together as they make love, inviting the child to join them. After the child is conceived, she sings it to the baby in her womb. Then she teaches it to the old women and midwives of the village, so that throughout the labor and at the miraculous moment of birth itself, the child is greeted with its song. After the birth, all the villagers learn the song of their new member and sing it to the child when it falls or hurts itself. It is sung in times of triumph, or in rituals and initiations. The song becomes a part of the marriage ceremony when the child is grown, and at the end of life, his or her loved ones will gather around the deathbed and sing this song for the last time.

Psycho-spiritual Roots of Human Violence and Insatiable Greed

Stan Grof (USA)

Abstract. Diplomatic negotiations, administrative and legal measures, economic and social sanctions, military interventions, and other similar efforts have had so far very little success in alleviating the rapidly escalating global crisis. Drawing on the observations from forty-five years of research of non-ordinary states of consciousness, the author explores the implications of this material for the understanding of the psychological and spiritual roots of the problems humanity is currently facing. The vastly expanded cartography of the human psyche that has emerged from this work offers a new understanding of insatiable greed and malignant aggression, two powerful forces that have played a critical role in human history and currently represent a serious threat for life on our planet. The author suggests that the problems in modern world are products and symptoms of a psychospiritual crisis and that any effective solution will require a deep inner transformation of humanity and a new scientific world view emphasising unity, co-evolution, and co-operation. He explores the possible role of ancient and modern methods facilitating spiritual opening and consciousness evolution in achieving these goals.

The research of holotropic states of consciousness has important implications not only for each of us individually, but also for the future of humanity and survival of life on this planet. In this chapter, I will explore how the experiences and observations from consciousness research can help us understand the nature and roots of the global crisis we are all facing. I will also discuss some new strategies for coping with this critical situation that have emerged from this work. We will pay special attention to the psychospiritual roots of two elemental forces that have driven human history since time immemorial, the proclivity to violence and insatiable greed. We will also take a look at the role that the monistic materialistic worldview of Western science has played in technological progress and in the loss of spiritual values.

There is no doubt that "malignant aggression" is connected with traumas and frustrations in childhood and infancy. However, modern consciousness research has revealed additional significant roots of violence in deep recesses of the psyche that lie beyond postnatal biography and are related to the trauma of biological birth. The vital emergency, pain, and suffocation experienced for many hours during biological delivery generate enormous amounts of anxiety and murderous aggression that remain stored in the organism. As we saw earlier, the reliving of birth in various forms of experiential psychotherapy involves not only concrete replay of the original emotions and sensations, but is typically associated with a variety of experiences from the collective unconscious portraying scenes of unimaginable violence. Among these are often powerful sequences depicting wars, revolutions, racial riots, concentration camps, totalitarianism, and genocide.

The spontaneous emergence of this imagery during the reliving of birth is often associated with convincing insights concerning perinatal origin of such extreme forms of human violence. Naturally, wars and revolutions are extremely complex phenomena that have historical, economic, political, religious, and other dimensions. The intention here is not to offer a reductionistic explanation

replacing all the others, but to add some new insights concerning the psychological and spiritual dimensions of these forms of social psychopathology that have been neglected or received only superficial treatment in earlier theories.

The images of violent socio-political events accompanying the reliving of biological birth tend to appear in very specific connection with the consecutive stages of the birth process and the dynamics of the basic perinatal matrices (BPMs). While reliving episodes of undisturbed intrauterine existence (BPM I), we typically experience images from human societies with an ideal social structure, from cultures living in complete harmony with nature, or from future utopian societies where all major conflicts have been resolved. Disturbing intrauterine memories, such as those of a toxic womb, imminent miscarriage, or attempted abortion, are accompanied by images of human groups living in industrial areas where nature is polluted and spoiled, or in societies with insidious social order and all-pervading paranoia.

Regressive experiences related to the first clinical stage of birth (BPM II), during which the uterus periodically contracts but the cervix is not open, present a diametrically different picture. They portray oppressive and abusive totalitarian societies with closed borders, victimising their populations, and "choking" personal freedom, such as Czarist or Communist Russia, Hitler's Third Reich, South American dictatorships, and the African Apartheid), or bring specific images of the inmates in Nazi concentration camps and Stalin's Gulag Archipelago. While experiencing these scenes of living hell, we identify exclusively with the victims and feel deep sympathy for the down-trodden and the underdog.

The experiences accompanying reliving of the second clinical stage of delivery (BPM III), when the cervix is dilated and continued contractions propel the fetus through the narrow passage of the birth canal, feature a rich panoply of violent scenes -- bloody wars and revolutions, human or animal slaughter, mutilation, sexual abuse, and murder. These scenes often contain demonic elements and repulsive scatological motifs. Additional frequent concomitants of BPM III are visions of burning cities, launching of rockets, and explosions of nuclear bombs. Here we are not limited to the role of victims, but can participate in three roles - that of the victim, of the aggressor, and of an emotionally involved observer.

The events characterizing the third clinical stage of delivery (BPM IV), the actual moment of birth and the separation from the mother, are typically associated with images of victory in wars and revolutions, liberation of prisoners, and success of collective efforts, such as patriotic or nationalistic movements. At this point, we can also experience visions of triumphant celebrations and parades or of exciting postwar reconstruction.

In 1975, I described these observations, linking socio-political upheavals to stages of biological birth, in Realms of the Human Unconscious (Grof, 1975). Shortly after its publication, I received a letter from Lloyd de Mause, a New York psychoanalyst and journalist. De Mause is one of the founders of psychohistory, a discipline that applies the findings of depth psychology to history and political science. Psychohistorians study such issues as the relationship between the childhood history of political leaders and their system of values and process of decision making, or the influence of child-rearing practices on the nature of revolutions of that particular historical period. Lloyd de Mause was very interested in my findings concerning the trauma of birth and its possible socio-political implications, because they provided independent support for his own research.

For some time, de Mause had been studying the psychological aspects of the periods preceding wars and revolutions. It interested him how military leaders succeed in mobilizing masses of peace-

ful civilians and transforming them practically overnight into killing machines. His approach to this problem was very original and creative. In addition to analysis of traditional historical sources, he drew data of great psychological importance from caricatures, jokes, dreams, personal imagery, slips of the tongue, side comments of speakers, and even doodles and scribbles on the edge of the rough drafts of political documents. By the time he contacted me, he had analysed in this way seventeen situations preceding the outbreak of wars and revolutionary upheavals, spanning many centuries since antiquity to most recent times (de Mause 1975).

He was struck by the extraordinary abundance of figures of speech, metaphors, and images related to biological birth that he found in this material. Military leaders and politicians of all ages describing a critical situation or declaring war typically used terms that equally applied to perinatal distress. They accused the enemy of choking and strangling their people, squeezing the last breath out of their lungs, or constricting them and not giving them enough space to live (Hitler's "Lebensraum").

Equally frequent were allusions to dark caves, tunnels, and confusing labyrinths, dangerous abysses into which one might be pushed, and the threat of engulfment by treacherous quicksand or a terrifying whirlpool. Similarly, the offer of the resolution of the crisis comes in the form of perinatal images. The leader promises to rescue his nation from an ominous labyrinth, to lead it to the light on the other side of the tunnel, and to create a situation where the dangerous aggressor and oppressor will be overcome and everybody will again breathe freely.

Lloyd de Mause's historical examples at the time included such famous personages as Alexander the Great, Napoleon, Samuel Adams, Kaiser Wilhelm II., Hitler, Khrushchev, and Kennedy. Samuel Adams talking about the American Revolution referred to "the child of Independence now struggling for birth." In 1914, Kaiser Wilhelm stated that "the Monarchy has been seized by the throat and forced to choose between letting itself be strangled and making a last ditch effort to defend itself against attack."

During the Cuban missile crisis Krushchev wrote to Kennedy, pleading that the two nations not "come to a clash, like blind moles battling to death in a tunnel." Even more explicit was the coded message used by Japanese ambassador Kurusu when he phoned Tokyo to signal that negotiations with Roosevelt had broken down and that it was all right to go ahead with the bombing of Pearl Harbor. He announced that the "birth of the child was imminent" and asked how things were in Japan: "Does it seem as if the child might be born?" The reply was: "Yes, the birth of the child seems imminent." Interestingly, the American intelligence listening in recognized the meaning of the "war-as-birth" code.

Particularly chilling was the use of perinatal language in connection with the explosion of the atomic bomb in Hiroshima. The airplane was given the name of the pilot's mother, Enola Gay, the atomic bomb itself carried a painted nickname "The Little Boy," and the agreed-upon message sent to Washington as a signal of successful detonation was "The baby was born." It would not be too farfetched to see the image of a newborn also behind the nickname of the Nagasaki bomb, Fat Man. Since the time of our correspondence, Lloyd de Mause collected many additional historical examples and refined his thesis that the memory of the birth trauma plays an important role as a source of motivation for violent social activity.

The issues related to nuclear warfare are of such relevance that I would like to elaborate on them using the material from a fascinating paper by Carol Cohn entitled "Sex and Death in the Rational World of the Defense Intellectuals" (Cohn 1987). The defence intellectuals (DIs) are civilians who

move in and out of government, working sometimes as administrative officials or consultants, sometimes at universities and think tanks. They create the theory that informs and legitimates U.S. nuclear strategic practice - how to manage the arms race, how to deter the use of nuclear weapons, how to fight a nuclear war if the deterrence fails, and how to explain why it is not safe to live without nuclear weapons.

Carol Cohn had attended a two-week summer seminar on nuclear weapons, nuclear strategic doctrine, and arms control. She was so fascinated by what had transpired there that she spent the following year immersed in the almost entirely male world of defence intellectuals (except for secretaries). She collected some extremely interesting facts confirming the perinatal dimension in nuclear warfare. In her own terminology, this material confirms the importance of the motif of "male birth" and "male creation" as important psychological forces underlying the psychology of nuclear warfare. She uses the following historical examples to illustrate her point of view:

In 1942, Ernest Lawrence sent a telegram to a Chicago group of physicists developing the nuclear bomb that read: "Congratulations to the new parents. Can hardly wait to see the new arrival." At Los Alamos, the atom bomb was referred to as "Oppenheimer's baby." Richard Feynman wrote in his article "Los Alamos from Below" that when he was temporarily on leave after his wife's death, he received a telegram that read: "The baby is expected on such and such a day."

At Lawrence Livermore laboratories, the hydrogen bomb was referred to as "Teller's baby," although those who wanted to disparage Edward Teller's contribution claimed he was not the bomb's father, but its mother. They claimed that Stanislaw Ulam was the real father, who had all the important ideas and "conceived it"; Teller only "carried it" after that. Terms related to motherhood were also used to the provision of "nurturance" -- the maintenance of the missiles.

General Grove sent a triumphant coded cable to Secretary of War Henry Stimson at the Potsdam conference reporting the success of the first atomic test: "Doctor has just returned most enthusiastic and confident that the little boy is as husky as his big brother. The light in his eyes discernible from here to Highhold and I could have heard his screams from here to my farm." Stimson, in turn, informed Churchill by writing him a note that read: "Babies satisfactorily born."

William L. Laurence witnessed the test of the first atomic bomb and wrote: "The big boom came about a hundred seconds after the great flash -- the first cry of a new-born world." Edward Teller's exultant telegram to Los Alamos, announcing the successful test of the hydrogen bomb "Mike" at the Eniwetok atoll in Marshall Islands read "It's a boy." The Enola Gay, "Little Boy," and "The baby was born" symbolism of the Hiroshima bomb, and the "Fat Man" symbolism of the Nagasaki bomb were already mentioned earlier. According to Carol Cohn, "male scientists gave birth to a progeny with the ultimate power of domination over female Nature."

Carol Cohn also mentions in her paper abundance of overtly sexual symbolism in the language of defence intellectuals. The nature of this material, linking sex to aggression, domination, and scatology shows a deep similarity to the imagery occurring in the context of birth experiences (BPM III). Cohn used the following examples: American dependence on nuclear weapons was explained as irresistible, because "you get more bang for the buck." A professor's explanation, why the MX missiles should be placed in the silos of the newest Minutemean missiles, instead of replacing the older, less accurate ones: "You are not going to take the nicest missile you have and put it into a crummy hole." At one point, there was a serious concern that "we have to harden our missiles, because the Russians are a little harder than we are." One military adviser to the National Security Council referred to "releasing 70 to 80 percent of our megatonnage in one orgasmic whump."

Lectures were filled with terms like vertical erector launchers, thrust-to-weight ratios, soft lay-downs, deep penetration, and the comparative advantages of protracted versus spasm attacks. Another example was the popular and widespread custom of patting the missiles practised by the visitors to nuclear submarines, which Carol Cohn saw as an expression of phallic supremacy and also homoerotic tendencies. In view of this material, it clearly is quite appropriate for feminist critics of nuclear policies to refer to "missile envy" and "phallic worship."

Further support for the pivotal role of the perinatal domain of the unconscious in war psychology can be found in Sam Keen's excellent book The Faces of the Enemy (Keen 1988). Keen brought together an outstanding collection of distorted and biased war posters, propaganda cartoons, and caricatures from many historical periods and countries. He demonstrated that the way the enemy is described and portrayed during a war or revolution is a stereotype that shows only minimal variations and has very little to do with the actual characteristics of the country and culture involved.

He was able to divide these images into several archetypal categories according to the prevailing characteristics (e.g., Stranger, Aggressor, Worthy Opponent, Faceless, Enemy of God, Barbarian, Greedy, Criminal, Torturer, Rapist, Death). According to Keen, the alleged images of the enemy are essentially projections of the repressed and unacknowledged shadow aspects of our own unconscious. Although we would certainly find in human history instances of just wars, those who initiate war activities are typically substituting external targets for elements in their own psyches that should be properly faced in personal self-exploration.

Sam Keen's theoretical framework does not specifically include the perinatal domain of the unconscious. However, the analysis of his picture material reveals preponderance of symbolic images that are characteristic of BPM II and BPM III. The enemy is typically depicted as a dangerous octopus, a vicious dragon, a multiheaded hydra, a giant venomous tarantula, or an engulfing Leviathan. Other frequently used symbols include vicious predatory felines or birds, monstrous sharks, and ominous snakes, particularly vipers and boa constrictors. Scenes depicting strangulation or crushing, ominous whirlpools, and treacherous quicksands also abound in pictures from the time of wars, revolutions, and political crises. Juxtaposition of pictures from holotropic states of consciousness that depict perinatal experiences with the historical pictorial documentation collected by Lloyd de Mause and Sam Keen represents strong evidence for the perinatal roots of human violence.

According to the new insights, provided jointly by observations from consciousness research and the findings of psychohistory, we all carry in our deep unconscious powerful energies and emotions associated with the trauma of birth that we have not adequately mastered and assimilated. For some of us, this aspect of our psyche can be completely unconscious, until and unless we embark on some in-depth self-exploration with the use of psychodelics or some powerful experiential techniques of psychotherapy, such as the holotropic breathwork or rebirthing. Others can have varying degrees of awareness of the emotions and physical sensations stored on the perinatal level of the unconscious.

As we have seen in an earlier chapter, activation of this material can lead to serious individual psychopathology, including unmotivated violence. It seems that, for unknown reasons, the awareness of the perinatal elements can increase simultaneously in a large number of people. This creates an atmosphere of general tension, anxiety, and anticipation. The leader is an individual who is under a stronger influence of the perinatal energies than the average person. He also has the ability to disown his unacceptable feelings (the Shadow in Jung's terminology) and to project them on an exter-

nal situation. The collective discomfort is blamed on the enemy and a military intervention is offered as a solution.

The war provides an opportunity to overcome the psychological defences that ordinarily keep the dangerous perinatal tendencies in check. Freud's superego, a psychological force which demands restraint and civilised behaviour, is replaced by the "war superego." We receive praise and medals for murder, indiscriminate destruction, and pillaging, the same behaviours that in peacetime are unacceptable and would land us in prison. Similarly, sexual violence has been a common practice during wartime and has been generally tolerated. As a matter of fact, military leaders have often promised their soldiers unlimited access to women in the conquered territory to motivate them for battle. Once the war erupts, the destructive and self-destructive perinatal impulses are freely acted out. The themes that we normally encounter in a certain stage of the process of inner exploration and transformation (BPM II and III) now become parts of our everyday life, either directly or in the form of TV news. Various no exit situations, sadomasochistic orgies, sexual violence, bestial and demonic behaviour, unleashing of enormous explosive energies, and scatology, which belong to standard perinatal imagery, are all enacted in wars and revolutions with extraordinary vividness and power.

Witnessing scenes of destruction and acting out of violent unconscious impulses, whether it occurs on the individual scale or collectively in wars and revolutions, does not result in healing and transformation as would an inner confrontation with these elements in a therapeutic context. The experience is not generated by our own unconscious, lacks the element of deep introspection, and does not lead to insights. The situation is fully externalised and connection with the deep dynamics of the psyche is missing. And, naturally, there is no therapeutic intention and motivation for change and transformation. Thus the goal of the underlying birth fantasy, which represents the deepest driving force of such violent events, is not achieved, even if the war or revolution has been brought to a successful closure. The most triumphant external victory does not deliver what was expected and hoped for - an inner sense of emotional liberation and psycho-spiritual rebirth.

After the initial intoxicating feelings of triumph comes at first a sober awakening and later bitter disappointment. And it usually does not take a long time and a facsimile of the old oppressive system starts emerging from the ruins of the dead dream, since the same unconscious forces continue to operate in the deep unconscious of everybody involved. This seems to happen again and again in human history, whether the event involved is the French Revolution, the Bolshevik Revolution in Russia, the Communist revolution in China, or any of the other violent upheavals associated with great hopes and expectations.

Since I conducted for many years deep experiential work in Prague at the time when Czechoslova-kia had a Marxist regime, I was able to collect some fascinating material concerning the psychological dynamics of Communism. The issues related to Communist ideology typically emerged in the treatment of my clients at the time when these were struggling with perinatal energies and emotions. It soon became obvious that the passion the revolutionaries feel toward the oppressors and their regimes receives a powerful reinforcement from their revolt against the inner prison of their perinatal memories. And, conversely, the need to coerce and dominate others is an external displacement of the need to overcome the fear of being overwhelmed by one's own unconscious. The murderous entanglement of the oppressor and the revolutionary is thus an externalised replica of the situation experienced in the birth canal.

The Communist vision contains an element of psychological truth that has made it appealing to large numbers of people. The basic notion that a violent experience of a revolutionary nature is necessary to terminate suffering and oppression and institute a situation of greater harmony is correct when understood as a process of inner transformation. However, it is dangerously false when it is projected on the external world as a political ideology of violent revolutions. The fallacy lies in the fact that what on a deeper level is essentially an archetypal pattern of spiritual death and rebirth takes the form of an atheistic and anti-spiritual program.

Communist revolutions have been extremely successful in their destructive phase but, instead of the promised brotherhood and harmony, their victories have bred regimes where oppression, cruelty, and injustice ruled supreme. Today, when the economically ruined and politically corrupt Soviet Union has collapsed and the Communist world has fallen apart, it is obvious to all people with sane judgement that this gigantic historical experiment, conducted at the cost of millions of human lives and unimaginable human suffering, has been a colossal failure. If the above observations are correct, no external interventions have a chance to create a better world, unless they are associated with a profound transformation of human consciousness.

The observations from modern consciousness research also throw some important light on the psychology of concentration camps. Over a number of years, professor Bastians in Leyden, Holland, has been conducting LSD therapy for people suffering from the "concentration camp syndrome," a condition that develops in former inmates of these camps many years after the incarceration. Bastians has also worked with former kapos on their issues of profound guilt. An artistic description of this work can be found in the book Shivitti written by a former inmate, Ka-Tzetnik 135633, who underwent a series of therapeutic sessions with Bastians (Ka-Tzetnik 135633–1989).

Bastians himself wrote a paper describing his work, entitled "Man in the Concentration Camp and Concentration Camp in Man." There he pointed out, without specifying it, that the concentration camps are a projection of a certain domain which exists in the human unconscious: "Before there was a man in the concentration camp, there was a concentration camp in man" (Bastians 1955). Study of holotropic states of consciousness makes it possible to identify the realm of the psyche Bastians was talking about. Closer examination of the general and specific conditions in the Nazi concentration camps reveals that they are a diabolical and realistic enactment of the nightmarish atmosphere that characterises the reliving of biological birth.

The barbed-wire barriers, high-voltage fences, watch towers with submachine guns, minefields, and packs of trained dogs certainly created a hellish and almost archetypal image of an utterly hopeless and oppressive no exit situation that is so characteristic of the first clinical stage of birth (BPM II). At the same time, the elements of violence, bestiality, scatology, and sexual abuse of women and men, including rape and sadistic practices, all belong to the phenomenology of the second stage of birth (BPM III), familiar to people who have relived their birth.

In the concentration camps, the sexual abuse existed on a random individual level, as well as in the context of the "houses of dolls," institutions providing "entertainment" for the officers. The only escape out of this hell was death - by a bullet, by hunger, disease, or suffocation in the gas chambers. The books by Ka-Tzetnik 135633, House of Dolls and Sunrise Over Hell (Ka-Tzetnik, 1955 and 1977), offer a shattering description of the life in concentration camps.

The bestiality of the SS seemed to be focused particularly on pregnant women and little children, which brings further support for the perinatal hypothesis. The most powerful passage from Terence des Près's book The Survivor is, without a doubt, the description of a truck full of babies dumped

into fire, followed by a scene, in which pregnant women are beaten with clubs and whips, torn by dogs, dragged around by the hair, kicked into the stomach, and then thrown into the crematorium while still alive (des Près, 1976).

The perinatal nature of the irrational impulses manifesting in the camps is evident also in the scatological behaviour of the kapos. Throwing eating bowls into the latrines and asking the inmates for their retrieval and forcing the inmates to urinate into each other's mouth were practices that besides their bestiality brought the danger of epidemics. Had the concentration camps been simply institutions providing isolation of political enemies and cheap slave labor, maintenance of hygienic rules would have been a primary concern of the organisers, as it is the case in any facility accommodating large numbers of people. In Buchenwald alone, as a result of these perverted practices, twenty-seven inmates drowned in feces in the course of a single month.

The intensity, depth, and convincing nature of all the experiences of collective violence associated with the perinatal process suggests that they are not individually fabricated from such sources as adventure books, movies, and TV shows, but originate in the collective unconscious. When our experiential self-exploration reaches the memory of the birth trauma, we connect to an immense pool of painful memories of the human species and gain access to experiences of other people who once were in a similar predicament. It is not hard to imagine that the perinatal level of our unconscious that "knows" so intimately the history of human violence is actually partially responsible for wars, revolutions, and similar atrocities.

The intensity and quantity of the perinatal experiences portraying various brutalities of human history is truly astonishing. Christopher Bache, after having carefully analysed various aspects of this phenomenon, made an interesting conclusion. He suggested that the memories of the violence perpetrated throughout ages in human history contaminated the collective unconscious in the same way in which the traumas from our infancy and childhood polluted our

individual unconscious. According to Bache, it might then be possible that when we start experiencing these collective memories, our inner process transcends the framework of personal therapy and we participate in the healing of the field of species consciousness (Bache, 1999).

The role of the birth trauma as a source of violence and self-destructive tendencies has been confirmed by clinical studies. For example, there seems to be an important correlation between difficult birth and criminality. In a similar way, aggression directed inward, particularly suicide, seems to be psycho-genetically linked to difficult birth. According to an article published in the British journal Lancet, resuscitation at birth is conducive to higher risk of committing suicide after puberty. The Scandinavian researcher Bertil Jacobson found a close correlation between the form of self-destructive behaviour and the nature of birth. Suicides involving asphyxiation were associated with suffocation at birth, violent suicides with mechanical birth trauma, and drug addiction leading to suicide with opiate and/or barbiturate administration during labor (Jacobson et al. 1987).

The circumstances of birth play an important role in creating a disposition to violence and self-destructive tendencies or, conversely, to loving behaviour and healthy interpersonal relationships. French obstetrician Michel Odent has shown how the hormones involved in the birth process and in nursing and maternal behaviour participate in this imprinting. The catecholamines (adrenaline and noradrenaline) played an important role in evolution as mediators of the aggressive/protective instinct of the mother at the time when birth was occurring in unprotected natural environments. Oxytocine, prolactine, and endorphins are known to induce maternal behaviour in animals and foster dependency and attachment. The busy, noisy, and chaotic milieu of many hospitals induces an-

xiety, engages unnecessarily the adrenaline system, and imprints the picture of a world that is potentially dangerous and requires aggressive responses. This interferes with the hormones that mediate positive interpersonal imprinting. It is, therefore, essential to provide for birthing a quiet, safe, and private environment (Odent 1995).

Transpersonal Origins of Violence

The above material shows that a conceptual framework limited to postnatal biography and the Freudian unconscious does not adequately explain extreme forms of human aggression on the individual and collective scale. However, it seems that the roots of human violence reach even deeper than to the perinatal level of the psyche. Consciousness research has revealed significant additional sources of aggression in the transpersonal domain, such as archetypal figures of demons and wrathful deities, complex destructive mythological themes, and past-life memories of physical and emotional abuse.

C. G. Jung believed that the archetypes of the collective unconscious have a powerful influence not only on the behavior of individuals but also on the events of human history. From this point of view, entire nations and cultural groups might be enacting in their behavior important mythological themes. In the decade preceding the outbreak of World War II, Jung found in the dreams of his German patients many elements from the Nordic myth of Ragna

rok, or the twilight of the gods. On the basis of these observations, he concluded that this archetype was emerging in the collective psyche of the German nation and that it would lead to a major catastrophe, which would ultimately turn out to be self-destructive.

In many instances, leaders of nations specifically use not only perinatal, but also archetypal images and spiritual symbolism to achieve their political goals. The medieval crusaders were asked to sacrifice their lives for Jesus in a war that would recover the Holy Land from the Mohammedans. Adolf Hitler exploited the mythological motifs of the supremacy of the Nordic race and of the millenial empire, as well as the ancient Vedic symbols of the swastika and the solar eagle. Ayatollah Khomeini and Saddam Hussein ignited the imagination of their Moslem followers by references to jihad, the holy war against the infidels.

Carol Cohn discussed in her paper not only the perinatal but also the spiritual symbolism associated with the language of nuclear weaponry and doctrine. The authors of the strategic doctrine refer to members of their community as the "nuclear priesthood." The first atomic test was called Trinity—the unity of Father, Son, and Holy Ghost, the male forces of creation. From her feminist perspective, Cohn saw this as an effort of male scientists to appropriate and claim ultimate creative power (Cohn 1987). The scientists who worked on the atomic bomb and witnessed the test described it in the following way: "It was as though we stood at the first day of creation." And Robert Oppenheimer thought of Krishna's words to Arjuna in the Bhagavad Gita: "I am become Death, the Shatterer of Worlds."

Biographical Determinants of Insatiable Greed

This brings us to the third poison of Tibetan Buddhism, a powerful psycho-spiritual force that combines the qualities of lust, desire, and insatiable greed. Together with "malignant aggression," these qualities are certainly responsible for some of the darkest chapters in human history. Western

psychologists link various aspects of this force to the libidinal drives described by Sigmund Freud. Psychoanalytic interpretation of the insatiable human need to achieve, to possess, and to become more than one is, attributes this psychological force to sublimation of lower instincts.

According to Freud, "What appears as . . . an untiring impulse toward further perfection can easily be understood as a result of the instinctual repression upon which is based all that is most precious in human civilization. The repressed instinct never ceases to strive for complete satisfaction, which would consist in the repetition of a primary experience of satisfaction. No substitutive or reactive formations and no sublimations will suffice to remove the repressed instinct's persisting tension" (Freud 1955).

More specifically, Freud saw greed as a phenomenon related to problems during the nursing period. According to him, frustration or overindulgence during the oral phase of libidinal development can reinforce the primitive infantile need to incorporate objects to such an extent that it is in adulthood transferred in a sublimated form to a variety of other objects and situations. When the acquisitive drive focuses on money, psychoanalysts attribute it to the fixation on the anal stage of libidinal development. Insatiable sexual appetite is then considered to be the result of phallic fixation. Many other unrelenting human pursuits are then interpreted in terms of sublimation of such phallic instinctual urges. Modern consciousness research has found these interpretations to be superficial and inadequate. It discovered significant additional sources of acquisitiveness and greed on the perinatal and transpersonal levels of the unconscious.

Perinatal Sources of Insatiable Greed

In the course of biographically oriented psychotherapy, many people discover that their life has been inauthentic in certain specific sectors of interpersonal relations. For example, problems with parental authority can lead to specific patterns of difficulties with authority figures, repeated dysfunctional patterns in sexual relationships can be traced to parents as models for sexual behavior, sibling issues can color and distort future peer relationships, and so on.

When the process of experiential self-exploration reaches the perinatal level, we typically discover that our life up to that point has been largely inauthentic in its totality, not just in certain partial segments. We find out to our surprise and astonishment that our entire life strategy has been misdirected and therefore incapable of providing genuine satisfaction. The reason for this is the fact that it was primarily motivated by the fear of death and by unconscious forces associated with biological birth, which have not been adequately processed and integrated. In other words, during biological birth, we completed the process anatomically, but not emotionally.

When our field of consciousness is strongly influenced by the underlying memory of the struggle in the birth canal, it leads to a feeling of discomfort and dissatisfaction with the present situation. This discontent can focus on a large spectrum of issues - unsatisfactory physical appearance, inadequate resources and material possessions, low social position and influence, insufficient amount of power and fame, and many others. Like the child stuck in the birth canal, we feel a strong need to get to a better situation that lies somewhere in the future.

Whatever is the reality of the present circumstances, we do not find it satisfactory. Our fantasy keeps creating images of future situations that appear more fulfilling than the present one. It seems that, until we reach it, life will be only preparation for a better future, not yet "the real thing." This results in a life pattern that has been described as a "treadmill" or "rat-race" type of existence. The existential-

ists talk about "auto-projecting" into the future. This strategy is a basic fallacy of human life. It is essentially a loser strategy, since it does not deliver the satisfaction that is expected from it. From this perspective, it is irrelevant whether or not it brings fruit in the material world.

When the goal is not reached, the continuing dissatisfaction is attributed to the fact that we have failed to reach the corrective measures. When we succeed in reaching the goal of our aspirations, it typically does not have much influence on our basic feelings. The continuing dissatisfaction is then blamed either on the fact that the choice of the goal was not correct or that it was not ambitious enough. The result is either substitution of the old goal with a different one or amplification of the same type of ambitions.

In any case, the failure is not correctly diagnosed as being an inevitable result of a fundamentally wrong strategy, which is in principle incapable of providing satisfaction. This fallacious pattern applied on a large scale is responsible for reckless irrational pursuit of various grandiose goals that results in much suffering and many problems in the world. It can be played out on any level of importance and affluence, since it never brings true satisfaction. The only strategy that can significantly reduce this irrational drive is full conscious reliving and integration of the trauma of birth in systematic inner self-exploration.

Transpersonal Causes of Insatiable Greed

Modern consciousness research and experiential psychotherapy have discovered that the deepest source of our dissatisfaction and striving for perfection lies even beyond the perinatal domain. This insatiable craving that drives human life is ultimately transpersonal in nature. In Dante Alighieri's words, "The desire for perfection is that desire which always makes every pleasure appear incomplete, for there is no joy or pleasure so great in this life that it can quench the thirst in our soul" (Dante 1990).

In the most general sense, the deepest transpersonal roots of insatiable greed can best be understood in terms of Ken Wilber's concept of the Atman Project (Wilber 1980). Our true nature is divine - God, Cosmic Christ, Allah, Buddha, Brahma, the Tao - and although the process of creation separates and alienates us from our source, the awareness of this fact is never completely lost. The deepest motivating force in the psyche on all the levels of consciousness evolution is to return to the experience of our divinity. However, the constraining conditions of the consecutive stages of development prevent a full experience of full liberation in and as God.

Real transcendence requires death of the separate self, dying to the exclusive subject. Because of the fear of annihilation and because of grasping onto the ego, the individual has to settle for Atman substitutes or surrogates, which are specific for each particular stage. For the fetus and the newborn, this means the satisfaction experienced in the good womb or on the good breast. For an infant, this is satisfaction of age-specific physiological needs. For the adult the range of possible Atman projects is large; it includes besides food and sex also money, fame, power, appearance, knowledge, and many others.

Because of our deep sense that our true identity is the totality of cosmic creation and the creative principle itself, substitutes of any degree and scope - the Atman Projects - will always remain unsatisfactory. Only the experience of one's divinity in a holotropic state of consciousness can ever fulfill our deepest needs. Thus the ultimate solution for the insatiable greed is in the inner world, not in secular pursuits of any kind and scope. The Persian mystic and poet Rumi made it very clear:

All the hopes, desires, loves, and affections that people have for different things - fathers, mothers, friends, heavens, the earth, palaces, sciences, works, food, drink - the saint knows that these are desires for God and all those things are veils. When men leave this world and see the King without these veils, then they will know that all were veils and coverings, that the object of their desire was in reality that One Thing (Hines 1996).

Technologies of the Sacred and Human Survival

The finding that the roots of human violence and insatiable greed reach far deeper than academic psychiatry ever suspected and that their reservoirs in the psyche are truly enormous could in and of itself be very discouraging. However, it is balanced by the exciting discovery of new therapeutic mechanisms and transformative potentials that become available in holotropic states on the perinatal and transpersonal levels of the psyche.

I have seen over the years profound emotional and psychosomatic healing, as well as radical personality transformation, in many people who were involved in serious and systematic inner quest. Some of them were meditators and had regular spiritual practice, others had supervised psychedelic sessions or participated in various forms of experiential psychotherapy and self-exploration. I have also witnessed profound positive changes in many people who received adequate support during spontaneous episodes of psycho-spiritual crises.

As the content of the perinatal level of the unconscious emerged into consciousness and was integrated, these individuals underwent radical personality changes. The level of aggression typically decreased considerably and they became more peaceful, comfortable with themselves, and tolerant of others. The experience of psycho-spiritual death and rebirth and conscious connection with positive postnatal or prenatal memories reduced irrational drives and ambitions. It caused a shift of focus from the past and future to the present moment and enhanced the ability to enjoy simple circumstances of life, such as everyday activities, food, love-making, nature, and music. Another important result of this process was emergence of spirituality of a universal and mystical nature that was very authentic and convincing, because it was based on deep personal experience.

The process of spiritual opening and transformation typically deepened further as a result of transpersonal experiences, such as identification with other people, entire human groups, animals, plants, and even inorganic materials and processes in nature. Other experiences provided conscious access to events occurring in other countries, cultures, and historical periods and even to the mythological realms and archetypal beings of the collective unconscious. Experiences of cosmic unity and one's own divinity lead to increasing identification with all of creation and brought the sense of wonder, love, compassion, and inner peace.

What had begun as psychological probing of the unconscious psyche automatically became a philosophical quest for the meaning of life and a journey of spiritual discovery. People who connected to the transpersonal domain of their psyche tended to develop a new appreciation for existence and reverence for all life. One of the most striking consequences of various forms of transpersonal experiences was spontaneous emergence and development of deep humanitarian and ecological concerns and need to get involved in service for some common purpose. This was based on an almost cellular awareness that the boundaries in the universe are arbitrary and that each of us is identical with the entire web of existence.

It was suddenly clear that we cannot do anything to nature without simultaneously doing it to ourselves. Differences among people appeared to be interesting and enriching rather than threatening, whether they were related to sex, race, color, language, political conviction, or religious belief. It is obvious that a transformation of this kind would increase our chances for survival if it could occur on a sufficiently large scale.

Lessons from Holotropic States for the Psychology of Survival

Some of the insights of people experiencing holotropic states of consciousness are directly related to the current global crisis and its relationship with consciousness evolution. They show that we have exteriorized in the modern world many of the essential themes of the perinatal process that a person involved in deep personal transformation has to face and come to terms with internally. The same elements that we would encounter in the process of psychological death and rebirth in our visionary experiences make our evening news today. This is particularly true in regard to the phenomena that characterize BPM III.

We certainly see the enormous unleashing of the aggressive impulse in the many wars and revolutionary upheavals in the world, in the rising criminality, terrorism, and racial riots. Equally dramatic and striking is the lifting of sexual repression and freeing of the sexual impulse in both healthy and problematic ways. Sexual experiences and behaviors are taking unprecedented forms, as manifested in the sexual freedom of youngsters, gay liberation, general promiscuity, open marriages, high divorce rate, overtly sexual books, plays and movies, sadomasochistic experimentation, and many others.

The demonic element is also becoming increasingly manifest in the modern world. Renaissance of satanic cults and witchcraft, popularity of books and horror movies with occult themes, and crimes with satanic motivations attest to that fact. The scatological dimension is evident in the progressive industrial pollution, accumulation of waste products on a global scale, and rapidly deteriorating hygienic conditions in large cities. A more abstract form of the same trend is the escalating corruption and degradation in political and economic circles.

Many of the people with whom we have worked saw humanity at a critical crossroad facing either collective annihilation or an evolutionary jump in consciousness of unprecedented proportions. Terence McKenna put it very succinctly: "The history of the silly monkey is over, one way or another" (McKenna 1992). It seems that we all are collectively involved in a process that parallels the psychological death and rebirth that so many people have experienced individually in holotropic states of consciousness. If we continue to act out the problematic destructive and self-destructive tendencies originating in the depth of the unconscious, we will undoubtedly destroy ourselves and life on this planet. However, if we succeed in internalizing this process on a large enough scale, it might result in an evolutionary progress that can take us as far beyond our present condition as we now are from primates. As utopian as the possibility of such a development might seem, it might be our only real chance.

Let us now look into the future and explore how the concepts that have emerged from consciousness research, from the transpersonal field, and from the new paradigm in science could be put into action in the world. Although the past accomplishments are very impressive, the new ideas still form a disjointed mosaic rather than a complete and comprehensive worldview. Much work has to be done in terms of accumulating more data, formulating new theories, and achieving a creative synthesis. In

addition, the existing information has to reach much larger audiences before a significant impact on the world situation can be expected.

But even a radical intellectual shift to a new paradigm on a large scale would not be sufficient to alleviate the global crisis and reverse the destructive course we are on. This would require a deep emotional and spiritual transformation of humanity. Using the existing evidence, it is possible to suggest certain strategies that might facilitate and support such a process. Efforts to change humanity would have to start with psychological prevention at an early age. The data from prenatal and perinatal psychology indicate that much could be achieved by changing the conditions of pregnancy, delivery, and postnatal care. This would include improving the emotional preparation of the mother during pregnancy, practicing natural childbirth, creating a psycho-spiritually informed birth environment, and cultivating emotionally nourishing contact between the mother and the child in the postpartum period.

Much has been written about the importance of child rearing, as well as disastrous emotional consequences of traumatic conditions in infancy and childhood. Certainly this is an area where continued education and guidance is necessary. However, to be able to apply the theoretically known principles, the parents have to reach sufficient emotional stability and maturity themselves. It is well known that emotional problems are passed like curse from generation to generation. We are facing here a very complex problem of the chicken and the egg.

Humanistic and transpersonal psychology have developed effective experiential methods of self-exploration, healing, and personality transformation. Some of these come from the therapeutic traditions, others represent modern adaptations of ancient spiritual practices. There exist approaches with a very favorable ratio between professional helpers and clients and others that can be practiced in the context of self-help groups. Systematic work with them can lead to a spiritual opening, a move in a direction that is sorely needed on a collective scale for our species survive. It is essential to spread the information about these possibilities and get enough people personally interested in pursuing them.

We seem to be involved in a dramatic race for time that has no precedent in the entire history of humanity. What is at stake is nothing less than the future of life on this planet. If we continue the old strategies which in their consequences are clearly extremely self-destructive, it is unlikely that the human species will survive. However, if a sufficient number of people undergo a process of deep inner transformation, we might reach a level of consciousness evolution when we deserve the proud name we have given to our species: **Homo sapiens**.

The Vulnerable Prenate

William R. Emerson (USA)

Abstract. Emerson reports on the effects of prenatal traumas, drawing on his 20 years of research into the significance of prenatal and perinatal experiences for an individual's life-history. More than one trauma is usually involved. Emerson assumes that children can experience consciously before birth and also have a prenatal memory. A number of examples are given to illustrate this. One of Emerson's important findings is that prenatal traumas may result in complications at birth. In particular, a child that suffers injury before birth may experience a normal birth as traumatic. Another significant observation is that prenatal and perinatal traumas impede an individual's ability to form relationships and predispose him or her to violence later on. An increasing number of therapists are now able to deal with the effects of prenatal and perinatal traumas in the therapeutic setting.

The prenate (i.e., the unborn baby) is vulnerable in a number of ways that are generally unrecognized and unarticulated. Most people think or assume that prenates are unaware, and seldom attribute to them the status of being human. I recall a recent train trip, where an expectant mother sat in a smoking car filled with boisterous and noisy people. I asked her whether she had any concern for her unborn baby, and whether she thought the smoke or the noise would be bothersome to her unborn child. Her reply was, "Well of course not, my dear. They are not very intelligent or awake yet." Nothing could be further from the truth.

Theory and research from the last 20 years indicates that prenatal experiences can be remembered, and have lifelong impact. The major purpose of this article is to clarify the conditions under which prenatal experiences may be lifelong and to describe the theoretical and research perspectives that are necessary to understand the effects of prenatal traumatization. In addition, because the incidences of personal and societal violence are at an all-time peak and headed higher, this paper discusses the effects of pre- and perinatal trauma on aggression and violence.

Interactional Trauma

The effects of prenatal traumatization cannot be predicted without knowledge of other factors, and prenatal experiences are likely to have lifelong impact when they are followed by reinforcing conditions or interactional trauma. The term "interactional trauma" means that traumas interact with each other in producing their effects. In statistical analyses, interactional means that the effects of factors depend on the presence of other factors. Both of these definitions communicate the meaning of interaction as it is used in this article. For example, it is unlikely that being stuck during the birthing process causes claustrophobia during adulthood. However, claustrophobia is more likely if similar, reinforcing traumas occur. In one such case that I treated, a baby who had been stuck during his birth was also locked in a closet for 24 hours as a child, and held and choked by his brother on several occasions, several points are relevant here. First of all, prenatal traumas provide "tinc-

tures" for later experiences, stated differently, life experiences are perceived in terms of prior and unresolved traumas. When a baby is stuck during birth, the baby is likely to perceive later events as entrapping, or to unconsciously manipulate or choose life situations that bring about entrapment. This process is called recapitulation. secondly, similar or recapitulated events, independent of perceptual processes, are likely to reinforce prenatal traumas, resulting in relatively chronic symptoms. In the case of the baby just described, childhood events acted as reinforcements for the birth trauma, resulting in chronic claustrophobia.

The Effects of Prenatal Experiences: Theoretical Perspectives — Prenates are Conscious, Aware Beings

During the 1995 APPPAH Congress in San Francisco, David Chamberlain shared a case that exemplifies the consciousness of prenates. In this case, a baby was undergoing amniocentesis. Videotapes of the amniocentesis showed that when the needle was inserted into the uterus, the baby turned toward the needle and batted it away. Thinking that they had seen an aberration, medical staff repeated the needle insertion, and again, the baby batted the needle away. In addition, there are numerous anecdotal reports that babies routinely withdraw from needles as they are inserted into the uterus. From these observations, it is safe to conclude that babies are very conscious of what is happening around them, particularly with respect to events that impact them personally. In her book From Fetus to Child, Piontelli cites cases of prenatal awareness. She describes a twin pair, at about four months of gestation, who were very conscious of each other, and were also involved in dominance-submission interactions. One of the twins was dominant and aggressive, the other submissive. Whenever the dominant twin was pushing or hitting, the submissive twin withdrew and placed his head on the placenta, appearing to rest there. In life, when these twins were four years of age, they had the same relationship. Whenever there was fighting or tension between the pair, the passive twin would go to his room and put his head on his pillow. He also carried a pillow and used it as his "security blanket," resting on it whenever his twin became aggressive. From this and other research (such as David Chamberlain's Babies RememberBirth, currently out of print but borrowable from APPPAH members, and Elizabeth Noble's Primal Connections), it seems clear that prenates are conscious beings and that behaviors that begin in utero are also likely to carry over into later life.

Prenatal Events Are Remembered

For years it was hard to understand how prenatal experiences could be remembered. The central nervous system is very rudimentary during the prenatal period, and is not yet myelinated (covered by a protective sheath). When there is no myelination, the nervous system cannot function efficiently enough to support memory. However, anecdotal reports of adults regressed to the prenatal period and remembering prenatal events proliferated in primal and regressive communities. In 1970 Dr. Graham Farrant, an Australian medical doctor, began experiencing prenatal events and recording his body experiences. He was quite astonished to discover that he experienced most of his significant prenatal memories at a cellular rather than a

tissue or skeletal-muscular level, and he referred to his recollections as cellular memory. In 1975 Dr. Frank Lake, an English theologian and psychiatrist, found that prenatal memories stemmed from viral cells, that viruses were primitive prenatal cells that formed during trauma and carried traumatic memories. He consistently referred to prenatal memories in terms of cellular memories. Over the last 5 years, there has been a considerable amount of research done in cellular biology, all of it supporting the theory that memories can be encoded in cells. The research of Dr. Bruce Lipton, reported in the 1995 APPPAH Congress, is relevant here and supports the conclusions of Farrant and Lake.

Prenatal Memories May be the Most Influential

A group of European psychologists, led by R. D. Laing and Frank Lake (both now deceased), contend that prenatal memories are the most influential because they are the first. This perspective is apparent in Laing's book entitled The Facts of Life, where he says, "The environment is registered from the very beginning of my life; by the first one (cell) of me. What happens to the first one or two of me may reverberate throughout all subsequent generations of our first cellular parents. That first one of us carries all my 'genetic' memories" (p. 30). He goes on to say, "It seems to me credible, at least, that all our experience in our life cycle from cell one is absorbed and stored from the beginning, perhaps especially in the beginning. How that may happen I do not know. How can one cell generate the billions and billions of cells I now am? We are impossible, but for the fact that we are. When I look at the embryological stages in my life cycle I experience what feel to me like sympathetic vibrations in me now ... how I now feel I felt then" (p. 36). Frank Lake mirrored Laing's perspectives. Lake contended that the most formative experiences were ones that occurred prenatally, especially during the first trimester. In the U.S., Lloyd de Mause has also written about the social, cultural, and political influences of prenatal experiences, and reported on these findings during the 1995 APPPAH Congress.

Prenates Incorporate Parental Experiences and Feelings

From his regressions with adult patients, Lake also found that the most influential events were maternal experiences that passed biochemically through the umbilical cord by means of a group of chemicals called the catecholamines, but it is also true that prenates incorporate psychic prenatal feelings and experiences, especially those of their mothers. Maternal emotions (and paternal emotions through the mother's emotional response to them) infiltrate the fetus. Research shows that what mothers experience, babies also experience. A good example is the following case. A woman's father died just prior to the conception of her child, she spent the whole 9 months feeling depressed and grieving the loss of her father. If it is true that babies experience and remember what their mothers experience, then her baby should also have experienced loss and depression, and these feelings would be expected to resurface during childhood and/or adulthood. This appeared to be the case. As a child, her baby was periodically depressed, and medical personnel could find no physiological or psychological basis for the depression (they were not cognizant of the child's prenatal experiences). When he was depressed, he would draw pictures of old and dying men in caves (in pre- and perinatal psychol-

ogy, caves are symbolic of wombs, the place where he experienced the loss of his grandfather). After drawing, he would feel better for a while, but the depression would slowly return. He was unconscious of any connection between his drawings and his grandfather's death. The depression became chronic when his parents were experiencing tension (his mother and father were living separately but raising him together). The tension symbolized the loss of his father and grandfather. His drawings sometimes depicted a little girl frantically searching for dying men. The little girl probably represented his own feminine, the mother's inner child, and/or a female twin's experience of the grandfather's loss. It is unlikely that grief would have resurfaced as chronic depression without the reinforcing conditions of father loss and parental discord.

It is important to realize that although prenates do take on the prenatal experiences of their parents, they also have their own unique experiences during the prenatal period, independent of their parents. The mechanisms of how this works are not clear, but numerous anecdotal reports and clinical cases show that prenates have their own experiences. For example, I recall the reports of a regressed child, a twin, who was repeatedly subjected to verbal and physical fights between his mother and her boyfriend during the prenatal period. His experiences of the prenatal fighting were not what might be expected, based on this paper's content. He reported that his mother and her boyfriend were constantly fighting, but he and his twin would respond to this by cuddling up and rocking while the fighting went on. During the fighting, they both felt quite clever (to have avoided the tension) and relaxed. Perhaps the presence of a comforting twin can make separation from parental experiences feasible or possible.

When Reinforced, Prenatal Experiences May Have Dramatic and Symptomatic Influences

In the case of the woman who lost her father just prior to pregnancy, the baby presumably experienced the same loss that his mother experienced. In addition, a very tangible and personal trauma happened shortly thereafter. Early in the pregnancy, when she was 8 weeks pregnant, the mother's husband abruptly left her for another woman, she was shocked by the experience and felt deeply abandoned. Presumably her unborn child did as well. Because she had little financial security and did not want to raise a child by herself, she decided to abort her child, she attempted several abortions, most often by using the hooked or curved end of a coat hanger. As a child, her baby was periodically sadistic and self-destructive. The manifestations of his sadism bore striking resemblances to his mother's abortion attempts, although he was unaware of them. He burned himself with cigarettes and gouged private parts of his body with sharp metal objects. His favorite sadistic instrument was a fishing hook, but he complained he could never buy ones that were big enough. As a young adult he was arrested thirty times for assault, and his modus operandi was reminiscent of his mother's attempts to abort him. He usually assaulted his victims when they were sleeping, by using heavy braided wire with a wire hook welded on the end.

Aggression and Violence are Pathological Symptoms Resulting from Multiple, Reinforcing Traumas with Themes of Loss, Abandonment, and Aggression

In the case just described, the prenate experienced the intense loss and abandonment that his mother experienced. In addition, he also experienced the abandonment that comes with parental narcissism, i.e., his mother was so absorbed in her abandonment and loss that she had little or no cognizance of him, nor did she have time or energy to celebrate his presence. On the contrary, he was perceived as a burden, and as something to get rid of. Consequently, he also experienced the aggression of his mother's abortion attempts on his life.

Prenatal and Birth Traumas are Mirror Images

Prenatal traumas have two distinct impacts on birth. First of all, birth is often perceived and experienced in terms of prenatal traumatization. So, for example, babies who experience abortion attempts are also likely to experience birth as annihilative, babies who experience near-death during implantation in the womb are likely to experience birth as a near-death experience, and babies who experience aggression or violence while in the womb are likely to experience the interventions of birth as aggressive and violent, even though there is no such intent on the part of medical personnel or parents. secondly, as Sheila Kitzinger has documented, whenever there is significant prenatal stress (trauma), there is an increasing statistical likelihood that birth complications will occur with greater frequency. The greater the degree of stress or trauma during the prenatal period, the greater the likelihood of birth complications and obstetrical interventions. This is exactly what occurred in case of the mother whose father died just before she became pregnant, and who attempted several abortions. The mother had a very difficult birth with long labor and many complications. Many interventions were used and repeated, among which were inductions, augmentations, sedations, analgesias, anesthesias, forceps, episiotomy, intensive care placement, and respiration.

It should be pointed out that the severity of symptomology in the present case is due to the fact that there were additional and reinforcing traumas as well, all involving loss, abandonment, and aggression. When the baby was 3 months old, the mother took him shopping in a stroller, forgot that he was with her, left him in an aisle of the store, and only realized her error hours later. In addition to this, she had a boyfriend who was repeatedly and physically abusive with her son during his early childhood. These multiple and reinforcing traumas manifested in his childhood and adulthood as aggression and violence.

Prenatal and Birth Traumas Impair Bonding at Birth

In addition to posing a risk of birth traumatization, prenatal traumas have another and more insidious impact. When traumas occur prior to or during birth, the quantity and quality of bonding is radically reduced. This reduction occurs for two reasons. The first has to do with the defensive dulling of mind and body. When traumas and shocks occur, there is a natural physiological dulling of the mind and body in order to defend against traumatization and shock (Bloch 1985). This self-anesthetization occurs because of the hormonal changes that normally occur in the body during and after trauma and shock. When the body and mind are dulled, and when the body is exhausted from stress, the quantity and quality of bonding are lessened. The second impact has to do with the failure of parents and others to acknowledge traumatization,

which diminishes the bonding process even further. When traumas occur, there is a critical period of time afterward during which humans require understanding, acknowledgment, and compassion in order for shock to subside and healing to begin. However it is rare for babies to receive understanding, acknowledgment, and compassion after their prenatal and birth traumas, simply because no one knows or believes that traumas have taken place. As has been verified in my own clinical research with babies, unacknowledged traumas create distrust in babies, and this significantly impedes the bonding process. In contrast, it is informative to witness the level and depth of bonding in babies who have not been traumatized, or whose traumatization is being seen and acknowledged. The bonding is noteworthy by its depth, intensity, and duration. One only has to witness such bonding to realize that bonding is significantly reduced and altered by the presence of unacknowledged and unresolved traumatization.

Lack of Bonding Predisposes the Individual to Aggression and Violence

In my work with infants over the past 25 years, I have discovered some important interrelationships between prenatal trauma, birth trauma, bonding, and aggression. The first interrelationship is that birth actively impacts and impairs the bonding process, and it does so because many aspects of the birthing process are psychologically and physically painful for babies, a fact that is seldom acknowledged. Many things are painful about birth, and many things need acknowledging. Medical exams and medical tests are often experienced (by babies) as unnecessary, invasive, and painful, and this is rarely acknowledged. Medical personnel routinely separate babies from parents after birth, and separation is often experienced as terrifying abandonment. Placement in intensive care is frequently experienced as terrifying, lonely, overstimulating, and painful abandon-ment. Anesthetization is particularly impactful on bonding because residual amounts of anesthesia are common in babies, even hours and days after birth, and anesthesia makes babies (and mothers) numb and therefore less available to the bonding process. Epidurals were thought to be superior to other anesthesias because they would not inhibit the bonding process as much, but research shows that mothers who receive epidurals show less attachment to their babies than mothers who do not. These are some examples of the effects of birth trauma on bonding. In all cases bonding is impacted because it is difficult for babies to trust their parents when their parents do not accurately perceive or acknowledge their prenatal and birth traumas. In general, the greater the number and severity of unacknowled-ged prenatal and birth traumas, the greater the impact on bonding.

A second important interrelationship has to do with the effects of unresolved trauma on bonding. When traumas are largely untreated, the impacts on bonding are exacerbated because the traumatized infant remains in a defensive stance with respect to the world, and does not "let the world touch him." Many parents report to me that their babies are very independent, but this is often a cover for defensiveness. Such babies act as if they are OK, and do not need comforting or support. They do not easily let themselves be comforted and held, either pushing their parents away and/or ignoring their attempts to comfort and console. Many times they will only let their parents comfort them after considerable resistance. Third, it is important to realize that a lack of bonding may be sufficient, in and of itself, to create aggression and violence. This surprising fact has been brought to light by various researchers. For example, Magid and McKelvey (1988) reported that children with severe bonding difficulties do not

develop a conscience, and perform asocial or antisocial acts without remorse. Felicity De Zulueta summarized research in the field of bonding and attachment, and concluded that violent aggression is the result of damaged bonding. She says (1993, p. 78), "One of the most important outcomes of... studies on attachment behavior is the emerging link between psychological trauma, such as loss (of a bond)... and destructive or violent behavior." She concludes that the more damage that is done to bonding, the greater the likelihood of aggression and violence during childhood and adulthood. Fourth and finally, it is clear from the observations of clinical researchers that the probability of societal aggression and violence are increased greatly by the presence of aggression or violence during the pre- and perinatal periods of development. Prenates pick up on aggressive and violent energies, and are likely to repeat what they experience in their prenatal life space.

What Kinds of Pre- and Perinatal Experiences Underlie Aggression and Violence?

As a way of determining the prenatal, etiological bases for violence and aggression, I posed a basic question to a number of experts in the field, among which were R. D. Laing, Frank Lake, Barbara Valassis, Barbara Findeisen, Stan Grof, Michael Irving, and others. I asked them to report on the kinds of regressive experiences that their aggressive and violent patients had uncovered and/or reported, and that were central in the success of treatment. Among their varied responses were common threads of consensus, among which were: a) pre and perina-tal experiences were paramount in aggression and violence; b) childhood experiences seemed to reflect and reinforce prenatal traumatization;

5. aggression and violence were related to the severest levels of pre and perinatal trauma; d) certain themes were consistently related to aggression and violence - themes of loss, abandonment, rejection, and aggression; and e) certain pre and perinatal traumas were consistently related to aggression and violence. These experiences are described below.

In reading through these experiences, it is important to remember several basic principles, referenced above. First of all, multiple prenatal traumas are more likely to result in violence and aggression than single traumas. secondly, bonding deficiencies are directly related to aggression and violence. The greater the degree of bonding deficits, the greater the likelihood of violence and aggression. Third, prenatal traumas that involve loss, abandonment, or rejection are more likely to impact bonding than other traumatic themes, and are also more likely to result in the complete absence of bonding than traumas involving other themes. Finally, the direct exposure to aggression and violence during the prenatal period is highly predictive of violence and aggression during adulthood.

The old adage, "Children learn what they live," is relevant here. Like children, prenates "learn what they live," and prenates subjected to aggression and violence are likely to manifest the same in their adult lives.

Conception

When clients who have problems with aggression and violence are regressed, they frequently encounter the experience of conception. They report that they are conscious of traumatic is-

sues outside of themselves, in their family or immediate surroundings. The most frequently mentioned traumas involve forced sex, manipulated sex, date rape, rape, substance abuse, physical abuse, dismal familial, social, or cultural conditions, and personal or cultural shame, such as when children are conceived out of wedlock. They often experience biological encounters as sperm and/or eggs which involve intense aggression, annihilation, death, power, and/or rejection. To cite an example of traumatic conception, one child was conceived out of wedlock in a small religious community where such things were disdained. Her mother experienced shame, guilt, and public ridicule before deciding to "keep her," and her child experienced the same guilt, shame, and ridicule that her mother did. The public ridicule was experienced as particularly annihilating and hostile. This led to charactero-logical patterns of self-righteousness, self-ridicule, masochism, and hostility.

Implantation

Implantation is the biological process whereby the conceptus attaches itself to the uterine wall, and is a vital stage of embryological development where survival is precarious. Prior to and during implantation, regressees report that they come close to death, experience the terror of near-death, experience that they are unwanted, experience that they have no place to go, no place to belong, and "decide" that the world is a hostile and unsafe place. They often collapse in hopelessness, retaliate in rage, fluctuate between these two extremes, and/or manifest intense rescue complexes (the need to rescue others and/or be rescued). Christ's life was, in many ways, a metaphor of implantation. There was "no room in the Inn", and He had no place that He belonged. And as the Bible declares, His life was manifested in order for Him to save and rescue mankind. Many regressees with problems in aggression report the loss of a twin. Their problems with aggression typically have to do with masochism and/or neurotic self criticism. Embryological research indicates that loss of a twin may be much more likely than originally thought. Embryologists estimate that between 30are multiple (i.e. twins) rather than single. Since the rate of birthed twins is far less than 30conclude that many conceptions involve the death of one or more twins, usually prior to or during implantation, although some happen after implantation. People who experience the loss of a twin manifest several common dynamics. First of all, there is an ineffable but profound sense of loss, despair, and rage that is connected with twin death. These feelings are usually held in, but are sometimes acted out against others. Secondly, there is a chronic but ineffable and unarticulated fear that loss will happen again, and pervasive insecurity. The threat of loss is defended against by distancing from others, or by engaging in codependent relationships. Third, the ability to bond with others is deficient or neurotic because there is a lack of trust in relationships, or disbelief that relationships will last. Fourth, there is often an over compliance in life, based on the unconscious feeling that "if I don't do what is expected or wanted, I will die." Over compliance feeds hostility and aggression toward others, since one cannot take care of oneself when constantly complying with others. Finally, prenatal experiences of near-death and/or loss are sometimes turned against oneself or others, resulting in sadistic and masochistic behaviors, criminal violence, or sadomasochistic thinking and behavior.

Discovery of Unwanted Pregnancy

When aggressive clients regress to the prenatal period, they frequently and spontaneously regress to the time of their discovery (i.e., the time the pregnancy was discovered), and many of them are surprised to find that they were unwanted. The discovery of being unwanted typically leads to the realization that lifelong episodes of depression, self-destructiveness, or aggression are a direct expression of prenatal rejection. They typically report that they can trust only themselves, and that their whole lives have been geared toward denying or finding the acceptance and love that they did not receive as prenates. The percentage of aggressive clients who were unwanted at the time of discovery is quite high, and has important implications for bonding disorders. Typical responses to being unwanted are to collapse into helplessness and hopelessness, to rage at others and the world's injustice, and/or to refuse to engage in life.

Prenatal Aggression

The majority of adults with problems in aggression learn that they were unwanted at the time of discovery, but many of them also learn that they were exposed to other forms of aggression during the pre- and perinatal period, some common forms of aggression are warfare, gang fights, domestic violence, conception through rape, physical or sexual abuse of parents or siblings, annihilative energies, intrauterine toxicities, and/or abortion attempts. Prenates who experience one or more of these aggressive conditions are at risk for manifesting aggression and violence, and the greater the number of conditions, the greater the likelihood of aggression and violence.

Adoption

Adoption trauma refers to a broad range of painful experiences that are common to adoption. When children are adopted, they are likely to have experienced some level of abortion trauma—there may have been direct attempts on life, abortion plans with no attempts, or abortion ideations but no plans. All of these are traumatizing to varying degrees. In addition they are likely to have experienced discovery trauma (child unwanted at the time of discovery), conception trauma (child unwanted at time of conception), or psychological toxicity (child exposed to mother's annihilative or ambivalent feelings, or to social/cultural shame). Adoption trauma has many different levels. The lowest level occurs when parents want their children but reluctantly give them up for adoption because external circumstances dictate. A higher level occurs when parents do not want their children and seriously consider abortion. The highest level occurs when parents are unequivocally opposed to having children, when pregnancies are resented, when abortions are attempted, when children are put up for adoption, and when children are fostered a number of times. High risk (for aggression) children are children who experience the severest levels of adoption trauma.

Pre and Perinatal Medical Procedures

When prenates experience severe forms of traumatization, as described above, they are also likely to perceive subsequent events in similar contexts. This is especially true when subsequent events are stressful life transitions (such as birth, adolescence, first jobs, new relationships, etc.), and/or when subsequent events are symbolically similar to traumatizing events. For example, if prenates experience prenatal violence, then they are likely to experience life transitions (such as birth) in violent ways. Freud called this process recapitulation. Among other definitions, recapitulation means that prenatal experiences shape how subsequent life experiences are perceived. The following case is a good example, because the mother had limited prenatal traumas, which nevertheless impacted her baby's perceptions and experiences of the birthing process. The mother was 28 years old, and had never attempted to conceive a child. Her mother had had difficulty conceiving children, so she was anxious about her ability to conceive. She wanted to have a child, and in spite of being unmarried, conceived a child with her boyfriend, who was ambivalent but consented to try. They conceived after much effort, whereupon the boyfriend turned brutal and violent against the mother and her baby (it was later determined that the boyfriend's father had been abusive during the boyfriend's prenatal period). A series of beatings occurred, after which the mother fled. She spent the remainder of her pregnancy in a distant and safe place, under conditions that were close to "ideal." She was attentive to herself, her body, and to her baby. She meditated daily and earned income from work she did at home. She had an extensive and supportive family system as well as friends, and the remainder of the pregnancy was uneventful in terms of other stresses and traumas. she devoted time to her unborn baby every day, talking and singing to him, and doing bonding exercises. She gave birth at home, and described the birth as short and simple, with no complications. In spite of having a largely positive pregnancy and an easy birth, the early abusive experiences haunted her and her baby. In particular, her baby experienced the birth as very traumatic (this is not an unusual event, even when mothers describe births as simple and uneventful). This was evident in childhood memories of his third trimester and birth. He experienced the his mother's jogging during the third trimester as abusive, saying that his head bounced painfully on his mother's pelvic bones. He experienced the perineal massages (given repeatedly during birth) as intrusive, and the contractions as abusive and violent. He was aware of his mother's physical pain, felt the birth was hurting her, and felt guilty that he could not protect her. In short, all of his birth feelings appeared to be overlays and manifestations of his unresolved abuse traumas from the first trimester. It is important to realize that, even more so than children or adults, prenates perceive and interpret life experiences in terms of past experiences. This is so because prenates do not have sufficient neurological integrity or adequate life experiences to assist in discriminating between current and historical realities.

When prenates experience abandonment, rejection, violence, or abuse, as has been described in this paper, they routinely bring these experiences to bear during the birthing process. Amniocentesis needles and chorionic villae catheters are commonly perceived as aggressive, annihilating, and/or rejecting instruments. Anesthetic procedures are often perceived as attempts to disempower or to poison (a reflection of abortion trauma). Augmentations (inductions and

"breaking waters") are usually experienced as boundary violations. Forceps and vacuum extractions are often perceived as attempts to control or annihilate. Contractions are often perceived as attempts to annihilate, destroy, or impede. For example, one adult who had been exposed to chemical and mechanical abortion attempts (his mother had taken low-dose cyanide pills and repeatedly pummeled her abdomen and uterus) experienced contractions as attempts to beat him to death, and experienced anesthesia administrations as attempts to poison him. It is vital that medical and obstetrical personnel understand the importance and relevance of preand perinatal traumas, and understand that birthing babies are likely to experience the birthing process in terms of prior traumatizations. This means that birth can be very traumatic, simply on the basis of personal history. If this fact were known, then medical interventions could be limited to situations where they were absolutely necessary, or medical interventions could be humanized in a variety of ways (such as asking for babies' permission to implement procedures and getting responses through mother's intuitions; letting babies know that they might experience prior pains and discomforts; empathizing in terms of prior traumas; letting babies know that birth is a difficult transition with the potential for neg-ative and overwhelming feelings; and acknowledging babies post-birth emotions as legitimate expressions of a difficult birthing process. It is also important to acknowledge the positive aspects of birthing, the wonder and joy that belongs to the birthing process. Few births are entirely difficult, and few are free from trauma or pain. We need to acknowledge the whole gamut of human experiences as they unfold during the birthing process.

Treatment

It is important that pre- and perinatal traumas be treated as early as possible. This is so because, as previously discussed, early traumas shape how subsequent events will be perceived and experienced. If treatment occurs early on, during gestation or the first year, then child-hood experiences can be freed from prenatal influences, and children can live their lives unencumbered by the bonds of trauma. The effects of trauma have been described elsewhere (Emerson, 1992, 1994). However, suffice it to say that unresolved traumas affect the spiritual and psychological development of children. In contrast, children who had no trauma, or whose traumas have been resolved, are clearly unique in the following ways. They are more spiritually evolved, manifest higher levels of human potential, and are developmentally precocious. They exhibit higher self-esteem and intelligence test scores, and they are more empathic, emotionally mature, cooperative, creative, affectionate, loving, focused, and self-aware than untreated and traumatized children (Emerson, 1993).

The fact that pre- and perinatal traumas shape how subsequent life events are experienced does not mean that childhood experiences, in and of themselves, are unimportant in terms of human development. On the contrary, childhood experiences are very important in determining and shaping who children will become. It is precisely because childhood experiences are so important that it is vital to free childhood from the bonds of pre- and perinatal trauma. If these traumas can be resolved before childhood, then childhood has the opportunity to be experienced on its own, without traumatic influence from the prenatal period, and without the defensive forces that inhibit feelings of safety, security, and growth. Furthermore, children can be freed

to exhibit and manifest their own unique human potential, to utilize their own inherent levels of intelligence, and to become themselves, unencumbered by prior traumas.

In addition to these benefits, society can be freed from the increasing burden of aggression and violence. According to statistics reported at the

1995 APPPAH Congress, violence and aggression are on the rise, and are reaching epidemic proportions. Therapists who specialize in anger resolution report that about one client in five carries a significant degree of anger and rage. Aggression and violence are on the rise, and are extremely costly in terms of human lives, in terms of financial and budgetary considerations (prisons, jails, and law enforcement are very costly, and deprive our school systems of needed finances), and in terms of the safe and efficient functioning of our institutions. These violent feelings are dire-cted toward self and others, and are very difficult to resolve for the following reasons. First of all, most therapists do not realize that anger and rage, at their deepest levels, are caused by pre- and perinatal traumas, and are related to perinatal bonding deficits. secondly, most clinicians fail to realize that anger and rage cannot be resolved solely by talking therapies. Instead, anger and rage require physical and emotional release. Third, anger and rage are inextricably intertwined with low self-esteem, shame, guilt, disempowerment, and forgiveness. These concepts need to be understood and recognized in the treatment of aggressive disorders. Finally, the ultimate resolution of rage and anger requires that relevant pre and perina-tal traumas be uncovered, encountered, catharted, repatterned, and integra-ted into consciousness. Additional aspects of treatment should include opportunities for rebonding, i.e., for bonding in ways that were impossible at the time of traumatization, or bonding in ways that were inhibited by unresolved traumas. The Association for Pre and Perinatal Psychology and Health, and Emerson Training Seminars (California) have personnel and lists of professionals who do such work.

Abortion Survivors At Columbine

John C. Sonne (USA)

Abstracts. This paper is a comprehensive analysis of the two adolescent perpetrators of the 1999 massacre at Columbine High School. Using psychoanalytic, family systems, and prenatal psychology resources, the author explores various theories advanced to explain their behavior and offers the new observation that the boys match the clinical profile of abortion survivors. In concluding, he predicts the increasing appearance or more and ever younger killers in a culture which features the multigenerational transmission of the threat of being aborted and suggests that this insight may help us understand other examples of antisocial behavior and pathological syndromes.

Introduction

Abortion survivors are persons who were born after having prenatally experienced either a direct attempt to physically abort them, or who have survived after having lived in an unwelcoming and ambivalent prenatal environment in which the possibility of their being aborted had been consciously or unconsciously considered by their parent s) or others. Evidence will be presented in this essay showing that the thinking, feeling and behavior of the Columbine killers represent an extreme example of the complex of symptoms of abortion survivors seen in clinical practice.

To begin my presentation, I shall describe in detail the killers' behavior during and prior to the massacre, and outline various theories that have been advanced as to its possible cause, none of which so far have touched on abortion dynamics. Following this I shall review evidence from the field of prenatal psychology that has documented that the unborn are sentient beings possessing the capacities of mentation, communication and response to trauma, and review some of the unconscious defense mechanisms used to cope with the threat of being aborted. I shall then summarize the symptoms of abortion survivors, show these symptoms in the school killers, and deal with the question of what is required to satisfy the burden of proof that the Columbine killers were indeed abortion survivors.

The Massacre

On Tuesday, April 20, 1999, at Columbine High School in Littleton, Colorado, two senior high school students, Eric Davis Harris, 18, and Dylan Bennett Klebold, 17, wearing ski masks, walked into the school cafeteria at lunch time and began firing automatic weapons and tossing shrapnel filled explosives about. They killed twelve of their classmates, wounded twenty-four others, killed one of their male teachers, and then committed suicide.

The massacre lasted about six hours, and involved the killers' making threatening and derisive comments and questions to the victims. A student recalls one of them saying, "Look, there's that little nigger," before shooting the student, a popular black athlete, three times in the head, then laughingly saying, "Hey, I always wondered what nigger's brains looked like." A young female

student was asked if she believed in God, and when she answered in the affirmative, she was shot. One girl told how, as she was begging for her life, she was told by one of the gunmen, as he laughingly put a gun to her head, that he was doing this because people had been "mean to him last year." Several students reported the killers as being excited and laughing triumphantly as they went about their killing. Nicholas Schumann, 19, who heard the shooting and voices from the library below, said "They were, like, orgasmic." To one student, hiding beneath a desk, they said, "Peekaboo," and then shot him.

Behavior of the killers to the massacre

Fellow students have described Harris and Klebold as "not present," and difficult to get to know. They were members of a group that school jocks called "The Trench Coat Mafia," which consisted of about a dozen students known for their unusual dress in black leather coats and high black steel-toed leather boots, a Gothic look popularized by rock singer Marilyn Manson and reminiscent of the garb of Nazi stormtroopers. Sometimes they wore white pancake makeup and dark eyeliner. They were fans of the video game, "Doom," and the movie, "Matrix," and also devotees of the German band KMFDM, whose name means "No pity for the majority," and whose lyrics question the meaning of life and are full of violence to the status quo and intense self loathing. One student described Harris and Klebold as having a "devilish, half-dead, half-alive" look. They were known as devotees of Hitler, and it is noteworthy in this regard, that the killings occurred on the 110-th anniversary of Hitler's birth. Popular jock athletes, minority groups, and anyone religious, particularly Jews, were targets of their scorn.

There were many indications of impending disaster preceding the massacre. In January 1998, Harris and Klebold were arrested for breaking into a commercial van and stealing electronic equipment. The two boys paid weekly visits to a "diversion officer" and were subjected to a range of reform programs, from community service to a "Mothers Against Drunk Driving" panel to an "angermanagement class." They were subsequently prohibited from owning weapons or explosives. The program officers for both boys marked their prognosis as "good." Klebold's officer wrote, "Dylan is a bright young man who has a great deal of potential," and "He is intelligent enough to make any dream a reality, but he needs to understand hard work is part of it." Harris' case officer wrote, "Eric is a very bright young man who is likely to succeed in life," and, "He is intelligent enough to achieve lofty goals as long as he stays on task and remains motivated."

Harris was reported to the police in early 1998 by parents of a fellow student, Brooks Brown, for breaking the windshield of their son's car and then posting on his web site "If anyone wants to kill someone, why not Brooks Brown?" He also wrote threats that he himself was going to kill their son and many others: "I don't care if I live or die in the shoot-out, all I want to do is kill and injure as many of you pricks as I can," and "Oh God dammit. Dead people do not argue! God dammit, I am pissed!" The Browns warned the police that Harris had boasted of making bombs, and they also warned neighbors to watch out for Harris and Klebold.

The Browns also spoke with Eric's mother. All we know about this interchange is that the mother cried, but we have no further amplification of this as to what her crying meant, nor do we know whether or not she talked to her son about what she had been told. As for the father, a retired Air Force officer, Eric was able to convince him that he didn't mean what he'd written. The Browns also spoke with a sheriff's investigator and a bomb-squad specialist just weeks before Harris and

Klebold were to be sentenced for stealing from the van. The sheriff's department said that they couldn't act on the Brown's complaint because the Browns refused to put their names on a sworn complaint for fear for their son's life.

On July 4, 1998, after an exchange of words with fellow student, Peter Mahker, at a 7-Eleven store, Harris and Klebold waved a pistol at him from the window of Klebold's BMW. Also in 1998, in one of their classes in school, the killers presented a violent home-made video in which they pretended to shoot friends dressed as jocks. Early in 1999, one teacher and two parents warned school authorities that Harris and Klebold were violent. The father of Isaiah Shoels, the black student later killed in the massacre, reported to the school authorities that his son had repeatedly complained to him that "These guys keep getting into my face." The father regrets that he didn't do more to really press the matter.

Many have found it incredulous to think that Harris and Klebold could have accumulated their extensive arsenal without their parents being aware of it. After hearing about the killings, Klebold's father, through an intermediary, called authorities and told them his son might have been involved, and offered to help. Whether the father had just discovered evidence or had known of it before, has not been reported, but neighbors recalled having heard sounds of clanking metal and breaking glass coming from Harris' garage the day before the massacre. Police searching the home of one of the killers after the massacre found bomb-making materials and a shotgun barrel lying in plain view in the bedroom. They also found a detailed diary revealing that extensive planning had been going on for a year. The killers had planned to blow up the entire school with everyone in it, including teachers and the 500 student body. The diary was replete with Nazi themes, and anti-Semitism. They also found what was left of the arsenal in several places in the school: 30 bombs, several built from propane gas cylinders, a 9 millimeter semiautomatic rifle, two pistol grip shotguns, one handgun and at least 100 rounds of ammunition, according to investigator Sheriff Stone. There also were bombs in two or three cars in the school parking lot. A bomb hidden in the school exploded unexpectedly several hours after the massacre.

There have been questions raised as to where and how Harris and Klebold obtained their arsenal. Two of their guns were purchased a year before the killings at a gun shop in Colorado Springs, Colorado, 60 miles from Littleton, by Robyn Anderson, whom Klebold had met in an advancedplacement class. According to Mel Bernstein, co-owner of the shop, Anderson, 18 at that time, quickly jumped in to volunteer to buy the guns after he had declined to sell them to a group of four underage young men who were dressed in trench coats. Anderson was Klebold's prom date on Saturday night before the massacre and at a post-prom party on Sunday night. Authorities believe that the killers planted bombs in the school during these events. Although Anderson's friend Tiffany Burk, 18, insists Ander-son had no idea what the guns were for, Anderson was in the school parking lot when the shooting started, and squatted under the steering column of her car the entire time. The morning of the killings, Klebold went bowling at six thirty A.M. wearing a T shirt with "Serial killer" printed on it, which he usually wore at bowling. When either he or Harris made a strike or a spare they would shout, "Heil Hitler!" in celebration. After bowling that day and changing into his black leather outfit, Harris, as he passed Brooks Brown in a school hallway, told him that he liked him now, and advised him to go home immediately. On Harris's web site prior to the killings there was a reference to something big happening on Hitler's birthday. Harris allegedly wrote in his America Online profile, "Kill 'em ALL."

Various theories advanced as to cause

Subsequent to these killings, there have been many theories advanced in an attempt to explain why this massacre happened. They have included: too easy access to guns, lack of religious education in schools, lack of personal attention and care on the part of school authorities, social and religious institutions and police, including failure to detect imminent signs that students are in trouble and potentially violent. Other theories have been inadequate parenting, particularly lack of supervision; unfriendly, mocking, or ostracizing behavior from fellow students; the influence of portrayals of violence on television and in the movies; the influence of violent rock music, drugs, including psychotropics; and an overall cultural decline in morals, described by Bill Owens, the Governor of Colorado, as a "Cultural virus." Owens also said, "We have to ask ourselves what kind of children we are raising."

Although Owens did not say, "We have to ask ourselves what kind of *parents* are raising our children," this question has occurred to some of the parents of those murdered, several of whom have instituted suit against the parents of Harris and Klebold. The Harris and Klebold families in turn have hired attorneys to defend themselves, and are not talking to the media.

What is noteworthy about the speculation as to possible causes of the massacre, even those that point to inadequate parenting, is that they all focus on post-natal life experiences, and that there are none that focus on prenatal experiences, prenatal mentation and communication, or on the possibility that abortion dynamics may have been operative.

When I heard and read descriptions of the thinking, feeling and behavior of Harris and Klebold, I was immediately struck by how similar these were to the thinking, feeling, and behavior of numerous abortion survivors with whom I have worked intensively in psychoanalysis, psychoanalytically-oriented psychotherapy, and marital and family therapy over the past several decades. Realizing this, over the next few days I wrote a brief preliminary essay on the Columbine killings entitled, "Abortion Dynamics and the Trench Coat Mafia," (Sonne, 1999), and submitted it to over a dozen major newspapers and newsletters. I also submitted it to several talk show hosts, along with an offer to be interviewed by them. No one was interested except Judie Brown of the American Life League.

A wall of silence about abortion

The fact that no mention of abortion was made in several hundred articles in the print media, or on several television news, talk and commentary shows, including "Meet the Press," and "Good Morning America," or by any public officials, both shortly after the massacre and even a year later, deserves examination. On the Dan Rather CBS Evening News program on April 20, 2000, the first anniversary of the massacre, one scholar said, "We still don't have the answer."

Discovery comes to the prepared mind, and it is quite clear that the minds of numerous inquirers are not prepared to consider prenatal psychology or abortion dynamics in their search for causes. Perhaps this should not be surprising, for we are living in a culture of abortion on demand that has existed since the Roe vs. Wade Supreme Court decision of 1973. During this period, one out of four of the unborn have been aborted in America, a total of 29 million, and during roughly the same period, abortion on demand, even forced abortion, has become a global phenomenon. In addition to the prevalence of abortion on demand, there has been increasing pressure to enact laws legalizing

physician assisted suicide, which could be looked at as another form of abortion. Both of these trends are reminiscent of the Nazi program to perfect the human race by eliminating the "unlebenswert" (unworthy of life) through abortion, genocide, the killing of the physically or mentally handicapped, and the infirm elderly.

Abortion survivors and the threat of being aborted

Not to minimize the importance of the deaths of millions of unborn by abortion, but there is a consequence of the greatest importance deserving urgent attention—the plight (and plague) of the traumatized abortion survivors in our society. These children are alive today not because of a development respected, welcomed and facilitated by others, but because a consideration of their extermination was not consummated. Both their fathers and mother have a role in this. The survivors are alive by default, by the sufferance of others, somewhat like convicted criminals whose death sentences were reprieved while they were on death row awaiting execution. Considering this, it is not surprising that they have the symptoms they have. In addition, the effect of their prenatal trauma can be compounded by postnatally experiencing in their parental or broader social environment a betrayal of basic trust that is similar to what they experienced prenatally. They are immersed in a culture rampant with examples of psychological and physical abortion, and other threats to soul and body.

In my essay (1997), and in (1998), I give several examples of abortion survivors who were told such things as "You are only alive today because the bichloride of mercury didn't work," "I didn't try to abort *you*, you were only a period then." A woman who had always considered herself "basically defective" was told by her mother that she had considered aborting her because she didn't want to risk having another child like the congenitally handicapped little boy she already had. Incidentally, this survivor's career choice was to do full time intensive work with the handicapped. One male survivor was told, "We tried to abort you once, and we could still do it," and another was repeatedly told in a joking manner that he was a "diaphragm baby." One mother, when asked by her daughter why she had bothered having her, answered, "Abortion wasn't legal back then." Another young man told me that his father, upset with him for not providing him with a grandchild he felt was owed to him, condemned him for his ingratitude by angrily saying to him, "You know, we could have aborted you."

Prenatal mentation, communication and trauma

It is perhaps not too difficult for some to consider that an unborn developing in an inimical prenatal milieu might have been physically traumatized, as in fetal alcohol syndrome for example. But to consider that an unborn may have suffered *psychological* damage in utero requires that they accept the reality of prenatal mentation, communication and trauma, something many have great difficulty doing--even though they may take postnatal mentation, communication and trauma as givens when discussing early childhood development or child abuse.

To understand how the threat of being aborted could have a traumatic psychological impact and lasting psychological consequences, one must consider research over the past several decades that has documented the existence of much more mentation and communication in the unborn than had been previously thought. The unborn pick up messages from their environment, including sensing they are liv-

ing in an unwelcoming, ambivalent environment. They hear sounds, voices, languages, and music that they respond to and record prenatally. Subsequently they recognize and respond to these after birth, and later life experiences contain transferential derivatives of the prenatal experience.

Among the classic papers on prenatal psychology are papers Ferenczi (1929), Ploye (1973), Verny and Kelly (1981), Ney (1983), and Chamberlain (1994), to name but a few. Numerous other reports in the literature by Bion (1977), Kestenberg a.Borowitz, (1990), Cheek a.LeCron (1968), Liley (1972), Kafkalides (1980), Lake (1981), Grof (1988), Wilheim (1988), Janus (1989), Piontelli (1992), Emerson (1996), DeMause (1982,1996), and many others, have convincingly documented the operation of prenatal mentation, communication and trauma in the unborn.

Even without considering these works, the study by Feldmar (1979) of four young women, each of whom had attempted suicide on the anniversary of their mothers' attempts to abort them (attempts verified by the mothers when interviewed) is alone sufficient to prove that the unborn possess the capacity for mentation and communication, that they can be traumatized psychologically, and that the consequences of prenatal trauma can find expression in later life. Documentation of such a magnitude, whatever doubts some might have, establishes the operation of prenatal mentation communication and trauma as incontrovertible truths.

As part of my own contribution to the study of prenatal psychology, particularly relative to prenatal trauma, I have published several essays (1966, 1975, 1994 a,b,c, 1995, 1996, 1998).

In these writings I have advanced the thesis that an "unthought known" (a term taken from the work of Bollas, 1987) continues to exist and dynamically operate in the minds of those threatened with being aborted. I suggest further that the psychological trauma the survivors have experienced resulted in a diminution of the exchange of information via the corpus callosum between the right brain, which is concerned mostly with affect, time and space, and the left brain, which is concerned mostly with words and logic.

Characteristic of abortion survivors

Abortion survivors have a variety of obvious symptoms, and a variety of more subtle but pervasive characteristics in their thinking, feeling and behavior. Both the obvious symptoms and the subtle characteristics are clues that can help in making the diagnosis. Some of these symptoms can be seen in other psychiatric disorders but collectively they constitute a unique syndrome. Not all of them are necessarily present in any given person. These symptoms will ultimately be seen as transferential derivatives from prenatal trauma, even though initially abortion survivors in most instances have little awareness of their repressed traumatic origin.

Abortion survivors feel like outcasts, unwelcome, unloved, undeserving, unlovable, unattractive, and worthless. They tend to develop false selves. Despite these negative feelings and self view, they do seek attention. They are pessimistic about their chances of ever finding love, but often when it is offered they cannot accept it. They can have turbulent marriages with a great deal of acting out. They choose bad mates, destroy good ones, and not uncommonly marry and divorce several times. Many have difficulty embracing and enjoying their sexual identity. They also have difficulty enjoying the simple things in life, such as savoring a cup of coffee in the morning. Many survivors are adopters, who can have additional problems (Sonne, 1998).

Abortion survivors are attention seeking. Sometimes, as part of resolving their prenatal trauma, they may seek recognition in socially constructive positions of leadership, perhaps in pro-life causes,

philanthropy, government, or other activities that promote the general welfare; or in law, medicine, philosophy or the arts. In other instances the seeking of attention takes a destructive and anarchistic path of notoriety and a glorification of their unconventional public enemy role.

Abortion survivors are half-alive and half-dead, suffering with a sense they are not present, do not feel real, and that life has little meaning for them. Although time passes, they have a sense that nothing is happening over time. They often describe themselves as drifting through life, and in therapy seldom talk about their future. They make limited use of poetic metaphors, metonyms and synesthesia in their speech, and have little sense of humor.

Abortion survivors frequently regard themselves as incurable or genetically flawed. Their efforts to convince the analyst of their inherent defectiveness can often be so unrelenting the analyst may be tempted to accept their hopeless conclusion about the unalterable genetic determination of the difficulties they have had with life since the day they were conceived. Relative to genetics, the fact that certain individual and interactive characteristics may have been manifest from birth is not proof that they are expressions of genetic programming present at conception. Kandel (1989) and Edelman (1989, 1992) have demonstrated that neuronal networks or maps, are plastic, and genetic programming is not immutable. Depending on one's experience, previously *dormant* genes can be activated and previously *active* genes can be deactivated. Their work supports the possibility that experiences in utero, such as the threat of being aborted, have the potential of altering genetic programming, but therapy or other metamorphic life experiences can do the same.

As a transferential derivative from precarious prenatal experience, abortion survivors have extreme difficulty trusting others. They are not thankful, grateful or appreciative. They do not feel present or connected, have little faith, and do not believe in the soul or in God. Their abortion wishes and fears are acted out in social relationships, and can come to the fore in therapy in the transference. James Grotstein (1992), my longtime friend and colleague, gave me permission to quote his letter to me in which he wrote of how, after reading one of my papers, he had asked a woman patient he had been seeing in analysis for fourteen years, whether she had ever been afraid of being aborted. She responded, "Yes, by you." In my own experience, I was struck by the fact that the first question one of my survivor patients asked me in his initial interview was whether I was sure that I wanted to accept him as a patient.

In my essay (1996), I suggest that one of the problems with interminable or interrupted analyses could be that abortion dynamics being acted out in the transference were not recognized by the analyst in the womb-like setting of the consultation room. Although abortion survivors fear being aborted, or being interminably confined (also an abortion) they also have a wish to be aborted, physically or psychologically. They want what they fear, and they are what they hate. Seeing themselves as loathsome, dirty, defective, incurable, unworthy and discardable, abortion survivors tend in part to regard the traumatic abortion threat experienced prenatally, and the poor treatment they often experienced postnatally, as justified. They have identified with the aggressor, the abortion-minded mother and/or father, or the indifferent world.

Abortion survivors are suicidal and self-aborting, and when in a suicidal mode they almost seem to seek, and often experience, repeated psychological abortions from their intimates or from their therapist. They are often very bright, competent, and overqualified for what they are doing, so that one might wonder why they hate themselves so much. But because of their fear of success or happiness, their competence doesn't do them much good: They tend to repeatedly psychologically self abort when on

the verge of fulfillment. If the dynamics are intense, there may be gross acting out in the form of actual suicides.

They can have murderous sibling rivalry. One of my patients as a child tried to kill his younger sister by pushing her off a second story balcony. In a homicidal mode they will attempt to abort, or sanction the psychological abortion of any potential competitor or friend, including their therapist. Similar to abused children who later become abusers, they are inclined to act out by aborting others, including their own children, or to sanction the abortion of others, either psychologically or physically. They feel resentful and hostile toward anyone who competitively threatens their existence, including siblings and the sibling substitutes they see in the world around them.

Murderous hostility can be directed toward their parents or acted out on people in authority, i.e., symbolic parental figures. They can be daredevils acting out their fears and wishes dramatically in relation to tunnels, caves, bridges, airplanes, and in sensation-seeking, counterphobic, death-defying, risk-taking activities such as spelunking, hang gliding, parachute jumping, motorcycle or automobile racing, flying, white-water rafting and scuba diving. These activities represent both a life wish and a death wish. They could be seen as symbolic re-enactments of the abortion survivors prenatal trauma, leading either to the mastery of birth and a genuine life, or to a completed abortion and death.

Some abortion survivors are episodic wanderers, looking for a home, i.e., a safe uterus that they never seem to find. They tend to move repeatedly, often after living in a house only briefly. They may seek or avoid cozy, sequestered spots, symbolic representations of the uterus. Light is very important to them, representing life outside the womb, and may be either sought or avoided. Sexual intercourse is seen as dangerous to both male and female survivors. The male's fetal self is afraid of coming close to the place symbolic of where he had been traumatized prenatally, and the female fetal self is afraid of being aborted by the invading penis.

The hostility and fear present in abortion survivors do not seem to be primarily connected with a desire for gratification, resentment at not receiving it, or resentment toward a competitor who interferes with their gratification, as in Oedipal conflicts. Nor do the hostility and fear seem to be very much about the need for affirmation of self or affirmation of one's gender or identity that is operative in the various stages of separation and individuation beginning in early childhood delineated by such researchers as Winnicott (1949), Erikson (1950), Jacobson (1964), Blos (1967), Mahler (1975), Kohut (1977), Bowen (1978), and Stern (1985). Instead, the hostility and fear seem to center around a fundamental struggle between being and non-being. Abortion survivors are not connected, and therefore cannot aspire to higher levels of fulfillment and gratification. The most they can hope for is momentary, fleeting, sensual stimulation, that gives them some partial sense they are alive. This is often experienced in impersonal sex, drugs, and masochistic and sadistic acting out. Nothing has been sacred for abortion survivors, so nothing is sacred to them.

Identification with the aggressor and acting out

Of the various defensive behaviors mentioned above, the major defense of abortion survivors is acting out (upon themselves, upon their progeny, and against other persons) the abortion impulses which they felt directed at themselves prenatally. This behavior can be thought of as similar to that of abused children who in later life become abusers (Johnson a. Szurek, 1952; Steele, 1970). The underlying

dynamic is an identification with the abortion minded aggressor parent or parents. In this identification, and its inherent denial of hostility to their parents, some abortion survivors say that it would have been better if they had been aborted. They reason that they then would have been spared suffering. Combined with this, however, is a belief (again similar to that of abused children who feel that they deserved the treatment they received) their suffering was deserved because they were "bad seeds," unworthy of life and love. Abortion survivors are often imperceptive when they are being psychologically aborted in social interactions.

As far as parenting by abortion survivors is concerned, instead of allowing themselves to feel anger toward their parents and thus freeing themselves to have the happiness of enjoying parenthood and loving children, they are often inclined to lethally act out against their own offspring the unconsummated abortion wishes of their parents. They rationalize that aborting their unborn would save them from the suffering they would experience in an "abusive, uncaring, polluted and unsafe world." This rationalization involves a projective identification of the unborn or newborn as destined to experience suffering similar to that which the abortion survivors themselves experienced. Beneath this is a hidden wish that their children would indeed suffer as they have, and rivalries feelings at the thought that their children might have a happier existence than they. Aborting their unborn also represents an acting out of their own fear of being, and wish to have been aborted.

Combined with hostility to themselves and to the unborn, abortion survivors often exhibit a reaction formation consisting of a sentimental over-emphasis on good parenting and the welfare of children. Espousal of abortion is presented as an example of this, i.e., parents who are willing to abort their unborn are good parents, therefore society should sanction abortion as a moral and legal act. Despite their self hatred and tendency to self abort, abortion survivors are often very concerned about their health, education, wealth, and social position, yet may unhesitatingly abort others psychologically in these pursuits. Sibling rivalry is an important dynamic motivating the espousal of the abortion of others, often rationalized on the basis that "There are too many people in the world." Those deemed unworthy of life are often those of a particular race, religion, or nationality.

Even abortion survivors who are psychologically sophisticated, and who focus on trauma, abuse, neglect, or unfortunate mishaps in early infancy as significant determinants of child and adult psychopathology, will frequently dismiss those who present mounting evidence documenting the importance of prenatal experience and prenatal trauma, including their own, as being misguided proponents of "So much nonsense." Beneath this defensive exterior they are often plagued with feelings of anger and guilt they cannot acknowledge to themselves or to others. These feelings can be compounded if they have aborted, or considered aborting, one of their unborn. Unable to forgive themselves or to be forgiven, pretending to themselves and others that all is well, abortion survivors are among the most miserable of humans. They are locked in a prison of defenses upon defenses unless helped by therapy or other metamorphic life experiences to have an authentic, happy, loved and loving life.

Symptoms of abortion survivors in Harris and Klebold

Harris and Klebold demonstrated feelings of unworthiness, being of little value, misfits, or outcasts. They identified with other misfits, as exemplified by the expression, "Ich bin ein Auslander" (I am an outsider). They were unable to love or be loved. They went through life half alive and half dead,

and were described as such by their classmates. They developed false selves and were not really fully present in social interactions. They were described by some classmates as unknowable.

The two boys were suicidal, aborting themselves psychologically and physically: "If I had a shot-gun, I'd blow my brains out." They experienced and elicited psychological abortion from others, were repeatedly mocked by others and called weirdoes and faggots. Their ultimate self abortion occurred when they committed suicide at just at the point when, as high school seniors, they were about to graduate and symbolically be "born" from the "mother womb" of their high school, which they simultaneously attempted to destroy--a behavior reminiscent of Ferenczi's (1929) point about the unwelcome child's refusal to be born, and his death wish. That their suicide was on Hitler's birthday suggests an identification with one of history's most hated people, a murderous soul mate who also committed suicide.

Both sought recognition and respect, although they saw themselves as rejects. They acted like leaders of the world, non-conformists out to change society even if it meant killing their classmates, their teacher and blowing up their school. They succeeded in making an impact on society. As notorious killers, they will never be forgotten, and we can no longer say that they were not present.

Harris and Klebold engaged in risky, daredevil activities, indifferent to danger in provocative, threatening behavior, stealing, writing publicly available violent web content, and presenting destructive amateur movies at school. They demonstrated an intense, murderous sibling rivalry, transferred to others who symbolically were siblings seen as undeservedly more loved, advantaged and successful than they, particularly athletic jocks who resembled Harris' brother. Other symbolic siblings were racially and ethnically different or religiously offensive to them. They aborted their "siblings" psychologically by demeaning, disaffirming behavior and comments, and aborted them physically by actually killing them.

A murderous hostility to their parents was expressed in acting out against authority figures (symbolic parents), and killing one of them, their male teacher "father." Hostility to mother is reflected in trying to blow up their "alma mater," the murderous hatred of his Jewish mother implicit in Klebold's anti-Semitism and his identification with Hitler, the killer of Jews.

Whether Harris and Klebold had difficulty with symbolization, synesthesia, metaphor, metonym, and simile is not clear, but they did tend to be literal, dogmatic and opinionated. As far as a sense of humor is concerned, the information we have does not mention any examples of it except in the bizarre humor they displayed in laughing as they murdered people.

The burden of proof

A natural question may come to the reader's mind whether showing the existence of abortion survivor symptoms in the Columbine killers is sufficient evidence that the genesis of their symptoms came from being traumatized prenatally by the threat of being aborted. In clinical practice it is possible to obtain confirmation from the abortion survivor's parents, or from statements given to the patient by others. In this case, however, only limited information is available. What little we do have makes one suspect that there were serious problems with family communication. For example, what did Klebold's Jewish mother think of the fact that her son was preoccupied with anti-Semitism? Did she pick up the hostility toward her implied in this? Her father, Leo Yassenhoff, a wealthy real estate developer in Columbus, Ohio, was a Jew, who was such a generous contributor

to the Jewish Community Center of Columbus that the Center was named after him (New York Times, April 25, 1999).

We must wonder how Harris was able to convince his father that he didn't really mean what he said in his website threats against his classmates. It is hard to believe that the killers' parents were unaware of their children's accumulation of an arsenal or indifferent to the cumulative instances of their antisocial behavior. For them to be unaware, or for them to be aware and not react appropriately, could both be considered psychological abortions of their childrens' existences. One of the parents whose child was killed in the massacre expressed this sentiment well when he said that if his child had six butane tanks in the garage and he didn't ask him about it, it would suggest that he didn't give a damn about him.

Relative to the lack (at this time) of more specific documentation that the Columbine killers experienced a threat of being aborted, it is important to remember that these data, although desirable, are not absolutely necessary to make the case. In medicine, if the signs and symptoms of an illness bear a strong resemblance to those seen in numerous other cases in which the etiologic agent has been identified, it is permissible to make a presumptive diagnosis, including presumed etiology, on this basis. This is what I have done in this essay pointing to the resemblance of the signs and symptoms of Klebold and Harris to those of other abortion survivors.

The fact that not everyone exposed to a pathogen (or impacted by trauma) becomes ill cannot be used as an argument to minimize the importance of the threat of being aborted as a cause of psychopathology. As DeMause (1982, 1996) and Grof (1988) have pointed out, life in the womb under the best of circumstances is not as idyllic as many would fancy, and some degree of prenatal trauma has probably been a very real experience for all of us. Whether or not a disease state develops depends on the virulence of the pathogen or trauma, the vulnerability of the host, the timing and duration of exposure, and the presence of ameliorating or exacerbating factors. The fetus is probably most vulnerable in the early stages of pregnancy. All of these factors are important to an understanding of the variation seen in the severity of the symptoms of abortion survivors, some of whom may have had more lasting consequences of the threat of being aborted than others.

Another point to consider in making a psychological diagnosis is that the symptoms of psychological diseases and trauma often resemble and bear the imprint of the original pathogenic situation to which they are associatively linked. This is generally not true of physical diseases, the symptoms of which seldom resemble their causal agent. This clue is particularly applicable to the symptoms of abortion survivors, for many of them appear to be symbolic reenactments resembling what we know from clinical experience to be the survivors' original prenatal trauma.

Considered collectively, all of the points mentioned above support the legitimacy of using examples of the thinking, feeling, and behavior of Harris and Klebold as evidence they were probably abortion survivors. Further support for this conclusion comes from a piece of startling confirmatory evidence that comes from one of the killers in the form of a negation in a videotape Harris left at home on the morning of the massacre. In it he quotes Shakespeare, "Good wombs have borne bad sons," implicitly condemning himself and exonerating his mother. Here is a truly remarkable find--one of the killers telling us about himself.

What is the significance of this? What was Harris' motive in making this videotape and quoting Shakespeare? Two psychoanalytic axioms can help answer these questions. The first is that denial connotes the opposite; the second is that the greater the denial, the greater the trauma and the intensity of the feelings associated with it. Obviously, for Harris to make this videotape indicates that he had, at the

least, thought about prenatal trauma being related to destructive behavior. However, he needed to deny the "unthought known" his unconscious was sending him about himself. Thus, to someone listening with a third ear, Harris is saying, "My mother damaged me when I was in her womb, and I have murderous feelings toward her." Several hours later, instead of killing his mother, he acted out his rage toward her by killing others, and punished himself by committing suicide.

The phenomenon of anticipation: more and younger killers

The Columbine massacre is but one of many examples of an increasing prevalence of violent and murderous acts by young people. Why are we seeing this? And why are we seeing similar behavior being exhibited more and more by ever younger children? A possible answer might be that we are witnessing a phenomenon of anticipation in the psychological realm akin to the phenomenon of anticipation seen in the physical realm, such as diabetes appearing earlier and earlier in succeeding generations, leading back from juvenile to early infant and prenatal diabetes or death. This phenomenon of anticipation could be revealed in the psychological realm as the cultural inheritance of destructive traits multi-generationally (Sonne, 1994 b).

Broader applicability of abortion survivor dynamics

In closing, I would like to suggest that the knowledge of abortion survivor dynamics could be applied more broadly than to the Columbine killers. It is conceivable that these dynamics could be operative in other criminal behavior such as serial killings, mass cultural exterminations, suicidal and murderous cults. This knowledge might also help us better understand the behavior of tyrants, tyrannical governments, the dynamics of international conflict and warfare, ethnic and religious intolerance, and marital and family conflict. We might be able to shed new light on the traditional definitions of psychological disease entities, an idea I have discussed in an essay, "Social Regression and the Global Prevalence of Abortion" (Sonne, 1994c). But much more work needs to be done on this subject. Perhaps this essay on abortion survivors at Columbine will inspire others to pursue this avenue of research.

Baby about Violence

David Chamberlain (USA)

Jolted by the epidemic of violence today, parents, legislators, criminologists, policemen, theologians, psychologists, teachers, politicians, and health care providers are all alarmed and looking for some deeper understanding that might lead to practical steps to deal with the problem. The result of this feverish activity is a massive and multiplying literature measured in the thousands of articles, books, conferences, and media productions. Nevertheless, in all this activity the origins of violence early--very early--in life are rarely explored.

Violence in the womb and at birth has always been a concern to members of APPPAH, many of whom are psychotherapists privy to the private revelations, which expose the consequences of this early violence. Other members who are on the scene in neonatal intensive care nurseries or labor and delivery rooms witness the repetition of violence and ponder what the consequences will be for these babies in the future. We have acquired the conviction that any violence, which greets a baby in the womb and around the time of birth is a deep form of conditioning which acts like a template for relationships. This conditioning may well affect a person's physical and mental health for decades to come.

Ironically, in modern hospital birth, violence and pain have become routine for babies. For most of the 20th century, neither obstetricians nor psychologists have regarded pain as a reality for newborns. Therefore, doctors have not hesitated to expose the baby to a harsh environment at birth, or to introduce painful routines, or painful instruments. Nor have they hesitated to use powerful chemicals in the form of drugs and anesthetics. All these departures from what normally happened at a home birth have profoundly altered the experience of birth for the baby. Babies protest being jabbed with needles for blood samples and vitamin K shots, don't like to be turned upside down, rushed through space, and handled by different people. Their skin is extremely sensitive and they complain when rubbed and cleaned. We have been making them angry, afraid, defensive, sad, and confused--for the greater part of the century.

The researches, which were made many years after these dramatic innovations in obstetrics, had warned us about danger, but, unfortunately, much more after the put damage. Children continue to speak with us. But whether always we understand or we want to understand them?

What Babies Are Teaching Us About Violence?

Introduction. Babies are a source of knowledge about ourselves, a revelation of human nature, and babies can be "bellwethers." Bellwether is a term used by shepherds to designate the lead sheep, the one, who wears a bell. I ask you to think about how babies can lead us and what they can teach us. This reverses the usual idea that they should follow and learn from us. But think about it: Would this violent world be better off if we tried to be more like them or if they tried to be more like us?

We do well to watch babies closely. They are like a mirror we can hold up to discover ourselves as fully sentient, fully conscious beings. Babies can also serve (if we let them) as an "Early Warning System" for humankind. This is hazardous duty for babies, teaching us, warn-

ing us of danger. In this respect, they are like the beautiful, singing canaries that coal miners once took into the bowels of the earth to warn them of deadly gasses. Babies have several important things to teach us.

1. Babies are teaching us the origins of violence

Until recently, the prevailing scientific habit has been to treat the earliest period of human development--from conception to birth--as an insensitive, unconscious, period of physical growth. Babies are teaching us quite the opposite: they are highly sensitive, reactive, and impressionable participants throughout gestation and birth. However, this is still the minority view in both medicine and psychology.

The belief, which has blocked understanding for a hundred years, is the idea that no intelligence is possible and no learning or memory can occur until after birth, when the construction of the brain is more advanced. If this were true, it would follow that babies cannot care about anything, know anything, or learn anything certainly nothing about love and violence. The false idea that prenates cannot learn is still given credence in academic circles, permeates the fundamental assumptions of developmental psychology, obstetrics and neonatology, still casts a shadow over nursing, midwifery, and childbirth education, and still confuses each new generation of pregnant parents. The mistaken belief that babies are not sentient is the main reason why scholars rarely look for the roots of violence in the earliest human experiences.

Potentially, babies have a lot to tell us and they are busy communicating with the psychologists, obstetricians, neonatologists, nurses, midwives, childbirth educators, and parents who will listen to them. Babies have been demonstrating awareness, vulnerability to influence, and intelligence (Verny a. Kelly, 1986, Klaus a. Klaus, 1985, Chamberlain, 1987, 1990, 1992, 1994). For two decades we have had proof that full-term newborns, prematurely born babies, and even babies in utero are capable of classical conditioning and habituation (Rovee-Collier a. Lipsitt, 1982, Leader et al, 1982). More recently, with refinements in both learning theory and experimental methodology, newborns have demonstrated tactile, auditory, and olfactory learning, imitation learning, and verbal learning (Van de Carr, 1992; Busnel et al, 1992; Meltzoff a. Moore, 1977; Ungerer et al, 1978; Balogh a. Porter, 1986). Recognition learning of musical passages, stories, voices, native language sounds and even children's rhymes have been shown at birth and during intra-uterine life (DeCasper a. Fifer, 1980, Moon, Cooper a. Fifer, 1993). You may not be familiar with the latest in the series of important experiments by Anthony DeCasper and colleagues, where French mothers repeated a child's rhyme three times a day from week 33 to 37 gestational age. After four weeks of daily rhymes, babies recognized the rhyme they had heard but showed no recognition of a different rhyme (DeCasper et al, 1994).

Since the evidence for learning in utero and at birth is now overwhelming, we can assert that babies are capable of learning violence both before and during birth.

2.Babies are teaching us they are no strangers to violence in the womb

Let us pause a moment to clarify definitions of violence and trauma. The dictionary says simply that trauma is a body injury produced by violence. In the psychiatric domain, trauma is a shocking experience which has a lasting effect on mental life.

Babies are exquisitely sensitive to their surroundings in the womb. Between 10 and 15 weeks, their mothers' cough or laugh will get most fetuses moving within seconds (Tajani and Ianniruberto, 1990). Babies do not live in a fortress but in a mother. If she is assaulted, babies will learn about violence; if she is generously loved, babies will learn about love. A fetus whose mother received an electric shock while she was ironing sat bolt upright and immobile in the womb for two days--long after the mother had recovered. Inez Correia (1994) has measured the effect on the fetus of a mother viewing brief portions of a violent movie. Fetuses were upset along with the mother. They share the world of emotion.

You will perhaps recall that Sontag and Wallace back in 1934, using a primitive apparatus to measure heart and respiratory activity in the mother and fetus, discovered that when a pregnant patient was persued by a psychotic husband, the baby was alarmed right along with the mother. Recently, a news story in California brought to public attention the background of Robert Harris who was executed in the gas chamber by the State of California. Harris was born three months early after his mother was kicked brutally in the abdomen by her angry husband and began hemorrhaging. This was only the first of many violent experiences this murderer-in-the-making suffered at the hands of his mother and father, a violence he later turned on innocent animals and people. At age 25, he shot two teenagers point blank, laughed at them after he pulled the trigger, and calmly ate the hamburgers they had just bought for lunch. We could not find a more dramatic example of a life that began and ended in violence.

Now that amniocentesis is common, babies in the womb frequently confront a needle entering their private territory. Studies show they react fearfully, defensively, and sometimes aggressively (Ianniruberto and Tajani, 1981). This was brought to my attention again when an acquaintance told us of her experience during amniocentesis. Her husband, the doctor, and the ultrasound technician all saw little Claire bat the side of the needle! The technician said, "Take it out!" When the doctor reinserted the needle, the fetus again attacked it, forcing the doctor to remove the needle. The husband and doctor were in a nervous sweat. The doctor said he had never before seen a baby bat a needle. The parents had an instant lesson in prenatal psychology: they had no idea that a baby this age could sense the intrusion of a needle (and with eyelids fused), have such strong feelings and take such effective action.

Ultrasound is revealing the hidden life of twins in utero. These pictures demolish the old theory that social relationships begin after birth. By 20 weeks, twins manifest a range of behaviors from affectionate to aggressive. Several observers have reported twins hitting each other. At 24 weeks g.a., mono-amniotic twins were filmed having a boxing match with repeated rounds of a few minutes each. Rest periods separated rounds when one would strike with his hand and the other would strike back. (Ianniruberto a. Tajani, 1981). They also filmed twins who were in different amniotic sacs. These brothers hit each other by pushing the dividing membrane. Obviously, we must enlarge our understanding of the roots of violence.

Much of the violence which takes place in utero is the silent, invisible type: the injuries cannot be discovered until much later. Babies are trying to alert us to this damage but we are slow in learning. Included in this category are (1) psychic damages conveyed through attitude, and (2)

brain damage inflicted through neglect. Bustan and Coker (1994) have uncovered the lethal consequences of rejection. In a cohort of 8,000 pregnant women, divided into those who wanted and those who did not want the pregnancy, the unwanted were 2.4 times more likely to die within the first month of life. In a cross-cultural study of planned and unplanned babies in the U.S. and Greece, the planned (and welcomed) babies were already showing higher levels of cognitive processing and greater attachment to their mothers at three months of age than the unplanned babies (Row a. Drivas, 1993). This is especially significant considering that roughly half of the pregnancies in the U.S. are unplanned.

Recent studies of violent criminals have revealed they often have poorly functioning brains. These poorly-built brains were constructed under adverse conditions during pregnancy. Research psychologist Adrian Raine finds enough evidence to justify labeling criminal behavior a clinical disorder resulting from structural and metabolic problems in the prefrontal area, as well as from other brain injuries and dysfunctions (Raine, 1993; Raine et al, 1994). Psychiatrist Dorothy Lewis has studied juveniles on death row and found a pattern of neurological impairment, paranoid misperception, hyper-vigilence, and low IQ's among these children (Lewis et al, 1988). Doctors Raine and Lewis fully appreciate that a combination of factors ultimately determines violent criminal behavior, but we must take note that brain-based origins of violence begin in the prenatal period. Having a sub-optimal brain means that life is more difficult, frustration is never ending, and self-control is marginal. This can lead to misery, crime, and even death--all from prenatal causes. Recent news from Children's Hospital, Boston adds to our understanding of SIDS. Using positron emission tomography brain scanning, researchers discovered that SIDS babies have a deficit in the "CO2 detection system." A fully functioning brain wakes a baby when the CO2 gets too high. If this proves true, we are looking at another violent consequence of impaired brain growth in utero.

A likely cause of abnormal brain growth is the ingestion of drugs and chemicals, legitimate or illegitimate. These substances can cause silent, invisible damage. Dangers of exposure to alcohol in utero is well known. The list of destructive effects now includes evidence for slowed cognitive activity in infancy (S. Jacobson et al, 1993). Prenatal exposure to the invisible environmental toxin PCB also compromises cognition: tests show less efficient visual discrimination and poorer short-term memory (J. Jacobson et al, 1992). Epidemiologists now think that breast cancer may originate in utero from excessive exposure to estrogen (Trichopoulos, 1990; Ekbom et al, 1992).

Another impediment to normal growth may be the frequent use of ultrasound. In a randomized controlled trial involving 1400 women in Western Australia, women who had ultrasound five times during pregnancy gave birth to babies with lower birth weight than women who had ultrasound only once (Newnham et al, 1993). Low birth weight reflects sub-optimal brain growth, which brings us back to our starting point: having a poorly constructed brain may lead to problems of cognition and self-control which increases the likelihood of violence and crime.

The safety of obstetrical anesthetics has been a concern over several decades. Psychologist Yvonne Brackbill began reviewing the literature in 1979 showing the effects of maternal anesthetics on infants (Brackbill, 1979; Brackbill, McManus, a. Woodward, 1985). A seven-year study of over 3,000 babies showed long-lasting effects on their behavior and muscular functions. Many children born to mothers given drugs were slow to start sitting, standing, and

walking. By age seven, some of these children were lagging in language learning skills of perception, memory, and judgement. In Sweden, Bertil Jacobson and colleagues studied the birth experiences of adult addicts and found a connection between obstetric pain medication and eventual amphetamine addiction (Jacobson et al, 1988). Opiate addiction was linked with the use of opiates, barbiturates, and nitrous oxide at birth (Jacobson et al, 1990). More recently, a study of epidural anesthesia via continuous infusion of bupivacaine and fantanyl was found to upset newborn visual habituation as well as immediate novelty preference (Brumitt, 1994).

Mirmiran and Swaab (1992), of the Netherlands Institute for Brain Research point to damage to the developing brain from pharmaceuticals given to mothers in the third trimester. They report that 80% of pregnant and lactating women are given drugs and warn that the type of brain damage which comes of this is not "grossly evident," but causes permanent microscopic and biochemical alterations in the formation of neurones, their migration, formation of neurites, synapses, transmitters, receptors, and behavioral states. They say what appears to be a structurally "normal" brain is functionally handicapped.

3. Babies tell us that even "normal" birth is violent

Babies communicate this with their strong voices, their anguished facial expressions, and by vigorous movements of arms and legs. Are they not famous for crying fiercely at birth? Both parents and professionals expect this, smile nervously, and call it "healthy." Birth cries are not yet taken seriously, although most of them are clearly a reaction to violence. Screaming babies tell us that something is wrong.

My own attention was drawn to birth trauma by clients remembering birth in hypnosis (Chamberlain, 1990). The great majority (but not all) were actively protesting inappropriate conditions or actions at the time of birth. With ringing clarity they identified what was wrong: the pressure of forceps on their heads, cold rooms, bright lights, needle injections, repeated heel jabs for blood, stinging or blurring eye medicine, being suspended by their feet, hasty cutting of the umbilical cord, separating them from their mother, and isolating them in nurseries. Their cries were cries of pain and protest. Although many birth professionals have changed their attitude about infant cries, the prevailing practice is to tolerate crying and to continue painful routines regardless of crying. There is no goal of preventing crying. As might be expected, the crying continues. A psychological approach would ask why a baby is crying, and, would work to eliminate the possible causes. French obstetrician Frederick Leboyer in Birth Without Violence (1975) led us in that direction by comparing anguished baby faces with blissful faces.

When neonates cry intensely and are impossible to console, pediatricians often become resigned and counsel parents to accept colic as a difficult developmental phase. A psychological approach, such as that of William Emerson and Raymond Castellino, is to identify what past trauma the baby is expressing and work to resolve it. In this form of therapy, body language and cry language is respected as genuine and helpful communication. Psychologist Aletha Solter (1984, 1995) sees colicky crying as meaningful and potentially therapeutic and teaches parents how to facilitate this.

One of the most violent routines associated with hospital birth in the 20th Century is the practice of male circumcision, a surgical alteration of the penis, in the past always performed without anesthetic, and at the present frequently performed without anesthetics. In my view, this physical and psychic trauma cannot possibly be justified for any of the "medical" reasons which have been proposed over the last hundred years.

Proving that circumcision is, in fact, a trauma with serious consequences should not be that difficult. First of all, a boy is permanently deprived of a functional part of his sexual anatomy. Is this not a serious long-term consequence? In my experience with clients, circumcision has sometimes been the origin of deep distrust between mother and son, or has left the victim with an unconscious impression there is something wrong with his penis. Harder to prove, but a hypothesis we must consider in this violent age, is that this sexual trauma contributes to sexual violence. Note well: prior to the operation, the penis is swabbed--often by a nurse--with disinfectant, creating an erection; then the penis is cut! Marilyn Milos states the problem concisely: "Circumcision is where sex and violence meet for the first time."

New research by doctors at the Hospital for Sick Children in Toronto has documented that circumcised boys have a more extreme response to routine injections of vaccine at 4 or 6 months of age than do boys who are intact (Taddio et al, 1995). The babies who were circumcised showed more signs of pain and cried longer than intact boys, suggesting a long-term effect. These pediatricians recommend anesthesia for circumcision. However, a survey of primary physicians in that area, who performed circumcisions, revealed that only half used any form of anesthesia. Twelve percent still believed babies do not feel pain, and 35% believed babies do not remember it (Wellington a. Rieder, 1993). In the U.S., 60% of male newborns are still being circed, usually with no concern about their pain. Is this not a seedbed for violence in our society?

Research based on over 4,200 consecutive births in Copenhagen found that birth complications like use of forceps, breech delivery, cord prolapsed, pre-eclampsia and long labor, when combined with maternal rejection and extended separations in the first year, predispose the victims toward violent crime (Raine, Brennan a. Mednick, 1994). Although only 4.5% of the sample had both risk factors, this small group accounted for 18% of all the violent crimes perpetrated by these 4200 people. Earlier studies also found links between obstetric complications and behavior disorders in children (Pasamanick, 1956), perinatal trauma and juvenile delinquency (Lewis et al, 1979), and perinatal complications and criminality (Litt, 1971). More recently, Kandel and Mednick (1991) found a significant correlation between delivery complications (e.g., eclampsia, forceps, ruptured uterus and cord prolapsed) and adolescent and adult violent offending. The association was particularly strong for a small group of violent recidivists.

Taken together, this alarming evidence suggests that babies born in the era of hospital obstetrics from 1939 to present were born in violence, baptised by violence. Neither medicine nor psychology understood the formative influence of early pain.

4. Babies tell us the premature nursery is a theatre of violence

Babies arriving too early find themselves in a surreal environment of needles, lights, incubators, and monitors designed for physical life support, but not for emotional life support. When these special nurseries were designed in 1967, babies were not expected to have thoughts,

feelings, or perception of pain. Virtually everything done to children in NICU's is painful: breathing tubes, suction tubes, feeding tubes going down the throat, monitor electrodes fastened to the skin, intravenous punctures, heel lancing, and endless interruptions and alarms. Over the last 25 years, the number of premature births has risen to over 10%. Obstetrician David Cheek calls it "the tragedy of premature birth" (Cheek, 1994).

In this theatre of violence, babies learn many lessons. Edward Harrison, who entered the NICU at 29 weeks g.a., learned to fear the sound and sight of adhesive tape and bandages. At age 15, he was still carrying in his unconscious mind the experience of having large patches of skin accidently ripped from his abdomen and chest when monitor pads and tape were removed. He was also phobic about doctors, medical procedures, and hospitals. He would become sick at the sight of the hospital, and could not go for necessary medical care without sedation. Edward was shunted for hydrocephalus, while paralyzed with curare. Although he could not move, cry, or react in any way, he could see, hear, and feel as large incisions were cut in his scalp, neck, and abdomen, as a hole was drilled in his skull, as a tube was inserted into the center of his brain, then pushed down under the skin of his neck, chest, and abdomen and implanted deep in his abdominal cavity. At fifteen, he still will not allow anyone to touch his head, his neck, or his abdomen.

Edward's experience was not unique. Numerous painful surgeries were routinely done on premature babies without benefit of pain-killing anesthetic, including the most common surgery, peridural anesthesia (PDA), thoracotomy for ligation of patent arteriosus. Necessary for 50% of infants born under 33 weeks g.a. or weighing less than 1500 g., this major operation involves cutting holes in both sides of the neck, another in the right side of the chest, an incision from the breastbone around to the backbone, prying the ribs apart, and tying off an extra artery near the heart. In addition, the left lung must be retracted, and a hole must be cut for a chest tube. All this took an hour and a half, during which time the baby was left completely conscious of pain, and flooded with terror. As impossible as it seems, this was standard practice in neonatal medicine from the discovery of ether in 1846 until about 1986. For 140 years, ether anesthesia was reserved for certain classes of children and adults, but not for babies (Pernick, 1985).

What could the babies tell us about this experience? Being paralyzed, they could not use body language in the usual way. Doctors were convinced the mind was not working and the experience could mean nothing. In reaction to surgery without anesthesia, some babies went into a trance or fell unconscious during or after their ordeals. Doctors said they fell asleep and were fine. However, many babies died, not immediately, but from shock following surgery. Death was their message, like the message of the canaries brought into the mines.

Since 1986, many doctors have changed their minds about infant surgery without anesthesia, and medical societies have generally made new commitments to give babies the same consideration in regard to pain control as they do other patients. If this new path is followed, the total number of pain-traumatized babies could diminish each year. Meanwhile, no one really knows what the consequences to society will be for inflicting so much pain on so many premature babies. Massive pain makes us desperate and irrational, willing to fight and take extreme risks. Pain feeds rage.

NICU alumni are growing up: the very first graduates are now approaching age 30. Their ranks are constantly swelling as those from about 700 nurseries join them.

f the percentage of premature babies holds around 10%, it means we are adding about 400,000 per year. We should carefully assess the long-term consequences of such a vast social experiment. Yet, I am not aware of any studies specifically focused on NICU trauma, violent behavior, and crime in this group.

With increasing acceptance of newborn pain perception, the debate now shifts to whether the fetus can perceive pain. That they do is shown by a team of London neonatologists who found that during intrauterine needling, the fetus mounts a full plasma cortisol and beta-endorphin stress response indicative of pain (Giannakoupoulos et al, 1994). Their study of 46 fetuses during intrauterine blood transfusions revealed an increase of 590% of b-endorphin and 183% increase of cortisol after ten minutes of the invasive fetal surgery. Even the youngest preemies showed a strong response.

In special care nurseries, pain and suffering are being reduced by several promising trends: a new acceptance of the baby's intelligence and capacity (Thoman a. Ingersoll, 1989); introduction of pleasurable tactile interactions (Field, 1990; Adamson-Macedo a. Attree, 1994); a new treatment approach called "individualized developmental care" which involves intensive listening and involvement with individual babies (Als, et al, 1994); and by new cribs and equipment designed to mimic the sound and movement of the uterine environment (Gatts, Winchester, a. Fiske, 1992). If neonatology continues to incorporate this kind of psychology, the current violence of the special care nursery may diminish--and with it some portion of societal violence which we have hardly begun to measure. Whatever happens in future nurseries, we must understand that the experience of prematurity is formative in its impact. For example, Stiefel and colleagues (1987) found that preterm babies studied at 12 and 18 months of age show greater sensitivity to even low levels of stress and show less ability to modulate distress once aroused. They do not relate to toys in the same way as full-term (fully-built) babies do. Their way of reacting to life carries a greater potential for emotional imbalance and loss of control--because they were prematurely born.

5.Babies know the destructive impact of rejection and separation

Ever since the pace-setting work of pediatricians Klaus and Kennell on maternal-infant bonding in 1976, attention has been repeatedly drawn to the destructive effects of untimely separations. In animal studies, the profound effects of separation in the post-partum period have been documented by Harlow (1958) and by Prescott (1971; Prescott, 1995). Separation is both a physical and emotional experience for a baby and can begin anytime in the womb or after birth. Whenever it occurs, it is a stroke of violence. Few things can compare with the oneness between mother and baby during gestation. The connections are total and holistic, embracing mind, emotion, and sensation. In this intimate world, babies know when they are not wanted, and if rejection persists, the harm worsens.

This was thoroughly documented by the landmark study that followed several cohorts of unwanted babies in Finland, Sweden, and the former Czeckoslovakia over a period of thirty years (David et al, 1988). The mothers, repeatedly denied abortions, were forced to bear and raise children they did not want. As their children's lives unfolded (in comparison with

matched control subjects) they proved to be at greater risk for social and psychiatric problems, and were more often delinquent. In the Prague cohort, unwanted children had almost three times the risk of showing up in the Criminal Register. This finding underscores the data of Raine, Brennan, and Mednick (1994) that rejection and postpartum separation paves the road to criminal violence.

This evidence is also coherent with the thesis of Ken Magid (1987) that children with no conscience are those who never had a close relationship with anyone. He typically finds in the family histories of psychopathic killers that they never had an affectionate, supportive relationship with anyone at the beginning of their lives. They started life unattached and grew up unable to follow rules or form lasting relationships. Without guilt, empathy or trust, their actions are callous and cruel; they kill without caring. We say they are suffering from "antisocial personality disorder."

Some clinical data indicate how early the vulnerability to rejection can be felt, though not necessarily on a conscious level. Psychologist Andrew Feldmar (1974) encountered four adolescents who were repeatedly attempting suicide at the same time each year. When he had put all the facts together, he learned from their mothers that their suicidal compulsion was occurring each year around the time their mothers had tried to abort them--something the adolescent children had never consciously known.

The same fetal sensitivity shown by these self-destructive youth is put to positive use in programs of prenatal stimulation. In every program which has been empirically tested, the efforts of parents to communicate love and welcome to their babies in the womb has been crowned with success. A prominent benefit has been the creation of strong mutual parent-child relationships (Van de Carr and Lehrer, 1988; Manrique, 1993, 1994; Panthuraamphorn, 1993). In the prenatal/perinatal era, anger and violence are natural products of rejection and separation; security and peace are the natural products of communication and love.

6. Babies born smiling teach us something we do not understand

A client told me about his experience in the delivery room when his son was born. He and his wife had prepared well for this great event, and the birth was smooth. The baby made not one cry and seemed perfectly content. To this father's surprise, however, the obstetrician proceded to circumcise the baby, whereupon the baby let out screams of anguish! Not one cry from the birth, but a howling protest about circumcision.

Early psychological research on birth left us with the impression that birth was always violent and painful for babies. Certainly, birth can be painful, but what about those contented babies? What are they telling us?

Obstetrician Frederick Leboyer (1975) was one of the first to look seriously at newborn faces and recognize what they were saying. He got the message and started to rearrange obstetrical practices to suit the babies. This was a stroke of genius. Why hadn't anyone thought of this before? You are familiar with how he dimmed the lights, moved the baby more slowly and gently, created a hushed atmosphere, left the cord intact, put baby on the mother, and waited while the baby settled down. Then he provided bath water near womb temperature, and voila! Faces changed from tortured and irritated to something more composed and--occasionally--smiles!

This was a major achievement, although no one could claim that every baby treated in this manner was born in bliss. Birth without violence became a new thought-form. Unfortunately, Leboyer's good influence has declined, due in part to a randomized clinical trial in Canada which declared the "Leboyer approach had no advantage" over conventional delivery (Nelson, et al, 1980). I believe the obstetrical measures used in this study failed to appreciate the importance of psychological factors and their long-term implications for mothers and babies.

Reacting to the faces in Leboyer's book, noted Swedish obstetrician John Lind was surprised to see so much anguish. Lind had done thousands of deliveries in Stockholm, but he decided to take a series of photos of newborn faces there. After collecting 130, he announced that instead of anxiety or pain, baby faces expressed great curiosity and often, great expectations (Lind, 1978). These are rare and important data, speaking volumes about the positive atmosphere for birthing in Sweden.

The world record for happy newborns probably belongs to Thailand, where smiling is more a tradition than a surprise. In Thailand the obstetrician who holds the record for the greatest number of smiling babies is Chairat Panthuraamphorn. With inspiration from obstetrician and prenatal bonding pioneer Rene Van de Carr, Panthuraamphorn designed an experimental program of prenatal stimulation for parents in his hospital in Bangkok (Panthuraamphorn, 1993). From about 20 weeks gestational age, mothers were encouraged to take time each day for a bath, to sit in a rocking chair, relax, look at a beautiful picture and listen to classical Thai music. Panthuraamphorn recommended abdominal massage three times a week, along with breathing exercises, visualization of birth and bonding, and engaged experimental subjects in a multi-sensory program of speaking and singing to the child, playing a game with a bell, and other pleasant interactions. When the babies were measured after birth, the experimental group proved to be significantly more advanced in a variety of measures--including smiling and laughing.

Nearly all of the experimental babies in Thailand smiled responsively during the first five days following birth, something not expected for about six more weeks. Half also smiled spontaneously during the first five days following birth. The control infants were not as joyful: two out of 12 smiled responsively in the first five days, and three smiled spontaneously in the same period. What are these babies teaching us?

Water babies are coming in smiling, too. Statistics for them may be hard to assemble, but both stories and pictures document the fact that some water babies have emerged from the womb smiling, starting underwater! One photo shows a baby on her mother's tummy, hand on the nipple, and smiling ear to ear seconds after birth. These babies seem to know their mothers have had an ecstatic experience; they express "total peace," and wear a "Thank-you!" on their faces.

In an age of violence, we do well to watch baby faces carefully and to believe what they are telling us. In the past, we have neither watched nor believed. The scientific response to baby faces and sounds has usually been to deny real emotion at birth--and most certainly before birth--so these expressions have not been of value. Baby faces have not determined the direction of obstetrical practice, in spite of Leboyer's efforts. We should see all pained, angry faces at birth in the context of the smiling faces. In the past, did we not mistakenly assume gruesome faces and screaming voices were normal? This myth befits a violent society.

Smiling newborns have been trying to teach us a higher standard for birth: birth without violence as a foundation for life without violence. Can we make this a national goal, a "standard of practice" in obstetrics rewarded with financial bonuses, and a basis for mother awards? It would make a difference, I believe, in our society. Almost three thousand years ago, the Hebrew prophet Isaiah poetically described his vision of a world of safety and peace, a world without harm and destruction, where "the wolf shall dwell with the lamb, and the leopard shall lie down with the kid; and the calf and the young lion and the fating together; and a little child shall lead them." (Isaiah 11:6) Babies leading us? Can we let them?iI sincerely hope we can.

Moother's experiences - ours prenatal impressions

Jon RG & Troya TGN Turners (Netherlands)

Peter Fedor-Freybergh gives our keynote: "Remember that the prenatal stage of life in the mother's consciousness and womb is our first ecological position as human beings. This is our first human encounter where we as children found ourselves involved in a creative dialogue with our mothers and their biological, psychological and social environment."

Some of these ideas may seem difficult to comprehend, but there are thirty years of experience by Western Medicine to confirm these ideas. There are beginning to be marked changes in attitudes towards birthing in Western Medicine. Some medical technology practices are being genuinely questioned not just because of physical impacts to tiny babies but because of demonstrable psychological damage inflicted both on us as being-born-babies as well as on our parents.

Bonding

One of the most important words in Perinatal Psychology and Medicine, which we would like to introduce to you is "bonding". The very essence of being human is to experience bonded or connected relationships with other human beings. That bonding process begins before birth, possibly before conception, as part of the mother/child dialogue called for by Prof. Drr. Peter Fedor-Freybergh, Honorary Life President of the International Society for Prenatal and Perinatal Psychology and Medicine and Chair of Child Psychiatry at the Charles University here in Prague.

Bonding initiates an attunement between us, as babies, and our parents which lasts a lifetime. The initiation of bonding naturally starts when we, as newly emerged infants are placed on mother's bare belly and instinctively begin to crawl to mother's breast for our first physical food. The most essential formational patterning or bonding as reported by Dr. Michel Odent is when baby and mother exchange a recognition through their eyes. This powerful moment opens a DNA packet in mother's and baby's brains which give both their abilities to experience love, compassion and empathy for each other and for every other human being. This instant of bonding is the singularly most important event of our entire lives. It is in that moment, as all of our mental and psychological instincts are activated which will have the greatest formational patterning for our lives. There is now ample evidence that when bonding is denied by hospital or other procedures, the emotional/psychological deficit for all of us, even young children, could be leading to the large numbers of murders, even child murders, reported in the world news. These children simply do not experience love, compassion or empathy for themselves or for other human beings.

For nine months before that dynamic moment when the first breath enters the baby mother's body has been growing, developing and maturing that little body within her womb.

100

And, what is just as important is that baby's emotional body also have been growing, developing and maturing; being educated, if you will, through the emotional experiences of mother, and father through mother's experiences of him. This is one of the basic principles of Whole-Self Psychology, Philosophy and Education; namely, that each person not only inherits the genetic coding which gives each of us our physical characteristic, but we are also the synthesis of the charged emotional/mental patterns of our parents from the nine months of gestations. It would be very strange for «mother nature» to give our little bodies six months of practice and rehearsal so that after birth our bodies could live functionally, and, for her to throw us out into the world with no experience of emotional existence. We will share the Whole-Self model of the Prebirth Analysis Matrix which offers clear understanding of the significance of our psychological development in the nine months of gestation - the time when our ability to feel love, compassion and empathy is generated.

Some of you may ask why prenatal psychology is important. In this short time, allow us to offer some possible answers. While birth goes back a very long way, through all of human history, in fact, Prenatal Psychology is actually a Twentieth Century phenomenon. We will give you a very brief history of this new science. But the intent of our presentation is to give you case histories to illustrate what we most want to share with you about these last three aspects: the Psychological beginnings and the development of baby's mind, and emotions.

Resistance to Take Responsibility for Life

Our theme is the therapeutic aspect of Perinatal Psychology. Here is a case which supports Dr. David Chamberlain when he describes babies who have an amazing amount of awareness and control. We would like to share a case from a Whole-Self Facilitator Sigrid Westermann in Germany.

The life of my last client Ursala, 26 years of age, working as a physiotherapist was ruled by fear. She presented *anorexia nervosa* which gave her a great need to be in control. The paradox was that she was consumed with fear of everything. Fear to be liked; fear to be seen; fear not to be able to live very long. But most debilitating was her FEAR TO BREATHE. Ursala had never been able to take full deep breaths. We went through her PAM – her Prebirth Analysis Matrix – a simple questionaire of 22 points regarding gestation to shortly after birth.

A few days later. Ursala returned and told me that in our session when she had taken the first breath she discovered that her consciousness had resisted taking responsibility for her life in that little body. She discovered that her thought – her belief – her reality had not allowed life to fully fill her body. Having recognized that resistance to take responsibility for her life and by changing that belief and allowing a full breath, from that moment on, Ursala felt she could take breaths to the full capacity of her lungs. She did not want to tell me that had happened on the session day because she was not sure that she would be able to continue breathing deeply. The fact is Ursala's ability to breathe deeply has stayed with her and she was very happy.

Ursala's case illustrates that at the very moment of the first breath consciousness is able to begin to control the physical functioning of baby's little body. How many times have you found yourself holding your breath in a moment of crisis or trauma? How many times have you looked into the eyes of the baby you have just assisted into life and were sure it was thinking

something? Prebirth Psychology as David Bodella has described, is able to recover non-verbal awareness even from birth and before.

Historical Beginnings of Prenatal Psychology

One of the first moments in the development of what was to become prenatal and perinatal psychology, occurred in 1924 when Sandor Ferenzi looking at the faces of some newborns perceived a resistance to life and a wish, he interpreted, to return to the peace and happiness they had experienced in the wombs of their mothers. Even this year, as described in the case above, we discover the kind of resistance to take responsibility for life described by Ferenzi. While the happy womb and good mother theories have since then been disproved, we must still honor Ferenzi's bravery at that time.

After Ferenzi, Analyst Gustav Hans Graber, pushed back the consciousness curtain by advocating that children experience prebirth and well as post birth memories. Graber founded the International Studysociety in Prenatal Psychology.

The foundation connecting trauma with birth was laid by Otto Rank. Theoretical superstructure supporting Rank was built by Sigmund Freud. And, Nandor Fodor topped off Rank's trauma theory by describing the consecutive stages of development theorized by Rank. Over a quarter of a century ago, Dutch analyst, M. Lietaert Peerbolte integrated a reposing consciousness before conception theory and the accepted analytical approach. His search questioned where consciousness comes from and what we know.

In 1986, in Badgastein, Austria, through the vision of Prof. Peter Fedor-Freybergh, Graber's ISPP was transformed into the trans-disciplinary International Society of Prenatal and Perinatal Psychology and Medicine. After the ISPPM was birthed in Badgastein, Dr. Thomas Verny in Toronto, Canada founded the Pre & Perinatal Psychology Association of North America later renamed the Association for Pre- and Perinatal Psychology and Health, and made the first major step in public awareness of babyhood with his book *The Secret Life of the Unborn Child.* Dr. David Chamberlain had an equal impact with his book *Babies Remember Birth*. In the 1970s, your authors pioneered in Prebirth Memory Recovery.

Through thousands of studies, early prenatal and perinatal psychology theories about pregnancy and birth have been proved or corrected. We must gratefully acknowledge those pioneering theories conceived during the last century. Now in the 21st Century theory and practice are advancing rapidly. At the 13th ISPPM Congress held in Cagliari, Sardinia, Italy in June 2000, Prof. Grigori I. Brekhman of the Ivanovo State Medical Academy, Russia described his research on «the conception of the multiple-level co-ordinated action between the mother and her unborn child». Brekhman described that the relationship between her unborn child and mother exist on the physical, mental, emotional and energetic levels. Brekhman's work confirmed Prof. Fedor-Freybergh who decades ago advocated the importance of the mother, father, unborn child dialogue. It was a model, which Whole-Self Psychology has also been teaching for 30 years. Recently I presented at the World Organization of Prenatal Education Congress "Towards A Violence Free World in Caracas Venezuela. Overwhelming was presented evidence that violence during pregnancy and birth creates violence in life. Quoting Professor Brekhman:

Nowadays a lot of data obtained has confirmed the hypothesis that the psycho-emotional interrelationship between the mother and her unborn child is the reality.... we (Brekhman) offered to examine the mother-unborn

child relationships based on the idea of a permanently functioning multiple-level polyphonic system. It has been assumed that if mother is a multiple-system embracing such levels as biological, energetic, astral, mental, etc, to have intimate and fruitful interplay between her and the unborn, he (the unborn) must already possess the same levels beginning with the zygote. Such a methodological approach proved to be fruitful. The subdivision of this system into the various levels is very relevant since baby is able to live and develop harmoniously only if all its components properly interact.

In this last sentence the word «only» is the operative word. Prof. Brekhman states that if there is such a process as a mother-unborn child dialogue - long advocated by Prof. Fedor-Freybergh - there needs to exist complementary resonant cohesive media systems which can recognize each others messages. In its very simplest terms, Whole-Self Psychology, Philosophy and Education is confirming that just as each of us is the synthesis of our parent's genetic coding which gives us our physical characteristics, there is also a synthesis of the emotional-mental patterns of our parents from the nine months of their pregnancy. This is exactly the multiple system Brekhman's research proved to exist. Prenatal and Perinatal Psychology and Medicine shows that the little body growing inside mother is a part of her body which is growing and practicing so that at birth it can function independently and that baby's mental and emotional faculties are practicing within mother's mind and emotions so that after birth they also can function independently.

People often ask how my wife and I, co-founders of our Institute, discovered and developed interest in Prenatal Psychology. Troya's discovery of the significance of the Prebirth period dates to her teen years when she was anorexic and bulimic when she was a nurse. Wanting to stop those behaviors, Troya got the inspiration that she might find the cause of her suicidal behaviors by going back to discover if something had happened at her birth that made her not want to be. She closed her eyes and tried to visualize her birth. She was surprised to see her mother in her doctor's office. She felt her mother's joy at being pregnant and felt that joy crushed as he told her that because of previous surgery she should prepare herself for this first baby to be born dead. That was when Troya realized that her suicidal eating disorders were her attempts to fulfill his prophecy. After meeting me I asked Troya if she had ever mentioned this information to her parents. She told me she had not because she did not want to upset them. But the next time we visited her parents she told them what she had imagined. Her father laughed and said the pregnancy was fine and they were so happy that they would have a baby. Her mother was stunned, "I never told anybody, not even your father, what the doctor said!"

My own history began when my mother, as a teenager, contracted TV. When she recovered her doctor told her that she should never have children. Years later when she had married, I was conceived and born by a forceps delivery. This resulted in brain damage. As I grew I had learning disabilities, short term memory deficit and I was hyperactive. The main point of all this was that I was living out my mother's pattern that it was inappropriate for her to be pregnant. Therefore, it was also inappropriate for me to be. It took me 50 years to overcome her patterns.

Around 1970, I was in therapy practice in Beverly Hills California and was getting referrals from psychologists who had given up on people they concluded as incurable. I realized that those people had spent many years – some decades exploring their lives. The inspiration came to lightly regress those persons to explore what their mothers, and in some cases fathers, had been experiencing during the nine months of their pregnancy. That is when I discovered that not only had I inherited the genetic coding of my parents but also the charged emotions of my mother when she discovered that she was pregnant.

Symbiosis; Your Feelings or Mine?

Symbiosis is a psychological problem in which people cannot tell if what they are feeling are their own feelings or someone else's. Symbiosis begins in pregnancy as baby's emotional body is practicing within mother's emotions. Troya had a recent case.

A man I call Ronald, 40, is divorced and wants a relationship with a new partner. His concern is his sexual power, his potential, his future. Ronald expects too much from his partner. This expectation is what caused the breakdown of his first marriage. His present partner makes him aware of this and therefore wants a 'living apart together' relationship. Because of his symbiotic neediness this is not satisfactory for Ronald. It is his neediness which creates conflict in relationship for him, too. He feels consumed! Feeling himself a victim he closes down. His is impotent to stay connected. This is also his relationship pattern with his children since his divorce.

Ronald feels responsible in life and looks forward to make new beginnings. His desire is freedom, independence and to express those in a close (symbiotic) relationship. But, not today, maybe tomorrow.

Through his Prebirth exploration Ronald discovers that

- He is not conscious of himself, his emotions, his feelings, including his feelings of lust.
- He admires other people, men and women, in a way that he discounts himself.
- These patterns appear to be based on a symbiotic relationship with his mother.
- His passion is handcrafts, working with his hands at home, all by himself.

Ronald's parents where divorced and his mother raised him. He dislikes his father for leaving them. The last appears to be the most important discovery!

- Difficulties between his parents where present during the pregnancy causing his mother to cling to her child Ronald from his birth on.
- With his mother, Ronald keeps blaming his father for their identical lack of self-love and self-respect. His opposition to his father leaving them set him up for the same experience of a divorce pattern.
- Through the absence of his father, Ronald could not identify with any male model leaving him impotent to erect himself seeable to manifest himself.

Worst Trauma's are Deaths and Betrayals

The most common trauma patterns babies inherit are mother's reactions to death or betrayal by the father of their child. Here is a case from another German colleague Katharina Honey:

I call her Susan. Susan had cried a lot in her life and continually expressed her sadness with this crying behavior. She often went to the cinema where she could safely express her sadness watching tragic dramas. The sadder the drama, the more she could cry.

In her Prebirth exploration, Susan visualized her mother during the pregnancy receiving the news that her mother, Susan's grandmother, had died. Susan described the very deep bereavement of her mother. She was extremely sad. Susan's mother's non-conscious decision was: «I have to deal with these feelings. This is life and life will go on.» Susan discovered that the deep, extreme sadness which had consumed her all her life was actually her mother's reaction to the death of her mother at the very time she was pregnant with Susan. Like her mother Susan was not a self-judging person. Whenever she had new challenging experiences, Susan had reconfirmed the same decisions her mother had made during the pregnancy: 'I have to deal with these feelings. Life will go on!' Susan is very successful in her life. She is married with a kind, loving, supportive man. Both are very creative and are committed to continuing personal development. Her profession is medicine. Susan is a doctor.

Factual or Symbolic Memories Still Work

Sometimes information about trauma can be symbolic rather than factual. Sigrid Westermann offers another case. She gives the name Anna to her client who did the PAM – Prebirth Analysis Matrix. Basically, Anna has been happy in her life, but her work is very exhausting for her. Anna wanted to find deeper insights into her life. She also was looking for personal development to make her life easier.

In her PAM, Anna visualizes her mother bicycling to her parent's house. For no apparent reason, she is having bad feelings and is trying to understand those feelings. When she arrives, Anna's mother goes directly to the kitchen where she sees her sister crying disconsolately. Her sister sobs the news that Gisela, her little daughter, is dead. The two sisters are very close – just 14 month apart. In childhood, they were together almost all the time. So close, in fact, that people thought that the sisters were twins.

Little Gisela had been a special, talented child with high intelligence. She was a happy and lovable little girl. Already, at the age of two and a half years, she was going with her brother to the Kindergarten where she was learning very long poems and songs. Everybody loved Gisela more than other children. Somehow, Gisela contracted an infection and was taken to the hospital. By the next day, she had recovered and should have gone home. So the doctor thought. Then without warning, for no apparent reason, Gisela was dead. Now the sister of Anna's mother is in incredible pain. She has lost her wonderful little child.

Because they were so close physically, mentally and emotionally, Anna's mother was very sensitive of her sister's feelings of loss and despair. Wanting to be able to help her sister deal with her tragedy, Anna's mother was determined to help her sister. But, unable to do so, she non-consciously judged herself to be not good enough. Not only were neither sister's traumas released, but they were passed on to Anna. What kind of work did Anna do? She became a Psychologist.

What is interesting about this case is that after the Prebirth work, while talking about what she had seen in her visualization, Anna realized that there had been a death in her aunt's family

during her mother's pregnancy. But consciously, Anna was sure, that it was her aunt's husband who died. The daughter, her cousin, died just three years ago. Anna had forgotten that her mother had told her, that her sister's husband had died at the time of her pregnancy and that she was not allowed to go with the funeral because their grandmother had declared: «It is not good for the unborn child when a pregnant woman goes to a funeral.»

Because Anna had been working in a slightly altered state of conscious she was responding to the pain of the more recent death of her cousin. The exploration about her prenatal period showed her pictures and feelings from the imagined death of her cousin, instead of the actual death of her uncle. The reason can be that the aunt had not released her shock at the trauma of the death of her husband. This is what Anna non-consciously had carried with her all her life.

When her cousin died her personality, which had been suppressing mother's pain was activated. In other words, for Anna, mother's pain at loosing her husband and Anna's pain three years ago loosing her cousin were the same degree of pain. Symbolically, for Anna's personality the deaths were interchangeable.

As a result of her Prebirth discovery, Anna stopped her work for a while. After three month, she began working with clients again but in an easier, more relaxed way, no longer trying to take away their pain. She was relieved that her work was no longer exhausting.

We trust that these cases give you an idea about how the charged emotional patterns which mother is experiencing are implanted into the conscious of the baby. In some therapies people experience birth as traumatic and painful. In 1989 Troya & I were invited to present a paper on Prebirth Memory Recovery at the First German Rebirthing Congress at the University of Osnabruck in Germany. Up to that time, in 20 years working all over the world, we had found that very, very few people experienced having a traumatic birth. In fact, these people confirmed studies reported to us by Joseph Chilton Pearce, noted American researcher and educator, that shortly before birth if there is no medication administered, the baby's body is saturated with endorphins which act as an anaesthetic for the actual birth. We proposed that what people experienced as traumatic was not the memory of their own trauma but the memory of mother's labor and delivery.

For the future of humanity, as Prof. Fedor-Freybergh has urged, it is imperative that we all dedicate ourselves to create the most enhancing circumstances and conditions in which a pregnant dialogue takes place. We have offered just a sampling of cases which support the concept of Prenatal Psychology. We trust that these cases will give you pause and inspiration in understanding that many of the problems which people are dealing with are sourced in the reactions to stresses or traumas which their mothers and fathers experienced during pregnancy and birth. It is these feeling patterns which continue to be lived out as pathology by their children. It is these feeling patterns which when explored in Prebirth Memory Discovery can be healed.

Violence Begets Violence

Paula M.S. Ingalls (USA)

Abstract. Today, the sciences are so overspecialized, it is difficult to remain current on what is being discovered in other corners of research. Ronald Kotulak, science reporter for *The Chicago Tribune*, has interviewed over 300 researchers in the various neurosciences. His findings have been published in his book: *Inside the Brain*. The new consensus is that the environment and experience are the architects of the brain. Biology is not the cause of violence; biology is shaped by external stimuli, which reshape the neural response mechanisms.

If those environmental influences are violent, aggression, impulsivity, and nihilism are wired into the structural network of neural connections in the brain and in the functional efficacy of the brain cells. Scientists have found that epilepsy and depression can be learned behaviors, implying that such diseases and other mental disorders can be corrected by relearning, especially when treated early in life. These latest psycho-neuro findings, suggest that we can no longer separate the mind from the brain or body from the soul whether one is a pre- or perinatal being or an adult. The development of the brain, thus the mind, begins upon conception when the zygote is already in a state of experience that will affect it for life -- either for better or for worse depending on the particular culture and environment the new organism is formed in.

Introduction

There are two types of violence: malevolent violence and abuse couched in benevolence. We are all too familiar with the first in the U.S. The latest horror was committed by a six-year old boy in Michigan who mortally shot a classmate to settle a score. Although the adult crime rate has gone down considerably over the last decade, juvenile crime has gone up in spite of the total number of prescriptions of Ritalin written for preschoolers – as young as two years old – and older children: 11.4 million in 1998 versus 8.4 million in 1995. The recent terrorist attack on America is another prime example.

The other, malevolence under the aegis of good intentions and ignorance, is best explained by quotes. According to Vladimir Nabokov, a fetus is "The tiny madman in his padded cell." To Freud, the child is a "selfish savage" while to Melanie Klein a "murderous cannibal." Many practitioners of pre-and perinatal care still perceive a third trimester fetus as nothing more than a bundle of neurons and reflexes. This materialistic view is being proven wrong by science. To be sure, the prenate is neurobiologically, neurochemically, psychologically, and emotionally a receptive, responsive, and expressive human being at a much earlier stage in utero than ever imagined. As a consequence, the perceptions, especially in neuroscience, concerning nature versus nurture, genes, and environment are shifting, placing greater emphasis on both nurture and the environment in the development of mammals, including humans.

Discussion

The incredible plasticity of the pre-, neonates, and children's brains is receiving greater attention. The consensus is that genes establish the framework while experience is the architect of the brain which uses the outside world to shape and reshape itself. The cultural and geographic environment customizes it. Experience from the moment of conception influences the organism physically, emotionally, psychological-ly, and mentally. From the outset, though, the physical effects on brain, neuro-development, neuro-chemistry, and electrical efficacy are of particular importance for both positive and negative stimuli which can alter genetic expressions significantly. The new perception is that it may be in the genes but is not necessarily predetermined by heredity such as eye color. For example, persistent stress during the embryonic and fetal stages may turn on or off genes, or combinations thereof, which otherwise would have not. Such genetic switching alters the course of development in utero in subtle and overt ways – possibly for life. The distinction is important. Materialistic scientists would have us and the public believe that chemical imbalances and deficits in certain brain centers of, for example criminals, measured in studies with imaging scans, are due to heredity rather than caused by genes altered by the environment.

Too, awareness is growing concerning teratogenic effects of stress, toxins, drug therapies, and obstetrical harsh practices on the structural and functional development of cells, brain, and eventually the 'neuro-psycho' behavior of the individual. Such discoveries are objective and proof positive of the relationship between stress and violence inflicted pre- and perinatally and the violent behaviors of our youth in particular. An obvious example, is the incurable Fetal Alcohol Syndrome.

The implication is that adverse effects can take place on a cellular level the consequences of which are still not considered. In that light, I would like to digress and draw your attention to the latest advances in science:

- 1.Cloning with the necessary harsh manipulations of delicate embryonic cells.²⁵
- 2.Preimplantation genetic diagnosis, or P.G.D. an embryo screening test. Specific genes are isolated by puncturing the coating of fertilized eggs. With a glass needle, an embryo cell is sucked out, amplified, and checked for the presence or absence of genetic mutations such as the one for cystic fibrosis. ²⁶
- 3.Gender selection prior to conception. This newly developed method sorts the sperm by the amount of DNA by staining and piercing them with a laser before they are used for artificial insemination.

To continue, as nature dictates, it is not in the number of neural connections; the question is which particular synaptic couplings are made and at which particular time. Content – initially derived from sensory and reflexive experiential in- and output – develops and expands over time into a perceptual and conceptual one. The emphasis is not on experience per se, but on the type of quality of environmental influences on the embryo, fetus, and newborn. In spite of its plasticity, the brain can get damaged from environmental threats and stresses, from alcohol and drugs, from maternal neurosis and psychosis, from stroke and head trauma, such as possibly caused by forceps and caesarian section during delivery. For example, Dr. Saul Schanberg of Duke University and Tiffany Field of the Univ. of Miami discovered one of the most important biological buttons of all: touch. When newborn rats were separated from their mothers they stopped growing regardless how well they were fed and medically attended to. The pups went in survival mode: the body's need for food was subdued by stress hormones which actually turned off genetic activity so that cells could not di-

vide. Working with 'preemies', the researchers found the same chemical changes as in the rats: the stress hormone cortisol was up and DNA synthesis was down. Similarly, 'preemies' that were held and had their backs rubbed regularly started to get stronger and grow by as much as thirty grams per day versus the anemic rate of twelve to seventeen grams a day before such touching therapy was used. In a recent study, reported in The New York Times, of 150 teenagers who weighed 2 pounds or less at birth (called 'micropreemies'), nearly one-third had significant physical disorders, including cerebral palsy, blindness, and deafness with academic and behavioral problems often surfacing in the school years. As a cause, prematurity is exacerbated by invasive modern medical techniques, imme-diate separation and isolation from the mother for a long period of time, and lack of social and emotional interactions beyond changes of tubes and electrodes. As Dr. Patricia M. Rodier, professor and anatomist at the Univ. of Virginia phrased it, "Many systematic brain insults during brain deve-lopment do result in lasting behavioral and emotional alterations, while in many instances leaving the affected being normal in appearance", on the same chemical changes as in the end of the stronger and specific preemies' that were held and had their backet with the stronger and grow by as much as thirty grams per day by as much as thirty grams per day by as much as thirty grams per day by as much as their day by as much as th

Systematic environmental stress upon prenates and young infants leave landmark imprints due to reduced or increased levels of neurotransmitters such as serotonin, noradrenaline, cortisol, and others. In the developing brain, the main neurochemical function is to adapt to the specific environment – to find out how to best survive in that world. The researchers can now tell us with increasing certainty how the brain adapts physically to a threatening environment – how abuse, poverty, neglect, or sensory deprivation – as is the case with 'micropreemies' – can reset the brain's chemistry in ways that make genetically vulnerable children more prone to violence. These brain changes can become permanent, encoding into genes a propensity for aggression and violence. These genes are not passed on to the next generation because the genetic changes occur in the brain cells and not in the sperm cells. However, parents who have suffered the genetic alterations in their brain cells can still pass on their proclivity to violence by means of their own behaviors, thoughts, and attitudes towards their children. Parents teach overtly and covertly by example.

Dr. Markus J. Kruesi, Chief of Child and Adolescent Psychiatry at the Medical School at the University of Illinois, said: "What we are all beginning to conclude is that the bad environments children are more and more exposed to are, indeed, creating an epidemic of violence. Environmental events are really causing molecular changes in the brain that make people more impulsive.",16 Adaptation by the brain to a stressful environment expresses itself in behaviors, such as hyper vigilance, reactivity, impulsivity, and a mentality of always anticipating the worst. Thus, a constant preparedness in the name of self-protection and survival is neurochemically triggered and becomes the norm – a part of a person's personality. The effect of early pervasive stress is that the neonate is taught by its own neurochemistry that facilitates the flight, fight, or freeze mechanism. The hyper vigilant infant is constantly in readiness to be on the defensive as survival has become its singular goal. According to Eichhorn and Verny, quoting Megan R. Gunnar of the University of Minnesota, children who have chronically high levels of cortisol due to persistent stress have been shown to experience more developmental delays – cognitive, motor, and social – than other children. ²⁶ Dr. Bruce Berry of the Baylor College of Medicine, and an expert in severely abused children, said: "those kids have high resting heart rates, increased startle response; they will eat but not gain weight. They have the physiology of permanent fear. Reminders of the early trauma(s) can keep flipping the switch of the evolutionarily perfected stress-response mechanism, overstimulating

stress hormones, causing the heart to race, the body to cool, the mind to focus narrowly on survival.

Especially young infants respond with their first learned behaviors and use strategies 'that worked before.' It is as if their emotional and sensory brain goes through its Rolodex of chronologically and cross-indexed organized response cards. Each response behavior, whether reflexive or learned, creates or reinforces synaptic connections and neural pathways for life. For infants who learn to respond with rage – rage due to a low serotonin, or high noradrenaline and cortisol productions, or combinations thereof – develop behaviors that are not represented in the neocortex by formulated thoughts. Yet, they retain the emotional memories, neural pathways, and affected gene cells. As these children grow up, they will continue to respond with curses, fists, and kicks precisely because those were the behaviors they learned first out of necessity. Raw survival continues to matter foremost. Furthermore, the affected brain anatomy and chemistry can inhibit learning, concentration, attachment, and even empathy. "This is significantly more damaging than traditional infectious diseases ...," said Dr. Perry "If you influence the way the brain functions in ways that become chronic and permanent, that's fixed. Impulsive violence is only a piece of what we're finding. The big picture is the lost potential of kids," because these children – these silent victims – are not living: they are struggling through each day while locked into their infantile primary goal of survival and related patterns of behavior. The next phase in their development toward chronic violence is the period between roughly ages 6 and 10 when their intellectual development begins to take shape.

Unfortunately, there is very little literature concerning what goes actually on in the mind of those young children who are predisposed towards violence and/or who have an unresolved traumatic history. What are their actual thoughts? How do they evaluate new experiences? ¹⁰

Susan J. Sara of the Institut des Neuroscience in Paris, has concluded from her research that " ... it is inconceivable that a new memory can be acquired independently of retrieval of past experience, in that it is memory of the past that organizes and provides meaning to the present perceptual experience." Past experiences provide a bifocal lens through which each new experience is perceived and initially evaluated. But, when a child begins to think independently, whether consciously or subconsciously, s/he differs from adults in several major respects: 1. children's thought patterns are linear; they take things literally. 2. Their thoughts are subjective and I-centered. Their ego is still the core of their emotional and mental universe. Their rationale can be illogical by adult standards but flawlessly logical by their own measurements. 3. According to Peter Shepherd, the meanings of words during the middle phase of language development are represented in the mind as an aggregate of subjective responses. Meanings are defined in terms of their position on a continuum between polar adjectives, such as 'Good-Bad', or 'Kind-Unkind', or as kids would phrase it: 'It's cool-It's a bummer', and so on. So they are felt meanings, defined not by other words but in terms of the subjective experience of these qualities.²⁹ In other words, a new experience to say an eightyear old goes initially through sensory and emotional filters already stored in the limbic system which holds the emotional and sensory memories of the past. ¹⁰ According to Dr. Joseph LaDoux, Neuroscientist of the Center for Neural Science in New York, the emotional, or limbic system, can act independently of the neocortex. From the amygdala, which also acts as the storehouse of emotional memories, projections extend to every part of the brain among them the locus ceruleus in the brain stem which manufactures noradrenaline: a stress hormone that suffuses the cortex, brain

stem, and limbic system itself. This hormone makes the sensory circuits more sensitive; it also increases blood pressure, speeds up heart rate, affects breathing, such as its suspension when in fright or behaviorally paralyzed. Thus, a neonate repeatedly subjected to severe fright will have a lot of reinforced connections from the various centers to the Amygdala and from there to other parts of the middle and lower brain sections, as well as overproduction of noradrenaline and other hormones. As a result, behaviors in response to fear are firmly encoded in the brain's neural networks, especially as the amygdala stores the emotional aspects of traumatic experiences and behaviors in response to them. The overall effect may be a hyper-active emotional brain. Thus, when intellectual development is in progress, thoughts are formed that are based on an emotional traumatic past. As a consequence, the neocortex will have strong connections to the limbic, or emotional brain.

Conclusion

Today, kids with traumatic pasts buried inside or unresolved conflicts are at greater risk than ever before because of our culture. Violence is everywhere. Forty years ago there were virtually no drugs, guns, run-aways, rampage rage at schools, violent television and video games, acid rock, and nihilistic lyrics as they are today. A traumatic past does not have to be pre- and perinatal: early poverty, illiteracy, lack of education, an environment engaged in war, fundamentalist and extremist religious indoctrination can cause the same psycho-social problems. Intellectually vulnerable by about age 6 or 7, their young minds are ready to absorb interpretations and develop ideologies that can turn them into hoodlums, gangsters, drug dealers, and terrorists of the ultra right or other causes. In time, attitudes change from being victims to turning into emotionless and cold victimizers during puberty when the high noradrenaline is

converted to low noradrenaline production. 16 Psychologically, these adolescents change from defensive survivors to aggressive challengers or victimizers. Some of them turn against themselves and resort to self-mutilation, or cutting, anorexia, or bulimia. As adults, they can't tolerate being wrong for the unconscious associations carry life threatening charges. As a consequence, they will carry to extremes their belief in being right regardless of the issue in question, particularly when their beliefs are validated by religion or political activism. Too, they cannot be dissuaded from their mandates and fanatic behaviors for they cannot be wrong which underscores their tunnel vision and intolerance. Their philosophy of 'Might is Right' and their self-righteousness is often maintained by brutal force which serves simultaneously as a means to act out their own repressed traumatic pre- and perinatal memories and their unresolved rage. City gang members, skinheads, terrorists are typical examples. Last but not least, teenagers with a violent ideology with its roots in violence done onto them, in many cases pre- and perinatally, are extremely difficult to help that might change their minds. They are inflexible. Those early experiences have become part and parcel of their neural networks and neurochemistry which is maintained by the very emotionally underpinned ideologies – primal philosophies embraced by what to their unconscious is nothing less than survival. Emotionally, they are infants or young children wrapped in adult bodies, yet no less lethal because of it.

Domestic Violence: Prevalence among Women in a Primary Care Center - A Pilot Study.

Mirta Grynbaum, Aya Biderman, Amalia Levy, Selma Petasne-Weinstock (Israel)

Background. Domestic violence against women has become a prevalent social and health issue that has serious consequences (1). The lifetime prevalence in the literature ranges between 21% and 34% (2-4). The lifetime risk for severe injury is 9%, and in the United States 30% of all murdered women were killed by their partner (1). Domestic violence during the past year is estimated to affect 8-14% of women (3,4), and 5% are currently afraid of their partner (3). In a primary care setting in the USA, the incidence of battered women was 9% (5). Among women who are treated for psychiatric symptoms or attempted suicide, 25% have been battered (4).

In Israel, 23% of women who visit a primary care clinic have suffered violence during the previous year, and the lifetime rate is 39% (6). A recent national survey in Israel found that 11.5% of adult women were victims of partner violence during their lifetime (7). Of these, 3% were abused during the previous year. The rate was higher in those who were Hebrew or Arabic speaking, divorced, and with less than 12 years of education. Abused women rated their health status as worse, had a higher rate of depressed mood, and had more need for psychological treatment during the previous year.

A high risk period for domestic violence is during pregnancy: 20% of pregnancies have violence-related complications, such as fetal trauma that sometimes results in death, premature delivery, fetal-maternal bleeding, amnionitis, abruptio placentae, etc. (8).

A "battering syndrome" has been described, in which a physical assault is followed by an increase in medical and emotional problems (2). Abused women make frequent visits to emergency rooms, are high consumers of health services, and frequently visit the family physician. Common symptoms include somatic and functional complaints such as abdominal pain, headache, irritable bowel disease, pelvic pain and others (2,4,9,10). Women who suffer domestic violence have a high incidence of psychiatric problems, such as depression, anxiety, sexual dysfunction, post-traumatic stress disorder, and suicide attempts (2,4,11-14). Domestic violence is a major risk for serious injuries and for death (1,4,8,14).

The problem of under-diagnosis of domestic violence can be attributed to several factors (5,14) — which are related to both the abused woman and to the healthcare provider. The woman is afraid and feels threatened, financially insecure and helpless. She is often unaware of her rights and the resources available for help. The healthcare provider feels insecure and lacks awareness of the relevant laws and regulations as well as the options to ensure the patient's safety (4,14). The law in Israel considers abused women legally as adults, whocan decide for and defend themselves and therefore report their abuse themselves. This is in contrast to the law's category of "helpless people" (elderly, children) for whom there is a legal obligation that mandates anyone aware of the abuse to notify the authorities (15).

The objectives of our pilot study were to estimate the prevalence of domestic violence among female patients who visit a primary care clinic, to characterize those women who report being abused, and to evaluate the use of a brief anonymous screening instrument. The screening questionnaire was based on the Partner Violence Screening tool (14). We also wished to estimate the influence of our screening on the rates of consultation with the Domestic Violence Prevention and Treatment Center in Beer Sheva.

Methods

The design was a quantitative descriptive pilot study. We used a brief anonymous questionnaire for self-completion, based on the "Brief screening questionnaire for detecting partner violence in the emergency department" (Partner Violence Screening tool) (14). The questions included:

Have you been hit, kicked, punched, or otherwise hurt by someone within the past year? If so, by whom?

Do you feel safe in your current relationship?

Is there a partner from a previous relationship who is making you feel unsafe now?

We included questions regarding demographic characteristics and the women's wish to talk about the issue:

Would you want to talk with someone about this issue? If so, with whom? (Options: your family physician, your nurse, your social worker, a policeman, someone else).

The questionnaire was translated to Hebrew and Russian using the double translation method (16). Demographic data collected included the woman's age, education, occupation and religion, the number and ages of her children, her family status, and number of household members. Attached to the questionnaire was the address and phone number of the Domestic Violence Prevention and Treatment Center in Beer Sheva, which treats domestic violence at all levels of care.

During October 1998, physicians and nurses in the primary care center distributed the questionnaires to all women aged 18—60 years who could read and write in Hebrew or Russian and whose health permitted their participation. For assessment of compliance, the physicians and nurses conducted a register of all questionnaires distributed and collected the demographic data of those women who were not included due to their refusal to participate or to their medical situation.

In the waiting rooms of the clinic we posted signs with information about the screening process and asking women to participate in the study. The completed questionnaires were put into a sealed envelope and into closed boxes located in the waiting rooms. The envelopes were collected at the end of each workday. A woman was considered at high risk if she answered a positive answer to at least one of the three independent questions related to violence.

For contingency table analysis, the chi-square or Fisher's exact tests were used as appropriate. Analysis of continuous variables was performed using one-way ANOVA. The comparison of so-cioeconomic risk factors in abused women and non-abused women was calculated by odds ratio with 95% confidence interval.

Results

During October 1998, 169 questionnaires were distributed to women visiting the clinic; 139 matched the inclusion criteria and 133 questionnaires were completed (response rate 95.7%). By our definition, 41 women (30.8%) reported one or more kinds of violence and were considered high risk. A relatively high proportion of women reported feeling insecure with a current partner, which might be related to all kinds of violence and not only to physical abuse. No direct questions were asked about sexual abuse, psychological or other kinds of abuse.

Women who were unmarried, older than 40, new immigrants from the former USSR, and not working were at the highest risk. Almost all women said they were willing to talk about this issue with their family physician (92%), both those who were at high risk and those who were not.

During the study month and for 2 months thereafter, there were no new visits of women from the clinic to the Domestic Violence Prevention and Treatment Center. Only three women tore off the Center's address and phone number that were attached to the questionnaire.

Discussion

The compliance with the screening tool was 95.7%, higher than reported in other studies — namely 81.6% (2) and 76% (14).

In our study the high risk women represent 30.8% of the respondents. The incidence of physical abuse during the last year was 10% among all respondents. This result is close to the incidence of 9% found in a large study in primary care clinics in the USA (5). A national Israeli survey found a lifetime prevalence of domestic violence of 11.5%, with 3% occurring during the previous year (7). This may be a clue to the higher incidence of violence among women who visit the clinics than in the general population. We also found a high number of women who felt threatened by their partners, both a current partner and a former one, probably reflecting the result of all kinds of abuse among women.

In our study the age of 40 years or more was found to be a risk factor for intimate partner violence. This result differs from other studies, where age younger than 36 was found to be a risk factor (2,8). Lack of a partner was also associated with domestic violence in our study, as in other studies (1,2,7). In Israel, divorced or pregnant women were at higher risk for domestic violence (7,8). We also found that immigration to Israel during the last 10 years was a powerful risk factor, especially immigration from the former USSR. This contrasts with findings in a recent survey in Israel, where Hebrew and Arabic-speaking women were at a higher risk (7). Women who did not work outside their home were at a very high risk, which concurred with almost all studies (1,8,14). Other studies found that low income was also an important factor (1,2,8), but this question was not included in our brief questionnaire.

Thus, immigration, unemployment, pregnancy, and low income are all stressful situations in which the risk for domestic violence is higher. Lack of a partner may represent a cause or a consequence of intimate partner violence. It may contribute to the woman's instability and low self-esteem, which can play an important role in domestic violence. Our finding that women who have recently immigrated to Israel from the former USSR are at a higher risk may also be related to the stress of immigration.

In this study we did not include some relevant variables, such as the partner's characteristics and the woman's psychiatric and physical complaints. We did not directly ask about other kinds of domestic violence such as psychological and sexual abuse. We preferred a short questionnaire that would improve the response rate.

We did not include women who spoke languages other than Hebrew or Russian and who could not read and write, and therefore our results may not be generalizable to all adult patients visiting a primary care clinic in Israel. Another limitation of the brief questionnaire is that it was self-completed, without the involvement of the healthcare professional and patient in an open and direct discussion and without a therapeutic relationship. This permits the woman to continue with her "secret-keeping" behavior that is so typical for abused women. Although these limitations were known, our anonymous questionnaire had a high compliance rate, contained vital information for the woman at risk, and could open a dialogue if she desired such.

We conclude that screening for domestic violence in primary care is effective. We found a high percentage of abused women, and the characteristics of these high risk women may contribute to our awareness. Thus, clinic staff should devote more attention to women who are over 40, not married, new immigrants from the former USSR, and unemployed. The family physician has a key role in detecting high risk women, inquiring about possible abuse, and diagnosing the problem. In addition, family physicians could help in working out a management plan and a support system as a part of the patient's healthcare.

During the screening month, the awareness of the physicians and nurses regarding this issue had increased. Further work should be directed at improving this ability and helping the healthcare personnel, the women and their families, to combat the epidemic of domestic violence.

Conclusions

The anonymous questionnaire was well accepted and had a high compliance rate. Its disadvantages are that respondents must be literate and that it permits the woman to continue with her "secret-keeping" behavior. A high prevalence of domestic violence among women visiting a primary care clinic should convince family physicians to be more active in diagnosing the problem accurately among their patients, providing treatment and preventing further deterioration and possible danger. Further effort should be directed at improving the clinic staffs ability to detect domestic violence among patients, and at developing management programs in the health system to help combat domestic violence.

Prevalence of the domestic violence among the woman – visitors of specialized polyclinic obstetricians advice.

Marina V. Kuligina, Lubov V. Posiseeva, Grigori I. Brekhman (Russia, Israel)

Background. Nowadays the domestic violence against women has reached the unprecedented sizes. Even by the minimal estimations the millions of women in the world suffered from violence or live with its consequences (32). Annually 1,8 million women in the United States (3% of all women of the country) are exposed to serious attack on the part of a husband or cohabite (1, 24, 28).

Annually in Russia more than five hundred thousand women have suffered violence, perish 14 thousands, 57 thousands - receive a mutilation (6). However, problem of domestic violence towards the women - "forbidden theme" or is not realized at all as a problem of infringement of the rights of the person. Domestic violence concerns a number "of family questions", and "to wash ones dirty linen in public" is not accepted for discussion. Thus, the men consider practice of violence to the woman as the natural privilege, and woman - as natural determination, as an attribute of the sex. The basic reasons of absence in a society of discussion about intolerance of violence against the women are an insufficient degree of self-comprehension by the women of a problem of violence concerning itself, "languid activity" of female organizations and traditional sacrifice of the Russian women (5).

Besides in Russia there is no advanced municipal or other accessible social-legal service for victims of violence. A procedure of a consequence on cases of violence is so humanless in relation to a victim, that only 3% of the women risk to declare about violence in militia. The legislative base concerning home violence is not created. The Russian law "About prevention of family violence" is considered in parliament for 4 years (4).

The dominant forms of violence concerning the women are physical, psychological and sexual (9, 33). From 10% up to 58% of the women in the different countries of the world are exposed to physical violence on the part of the intimate partner (20), that means that, home center are most often "place", where the violence is displayed.

It is believed, that the violence against the women is not only social, but also medical problem in view of the importance of its consequences for a condition of health of the women (31). The violence against the women is accompanied also by psychological problems, such as stress, alarm, depressions, mental and psychosomatic of frustration. There is one more aspect, which has opened due to the development of prenatal and perinatal psychology: an opportunity of relaying through and from a mother to not yet born child of feelings and images arising at the woman in connection with those or other events in life (11, 12, 14, 22, 26, 29). That is why the violence against the women begin to consider as violence against new generation of the people (7, 8). That is why a large interest arouses to a question on prevalence of violence against the women in separate regions, medical establishments.

The objectives of our study were to estimate the prevalence of domestic violence among female patients who visit specialized polyclinic obstetric-gynecologist reception, and to receive the de-

mographic characteristic of the women exposed to domestic violence. The study was carried out on the basis of Federal establishment - Ivanovo research institute of maternity and childhood named after V.N. Gorodkov. The examination was carried out among patients of consulting-diagnostic polyclinic and Centre of family planning, by using of the Partner Violence Screening tool (13).

It is necessary to note, that patients of polyclinic departments of institute are the inhabitants of Ivanovo region, as a rule, from safe families concerning a condition of their own reproductive health, wishing to receive the highly skilled advisory help, including on a commercial basis.

Methods

The project was certain as an experimental research, proceeding from brevity of the questionnaire allowing to estimate prevalence of domestic violence among the women - visitors of polyclinic (17). The research is carried out with the help of the brief anonymous biographical questionnaire for a self-estimation based on "Brief screening questionnaire for detection partner violence in the emergency department" (Partner Violence Screening tool)

(13). The questions included:

Have you been hit, kicked, punched, or otherwise hurt by someone within the past year? If so, by whom?

Do you feel safe in your current relationship?

Is there a partner from a previous relationship who is making you feel unsafe now?

During your pregnancy, present or former violence concerning you: for the first time has appeared, has amplified, was weakened, has stopped?

Would you want to talk with someone about this issue? If so, with whom? (Options: your family physician, your nurse, your social worker, a policeman, someone else).

The fourth question we have added for revealing the women exposed to violence during pregnancy.

Also some questions were included in the questionnaire to estimate demographic structure of women. The demographic data were included such as (age, formation, employment and religion, number and age of children, marital status and number of the members of family).

From the March 1 till April 30, 2003 registrars distributed the biographical questionnaires to all women of reproductive age (15-49 years). The information about the screening process and appeal to women to participate in the study was placed in registration office. The completed questionnaires were put into a envelope and into closed boxes located in reception. The envelopes were collected at the end of each work day.

A woman was considered to be at high risk if she answered to at least one of three independent questions related with violence positively. For contingency table analysis, frequency of domestic violence (on 100 women of appropriate social-demographic group) was calculated and the chi-square test was used as appropriate. The comparison of socio-economic risk factors in abused and non-abused women was calculated by odds ratio with 95% confidence interval.

Results

From March to April, 2003, 1968 questionnaires were distributed to women visiting polyclinic and Centre of family planning; 1943 – matched the inclusion criteria and 1913 were completed (response rate 98,5%).

As a result of research is established, that 3,8% of the asked women were previous exposed to physical violence during last 12 months, before our study. According to the analysis 258 women (13,5%) have answered to one of the questions positively, and were included by us in the group of high risk. Special attention should be paid to the fact, that the physical violence from the partner has been exposed or has been amplified during pregnancy to 50 women (2,6%).

Violence and risk of violence took place (on 100 asked women) at the age of 15-19 years - at 4,6; 20-24 years - at 3,0; 25-29 years - at 3,8; 30-34 years - at 5,3; 35-39 years - at 3,4; 40-44 years - at 6; 45-49 years - at 5,6 women. Hence, women of the senior age groups - at the age from 40 till 49 years were exposed to violence more frequently.

Frequency of violence depended on the educational level. In case of higher education from violence suffered 3,6, secondary education - 4,5, incomplete secondary education - 5,8 of 100 asked women.

Depending on religion the violence in family is more often met among the Islamic women (10,3 of 100 women), less often - among the Christian women (4,2 on 100 women) and women who are not belonging to any confession (3,4 on 100 women).

The high frequency of violence was found out among the women who were consisting in a marriage, but did not living together with the spouse (23,5 of 100 women), and divorced women (12,1 of 100 women). The women in registered and not registered marriages (3,6 and 3,0 accordingly) and unmarried - 3,9 of 100 women were exposed to violence less often.

Concerning the number of children the women having 3-rd children, are more often exposed to violence (14,3 of 100 women), less often women having 1 and 2 children (5,8 and 5,5 - accordingly), and significantly less often women who are not having children (2,6 on 100 women).

Thus, the prevalence of domestic violence is higher among the women of the senior age group (40-49 years), low educated, with the broken or breaking up family, islamic, and among the women having three and more of children.

The violence during pregnancy for the first time has appeared or has amplified at 2,6% of the women, was weakened or has stopped at 9,1%. That is, the pregnancy was "a regulator of violence" at 11,7% of the asked women.

On a question: "Would you want to talk with someone about domestic violence? If so, with whom?" - 57,7% of the women, from among exposed to violence, have given the negative answer, 34,8% have answered positively - from them: 15,4% - with a close girlfriend, 10,3% - did not know with whom exactly, 4% - with obstetric-gynecologist, 1,3% - with the psychologist, 1,3% - with the sister.

Discussion and psychological comment

The consent to cooperate in the examination have expressed 98,5% of the women, that was more, than in the research which have been carried out in Israel 95,7% (16) and USA - 76% (13).

The physical violence within last year was tried among 3,8% women. This result is lower, than in the research which has been carried out in municipal establishments of public health services that of region of Russia in 1999 - 8% (2). Probably, it is connected with the peculiarities of patients, which addressed to the given specialized medical establishment. At the same time it is revealed (10), that the severe handing treatment is negatively influenced on sexual and reproductive health of the women. So, among the women suffering from cruelty on the part of the intimate partner three times higher probability of occurrence of gynecological problems, such as chronic pelvic pain, vaginal infection, inflammation of genitals and urethra, painful menses, uterine myoma, sexual dysfunction, painful sexual act, sterility.

Probably, the specified problems among 3,8% of the women who addressed to polyclinic were connected with the physical violence of the intimate partner.

High risk of violence had 13,5% of the women, tested by us, and even if they were not exposed to physical violence, most likely feel a pressure, anxiety, alarm, fear, in the mutual relation with the intimate partner.

From a position of perinatal psychology the unborn child perceives feelings suffered by his pregnant mother, that promotes formation at him appropriate traits. If these women were pregnant, they (and actually at the fathers of children) would have high risk of transfer of this violent information to the children even before birth (12, 22, 26).

Circumstance, which softening this idea, are the data on prevalence of violence in group of the women 40-49 years, when the number of childbirth is considerably reduced.

According to the data of other research (24) risks of violence are increasing since 36 years - rather active reproductive age, and among the women, tested by us, the appreciable prevalence of violence was observed in the age of 30-34 and 15-19 years.

The pregnancy does not always protect the woman from violence. According to the researches which have been carried out in 70-th and in the beginning of 80-th years from 23% up to 56% of the women were abused during pregnancy (3, 16). The review of researches carried out in the different countries and published in 1963-1995 years, has shown, that the prevalence of violence among the pregnant women was ranged from 0,9 up to 20,1% (15). Last years this phenomenon, seems, has not the tendency to decrease. So, in totality of the pregnant women in Northern England the prevalence of home violence was 17%, and the compulsion to sex was tested by 10% of the women (23).

It is necessary to mean that violence and threat of violence are dynamic process. The pregnancy can become a regulator of this process in the party of its intensification, or, on the contrary, weakening. But even if the violence stopped, whether it is possible to assert that the pregnant woman periodically will not to restore from memory the pictures and feelings, accompanied violence, and, hence, will not to transfer these images and feelings to the unborn child? The results of our researches have shown, that at 2,6% of the women during pregnancy has suffered the violence the first time or has intensificated. We can only to assume how feelings they had: faults, insult, humiliation, fear, revenge, aggression, hatred etc. Whether it is possible to be sure, that this "emotional cocktail" has not touched the prenatal memory of child and will not be used by him in his subsequent life?

More than half of women (57,7%), from exposed to violence, did not want to discuss a problem with somebody. It is possible to assume, that they keep in themselves the secret, periodically coming back to those feelings, which have had during the act of violence. The intra-psychic conflicts resulting in a distress condition, quite often underlie psychosomatic disorders and diseases, including gynecological: infringement of menstrual function, pain pelvic syndrome, uterine myoma, endometriosis, sterility. Psycho-emotional distress at the pregnant woman can be accompanied by various complications of pregnancy and sorts: toxemia of pregnancy, immature pregnancy, miscarriage, prenatal fetal dystrophy, intrauterine fetal hypoxia and even death of child (30). Intra-psychic non-solved conflict at the pregnant woman is a very adverse background for mental and physical development of unborn child. After the birth child may to display intellectual backlog, inability to learn, autism etc. (21). With study of a phenomenon of domestic violence it is necessary to pay special attention to its psychological consequences for the woman, and also for its child as in nearest, so remote periods of life.

It makes actual questions of psychological training of the medical personnel, whose empathy should cause trust of patients and desire to inform about their problems. It assumes education of staff in the field of diagnostics of violence and knowledge how to act woman who has undergone to violence (25).

Conclusion

Patients of polyclinic office have accepted active participation in anonymous examination, that has allowed to receive representation about prevalence of violence among the woman - visitors of the specialized medical polyclinic obstetrician-gynecologists advice. The results of research have proved necessity of preparation of the medical staff for revealing victims of violence in order to they could in time give they the help, to inform them on the Centres rendering support to victims of violence. It is necessary also to take into account this aspect as one of possible etiological factors of disease, concerning which the woman has addressed, for more effective therapy. The organisation of interaction between the obstetricians and experts, who are carrying out social - psychological support to victims of home violence, expands opportunities of protection of the women from violence, and, that is not less important, protects a new generation of the people from violence.

. Mechanisms and ways of interaction between the mother and unborn child. Mother as a "transmitter" of the violence to the child.

Violence against the women – Violence against the new generation of people

Grigori I. Brekhman (Israel, Russia)

Abstracts. Sources of the prenatal and perinatal psychology and medicine. New paradigm of obstetrics and embryology. Wave principles of functioning DNA and other structural elements of organism. The concept of wave transfer of the information from the mother to her unborn child (prenate) and back. A multiple level principle of information interchange in system the mother prenate. Violence against women – violence against a new generation of people. The mother, the father, and social environment as "compilation" and "relaying" of the violence to the child. Approaches to preventive maintenance and decrease of a level of violence. On the way to the overnew paradigm.

1. New paradigm in obstetrics and embryology

Until now environmental people have indulgently smile, when the pregnant woman says, that her child understands everything, that occurs to her. Until now the experts name the child in uterus "embryo" and "fetus", and believe, that he there is deaf and dumb, feels nothing, understands nothing, and certainly does not perceive and does not show any emotions. Regarding memory and the mental activity of the baby in uterus they do not want even discuss. The experts and people consider that prenate in uterus is reliably protected, and his destiny is to grow and to develop organs and a body. They assume that only after birth with the first breath the function of all organs and systems are included. For more than 150 years obstetricians listened to heart pulse of the unborn child, but only recently scientists have begun to accept that, besides the heart, all other organs and systems, including sense organs and nervous system, not only develop, but simultaneously begin to function well before the baby is born.

Occurrence of new methods of research, which have allowed to have a look inside uterus, where we could not see before, has entered us in a new paradigm. According to it all organs and systems of a child already begin to function in the process of development, not waiting for the moment, when the child is to be born. It concerns systems circulation, blood-forming, digestion, urineferrous, endocrine, immune, bone, muscles, and even respiratory: though air also does not act in respiratory ways, but chest makes breathing movements(1,2).

The scientific researches have shown, that the sense organs also begin to function before birth. The tactile sensitivity is revealed since 5-7,5 weeks from the conception, first of all, on a skin of a head, cheeks, neck, and in genital area - per 10 weeks, on palms - per 11 weeks, on foot of stop - per 12 weeks, on a abdomen and buttocks - at 15-17 of weeks, on all sites of a skin - not later than 17 weeks (3,4,5).

The baby can feel pain at 24 weeks and practically on all sites of a body - by 32 weeks (6). Before this discovery doctors performed surgical operation on newborn babies without anaesthetic, and the babies would sometimes die of pain shock.

The child begins to perceive a beam of light directed on him close eyes from 10 weeks. At 18 weeks he covers his eyes with his hands to protect they from a beam of light from a video camera placed in the uterus (7), he reacts to flare of light reproduced above a mother's abdomen at 26 weeks (8,9), the final maturing of an organ of sight occurs by 33-34 weeks of pregnancy (10).

The reaction of the child to a sound was already found at 14-24 weeks, and after 28 weeks it have appeared constant and testified to steady perception of a sound by an organ of hearing (11,12). The baby can taste after 15-weeks (13, 14,15,16).

The baby has a sense of orientation and balance by 12 weeks, and the movements of the child are fixed from 10-12 of weeks as rocking, extending, bending of a back and neck, waving by hands, push by legs, graceful, free, spontaneous rotations with participation of all muscles of the baby. The swallowing and the movements of lips, mouth, tongue, facial expressions reaction are fixed from 14 weeks (17).

Thus, the given researches show, that unborn children have all kinds of sensitivity, which come to light in various terms of pregnancy: one earlier, other later. All together they show, that even before birth the child is formed and begins to function: a) the perceiving nervous device - receptors; b) conducting nervous ways and c) the central nervous system estimating acting pulses, and organizing reactions on them.

Since fundamental works of the Nobel winner Ramon-j-Cajal (18,19) by complex researches, the structure of brain in detail is investigated. Within first 2 weeks after conception there is a primary formation of embryo nervous tubules, which becomes an information center. By 7 weeks the predecessor of a brain telencephalon is formed (20). The general plan of level-by- level organization of a brain is generated already by 24-28 weeks, at this time the baby's brain structure is practically the same as a newborn's brain per 40 weeks and an adult (22). The differentiation of neuron and the neuron's shoots in cortex of brain is marked between 20 and 28 weeks of pregnancy. Simultaneously the nervous conducts are formed, on which the information acts in CNS and back (23).

Much data shows that the nervous system of unborn child begins to work before it is fully formed: a) Functioning of all kinds of sensitivity before birth (see above). b) The reactions of unborn children to various stimuli (light, sound, flavoring) have been found. The reactions include sense organs plus various groups of muscles in the face, neck, arms, and legs. The reactions very much reminding reflex, have formed the basis to assert, that already in the prenatal period the loops reflex of an arch are generated. Moreover, the complexity of these reactions allows to speak about presence at them of working physiological functional systems (25). These systems carry out self-regulation processes and self-checking and functional communication with external environment. c) Electroencephalograph research have shown the reactions of the brain to external stimulation of eyes, hearing and touch (24). d) The neuropeptides system also actively participates in this process. It connect, with the help of 50 -60 kinds of neuropeptides, constantly moving in the organism, the nervous, endocrine, and immune system in one information network working in both directions (26,27,28). e) The neurons of the brain produce biologically active substances (BAS),

neurotransmitters (catecholamines, serotonine, opiates), which in certain measure are connected with emotional displays.

Comparative characteristic of Up-to-date and Out-of-data paradigms in embryology and obstetrics

Tabl.1

Up-to-date paradigm	Out-of-date paradigm
The development proceeds from the complex to much more complex.	The development proceeds from the simple to complex.
The development of the human being goes from a primary cell (zygote) towards complicated organism. The primary cell contains coded genetic information, which comprises:	The development of the human being goes from a primary cell (zygote) to complicated organism. The primary cell contains coded genetic information, which comprises: A/ The data on the organism morphologic struc-
A/ The data on the organism morphologic structure, B/ The holographic plan of organism formation sequence,	ture,
C/ The functional processes of organism	
formation, D/ Parents, grandparents, predecessors'	
emotional and psychological peculiarities.	The functioning of all systems of the aggregation is
 The functioning of all systems of the organism proceeds parallel its structural construction and continues after the birth. The tactile, pain, auditory, visual, taste, space birth beginning from the first trimester of pregnancy. 	The functioning of all systems of the organism is begins after the birth with the first breathing of the newborn. The tactile, pain, auditory, visual, taste, space orientation sensitivity appears and proceeds gradually after the birth .
4. The umbilical cord is not the only way of interaction between the mother and her unborn.	The umbilical cord is the only way of interaction between the mother and her unborn.
5. Oxygen, protein, water and other necessary products and biologically active substances (BAS) delivery to the child with blood via umbilical cord vessels , and with liquor amnii via the membranes .	Oxygen, protein, water and other necessary products and biologically active substances (BAS) delivery to the child with blood via umbilical cord vessels .
6. The metabolism products from the unborn child to mother are delivered via the umbilical cord vessels , and with liquor amnii via the membranes .	The metabolism products from the unborn child to mother are delivered via the umbilical cord vessels ,
7. The emotional perception, prenatal memory of unborn child start their development from the beginning of prenatal stage .	The emotional perception , prenatal memory, are not suggested to be present.
8.Emotional and psychological interaction between the mother and her unborn child is carried out with help neuropeptides , BAS , delivered to the child by blood through umbilical cord vessels.	Are not suggested to be present.

Hence, the brain of an unborn child not only develops, but *functions, reacts* and *provides communication* of the child with the internal and external world. Moreover, it is proven that the brain begins to work before the structure is complete: just as the heart begins to pulse 22 days after conception, long before the completion of its structure, the brain also begins to function earlier than it appears finally structurally generated.

And what about emotions, thinking, and memory?

The emotional displays are found out in the child as the expression reactions the movements of the eyes reminding squinting and a smiles at 14 weeks, puckering of lips, scowling, muscle tension around eyes (have been associated with audible crying) - per 24 weeks, a smile and cry of the child are photographed in uterus by the ultrasonic device of new generation 4D per 31 week (29). To the present time much data confirm a reality of psychic and emotional perception of unborn child and psycho-emotional interaction between the mother and her unborn child (30, 31,32,33,34,35,36,37).

A lot of information about what happens in the prenatal period, while the baby is in the uterus, as impressions of events are saved in the memory of children and adults. This information has been retrieved in several ways: a) By the influence of LSD or holotropic breath on the man (31, 38); b) With the help of psychoanalysis, hypnosis and other methods of psychotherapy; c) As a result of psychological research on schoolboys (39); d)In psychological experiments with the participation of pregnant women, who read children's stories, sang songs, listened to music and "pregnant fathers"(40,41,42,43) Besides the memory about the events during pregnancy, now we also have scientific proof that children and adults have memories of their birth. It is said that : a) Some children aged 3-5 years can give information about their birth (44), b) Special scientific research has proven memory of birth (35), c) Many statements from adult people received even without hypnosis, about unusual sensations, feelings, habits, ideas, style of thinking and behavior are published (32, own data). Their comparison to events during pregnancy and labor was found out by precise chronological connections and are confirmed by the witnesses and / or by the participants. In the process of interaction of mother and child there is a formation not only of physical, but also psychological health of a baby. We can point out, that at the moment of conception the zygote already is full of information thanks to the genetic data, or not only of morpho-structure of organism, but of psychological qualities of parents and ancestors. Besides, the child is capable to snatch hard the most colorful moments of his mother's life and held them in his memory. In the process, later, these images are reflected in his thinking, emotional feeling and in the style of his behavior as a child and adult.

His capability and talents, and tasks are very much connected with it. It is found out as well, that many psychological problems of a person take their source from the period of pregnancy, labor and earlier postnatal period. It is considered also that all those activity is the result of psychological reactions of mother, her way of thinking and behavior. This, in its turn is the reflection of psychological and cultural specialties of the nearest environment, and socio- economical and political condition of the society as well, in whole. Not the last role in this plays the existed philosophy and technology of modern birthcare. There are proves that each of these circumstances or their totality may stipulate the appearance of the *perinatal psychological traumas* at the prenate. The psychic traumas may appear at the baby and at the grown up as psychological problems such, as fears and phobia, neurosis, psychopathic features and dependencies (drugs, alcohol, and smoking), sexual

peculiarities, psychosomatic disorders, high aggression and violence,. Those traumas could be the reason of psychological discomfort, and they meddle with the person to be in harmony with itself, with the people around him and with the environmental nature, from which the personality himself, his family, and society as a whole suffers.

Thus, in the course of the last decades of the 20th century the scientific -technological progress and the results of the scientific researches got with the help of the new methods, changed very much our imagination about a fetus and they let to formulate the position of a new paradigm in embryology and obstetrics (35,37).

In the accordance with the modern conception, the information from the mother to prenate is transmitted with the help of neuropeptides, hormones and others BAS mainly through a uterine-placenta circle, by blood, which is moving through the umbilical cord. Though the explanation of numerous displays, and in the same number, elicited from the memory of events and pictures, chronologically bound at the person, with the pregnancy and labor, came to the serious contradiction with the universally recognized conception.

Thus, it is shown in experiments, that some BAS, for example adrenaline, bound with emotion of fear and anxiety, because its high molecular weight (in general concentration) can not overcome placenta barrier and shift from mother's in blood to the child's (45,46).

The clinical data also do not give straight and convincing prove that mother's information goes only with the blood through umbilical cord or by amniotic fluid through membranes and placenta. Thus, in one of our experiments (47) we found out the change of heart's activity of the prenate as the answer to the different stimulus, which caused the woman to change her emotional condition. For example, this happened when the woman told about one member of the family who caused her to appear unpleasant emotions and exasperation an irritation; or when the woman heard for the first time the sound of palpitation of her baby, and also when she heard the tape recorder of the children's songs. The change of heartbeat happened practically instantly. How to explain those instant reactions?

And how to explain a great number of sensations, pictures, habits, which seem as fetus fantasy of the story-teller, on the first sight at the same time, there are accurate chronological coincidences which took place between them and events in the prenatal period. There are some observations from our practice.

From the story of a mother: 1. I wonder all the time at my son, who is 24 years old, who cannot hear the crunch of an apple while somebody eats it. In his childhood he ran away from a room, where people ate apples, and I always rubbed them to him. Maybe, this is the result of my experiences during my pregnancy? At the time of my pregnancy of 5 months, I wanted apples very much. They were very dear, and we were students ... Once I decided to buy one kg of apples. I was happy, I brought them home, washed and put them on the plate. In the pleasant anticipation of good emotions, I decided to finish some important things and went out of house for a short period of time. When I returned, I found out, that the plate was empty: my husband ate nearly all apples. It was hurt without limit cried, tapped my feet scolded at my husband, and I had hysterics, which never happened before. I long not be calmed by His words: "I love you: I left two apples to you, do not you see?" could not comfort me for a long time. Maybe my child remembered this episode, together with me? And this define his emotions and style of his behavior, when he hears the crunch of an apple?

6. Next example. One of our colleagues, doctor, a sports woman, in the past a pentathlonist, five-fighter, a skates-winner champion, could not understand for a long time the negative attitude to the sports of her senior daughter of 12, who once said to her mother: "You will never force me to go in for your light athletics". After getting acquainted with perinatal psychology, her colleague analyzing the flow of her first pregnancy, suddenly pointed out, that at the beginning she continued to go in skating but at the time of pregnancy at 16 weeks, she fell down and was very frightened for her pregnancy. She stopped to go in for sports from this moment. "Isn't that fright, which suffered not only by me, but by my daughter, played a "decisive role"? - asks G.N.

E., age 28, goes her story. "In my childhood, as much as I remember myself, I was constantly haunted by the thoughts of suicide. Gradually this thought came as my wish to do it. I mentally imagined many ways of how to do it, and I did not feel any fright before death, and I felt that I experienced death in the past. To the age of 12 the thoughts of suicide became an obsession, and prevent me from living and I could not understand what went on with me. I addressed to my mother with whom we had very good relations. Quite unexpectedly the following circumstances were cleared. When my mother was pregnant with me, she was pregnant during eighth month, she found out of my father's adultery, and that his lover was going to bear a child at the same time as my mother. My mother tried to hung herself on the tree in park. To our great relief the brunch broke, and we remained alive. Soon I was born one month earlier the time. All this was very trying to listen to but I found out the explanation to my suffering, it became easier on my soul, and the thoughts of suicide did not disturb me any more".

These bright and difficultly explained, from the point of view of classical medicine, the examples supplement the list of many similar stories and published by other authors (35,44,oth.). It is impossible to explain the given emotional impressions and instant reactions by extremely carry of the information by a biochemical way with the help neuro-peptides and others BAS. Not denying these ways, we would like to discuss here a another mechanisms and ways of information interchange between the mother and her unborn child. However, in the beginning we shall make small deviation to enter the reader into other world, world of quantum physics, corpuscle-wave theory, quantum genetics.

2. The wave principles of functioning of structural elements of organism

According to Einstein's paradigm and theory substantial-wave dualism of a matter Louis de Broil, any substance simultaneously can be in a status, both particle, and wave, both matter, and energy. The specified statuses are closely connected among themselves, exist in parallel and are capable to turn each other. These determinations of the quantum theory, and wave mechanics confirmed experimentally, were put forward and are advanced in 30-40th years of 20 century by the outstanding scientists - physicists (Compton, de Broil, Schrödinger, Dirac, Heisenberg, Bohr, oth.). These determinations were hardly perceived physicists of that time, but today it is difficult to itself to present physics without the quantum physics. Last decades the ideas of the quantum theory have begun to penetrate into biology, genetics, medicine. They have allowed to advance in understanding of principles of functioning of organism.

111111111111

The particles and the EM wave connect with the information. As to definition of the information, how wrote N. Wiener (1): "The Information is the information, but not energy and not matter". In the half of the century E.

Evreinov (2) stated: "The information as the scientific category is entered as primary concept, which together with the matter and energy are not subjected to definition". Practically we always deal with three-unity: matter

6. energy - information. The information, which the EM wave are bear, define by the term "the wave information".

According to modern performances **organism** of the man includes the following levels: cortical, organism, system, organ, tissue, cells, sub-cells, molecular, atomic, elementary. The elementary level includes electrons, protons and other components atom. It is known, that electron as the particle has a charge and has ability to receive, to transfer and to give back energy. Believe, that under influence of external forces electron can move into other orbit, or can lose communication with atom and be in a free status. Any of these statuses is accompanied by radiation of quantum's of energy in kind the electromagnetic (EM) waves with a various interval of frequencies (light, radio-waves, etc.) depending on influence of external environment.

What substances of organism are capable to generate and to perceive the wave information?

On the molecular level it is water, protein, and DNA.

The researches showed that **water** in a liquid status has complex quasi-crystallic microstructure. The molecules of water are united in labile formations - clusters. Cluster structures are in an oscillatory status and form the system of oscillators. Petrosyan e.a. (3) believe that the own fluctuations of molecules of water in a range of the extremely highest frequency (EHF-range) become a source of generation of radio-waves by water and biological environments. The authors have defined the length of a wave () of the own EM-field of radiation of water environment, stimulating by a magnetic field. It has appeared equal 2 mm, that roughly corresponds to frequency () 25 GHz. EM wave of MM range (EHF-ranges) at the extremely lowest, not thermal level of capacity, show high biological activity in the relation of regulation of deep processes of vital activity to alive organisms at a molecular-field level. The matrix of water has spatial and temporary organisation, and can execute a role of the synchroniser, and standard of time in bio-systems. That allows to speak about bio-information properties of water systems (4, 5,6,7).

By additional arguments supporting performance about water as of information environment capable to perceive to remember and to transfer the wave information are homeopathic practice (8), influence of "magnetic" and "electro-chemically activated" waters on biological objects, including man (9,10). Last years the researches on bioenergo-information influence of the man on the water and solutions are carried out. Such influence resulted in structural changes of water, rendered influence on their spectra of letting pass and absorption, in particular infrared (IR)- spectrum (11,12). Such water rendered precise influence on biological objects (13). Water with frequencies of fluctuations 1,2; 2,5; 7,8; 10,0 GHz renders favorable influence on organism, whereas the water at frequency 5,0Hz at many people the apathy and nausea is observed, and the frequency 1,8 Hz - is registered in cancer tissues and corresponds to water containing heavy metals (14). Ludwig W. (14) has shown, what even in water bi-distil the information as EM-waves about former in it impurity of heavy metals, nitrates, microbes is kept.

We would like to remind that water makes significant weight of the organism. So, the unborn child in the age of 6 weeks contains on weight about 97% of water, per 16 weeks - up to 92%, new-born - up to 72%, adults - up to 60-65%. On a share of molecules of water it is necessary more than 90% of all weights of a cell (15, etc.).

It is possible to believe that water of cells and organism as a whole carries out the very important double role: 1) it is the original generator of EM waves of MM range; 2) and at the same time water environment provides perception from external and internal environment of the wave information, which carries and transfers the information to other structural elements of organism. Thus we mean, that it is impossible automatically and completely to transfer experimental data received at work with water (water distillate and containing various additives), on water contained and circulating in organism, and which are in close connection with proteins and other structural elements of organism.

The molecules of **protein** also are described as oscillatory systems capable to generation of waves. It is connected from them dipolar structure, which is formed due to connection the nucleic acids with chromatinic protein. Such nucleo-proteides (DNP, RNP) become asymmetric molecules because of non-uniform distribution of charges inside a molecule, and they are capable to carry out intermolecular transfer of energy separating in space the place of absorption of quantum and the place of realisation of its action (16). The author believes that in a complex DNP and RNP proteins thanks to the high polarisation not only expand a range of waves (package of the information),

accepted by whole complex, but also become system conducting a resonant signal on the nucleic acid, which become a target for the wave information.

The special attention of the scientists is involved in research of a wave nature of **genes**. From a position of quantum genetics DNA molecule in structure of chromosomes has a substance-wave duality, similar to duality of elementary particles. It means, that DNA codes the organism in two ways - and with the help of substance DNA, and at the expense of its sign wave functions (17,18,19,20). The authors believe, that: a) the genetic device has ability to be non-local at a molecular level. That is shown as holographic memory of chromosome continuum, more exactly in each nucleus, its genome the memory of structure and function of all organism is kept.

5. The genetic device also has ability to be quantum non-local according to the effect of Einstein, Podolski, Rosen (21). It means, that genetic and other regulatory wave information of genome is written at a level of polarisation of its photons and non-local (everywhere and for zero time) is transferred to all space of bio-system, using code parameters. By this non-inertial information contact between billions cells of organism is reached.

c)Important is the third rule that genome as a whole and separate cellular nucleus have quasi-consciousness of a different level. The genome, and separate cellular nucleus are capable to generate and to distinguish textual-figurative regulatory structures with the use of a phone principle, of holography, and quantum non-locality (22).

The theory of a substantial-wave nature of the genome has received the **experimental** acknowledgement. The first real and authentic experiments in the field of quantum genetics has carried out Dzang Kandzeng (23). His device on distance of tens centimetres transmitting " wave genes " from the donor to the recipient, used own radiation of bio-systems of the donors. He managed to transfer the information from green mass of wheat on germinating semens of corn and barley, with melon on germinating semens of cucumbers, with peanut on the germinating semens of sunflower and to receive appropriate " wave hybrids ". His experiment is known, at which he has directed the bio-information from a duck on the 500 eggs. From the 480 hatched out chickens 80 % - had a flat duck form of the head, at 90 % - the arrangement of an eye has changed, at 25 % - on paws the membranes have appeared.

Not less important was that the attributes, received by hybrids, were transferred by inheritance, i.e. the biowave information was perceived by genes, was kept in genetic memory and "was relayed" to the following generation.

The results of this work were confirmed by researches of P.P.Gariaev (17), which with the help of the own radio-electronic device simulating the radio-wave processes in chromosomes, restored the chromosome device damaged by radiation semens of wheat and barley. In subsequent with the help of similar bio-active radio-waves the effect of revival semen-unshoots of a plant Arabidipsis taliana, taken from the Chernobil zone, which has received a high doze of gamma-rays (20). The described experiments have shown also the opportunity distance (up to 2 m) transfer of the bio-information. These works have confirmed the earlier carried out researches on so-called "Kasnacheev's mirror cyto-patic" effect expressing that the alive cells divided by the quartz glass, exchanged by the strategic regulating information. At last, all of them have confirmed of a prediction made still in 20-30-x years of 20th century outstanding genetic A.G.Gurvitch, A.A. Lubischev about a wave status of genes and wave way of transfer of the hereditary information. Now idea of a wave nature of genes is supported by scientific school F.A. Popp (24,25,26,27) and other scientists.

Chromosome continuum multi-cells organisms is capable to generate and to perceive the EM fields of a wide spectrum of a light range (from 250 nm up to 800 nm), infra-red, over high frequency and sound ranges. That is, according to P.P. Gariaev (17,18) DNA are capable to let out and to perceive a weak sound, laser light and radio-waves.

Last years the phenomenon of conversion of EM waves in bio-active radio-waves was open (28). Thus it is revealed that after the bringing of a part of the information with DNA to water its structure has changed. After that water rendered precise action on growth and development of plants.

The theoretical and experimental works have shown:

1) the bio-information can exist in a wave form, 2) the DNA has ability to be a source of the wave information, 3) the water has ability to perceive the wave information, 4) it can keep the wave information in memory, 5) water and DNA may transfer this information to other objects, 6) the EM waves can change their resonant frequency into radio-waves by the conversion, and this radio-waves are the bio-active (18).

Theoretical and the experimental researches allow to make the conclusion, that the informative-wave processes are peculiar both DNA, and protein, and water component of bio-systems. The amplitudes of the separate molecule's wave may summarising, and forming the common EM wave of the different type of molecules or genes.

Cellular level. Proceeding from above told, the genome of the man besides biological, has also by wave properties, that defines a EM wave of a nucleus and summarise in a common EM wave of a cell. Some scientists, however, are not inclined to consider the nucleus of cell as it "the brain centre". So, the expert in area of cellular biology Bruce Lipton (29), expressing for the benefit of quantum mechanisms of biological processes in a cell, allocates the main role in adaptation of cell to external conditions to the membrane of cell. These conclusions he has made, observing for behaviour muscle cell of the man in conditions of different external environment. Probably, such attitude Bruce Lipton to a role of a membrane of cell has defined the causal approach, whereas the DNA possess spontaneous activity, which constantly support si-PHK and mi-PHK (30,31,32). Anyway results of Lipton's researches and his followers confirm the important value not only genome and nucleus but also membrane of a cell in an information exchange of cells.

It is necessary to remind, that the each cell of human organism contains the huge quantity of different proteins. Besides the nucleus and membrane there is the cell's cytoplasm, which includes in itself a big quantity of organelles: ribosome, liposome, proteasome, mitochondria, collagen fibrils, cyto-plasmatic reticulum, network protein of micro-strings and micro-tubules, which is the components of cells, and etc. Each organelle includes the molecules of water and protein.

It allows to state the idea, that every organelle brings its contribution to the wave activity of a cell. All elements of any cell are connected among themselves by glico-proteins and other structures. And, hence, all elements of a cell: nucleus (containing the genome), membrane (with the set of receptors, canaliculus, aquaporins), cytoplasm (with the set of organelles) bring their own contribution to a wave range of a cell, and everyone, and all together participate in the information exchange between cells inside organism, and, probably, with external environment.

The structural elements of a cell and genome, being by complex formations including water, RNA, DNA, protein, lipids, microelements etc., are capable to generate and to perceive EM field of a wide diapason: light, near-light – infrared and ultraviolet, highest frequency (HF) and extremely high frequency(EHF), sound and ultrasound ranges (17,18). Each structural elements of cell and genome has the extremely specific wave range So, calculated resonance frequency of genome of the human cell is 2,5·10¹³ Hz, nucleus of somatic cell -9,55·10¹² Hz, mitochondria -3,18·10¹³ Hz, somatic cell - 2,39·10¹² Hz, etc. (16). It provides the exact mutual recognising cells, sub-cellular structures, chromosomes, molecules of proteins. The amplitudes of waves of separate molecules can summarise and form a common EM wave of the given type of molecules or genes.

Organ's level. In a similar way, probably, there is imposing waves of sub-cellular elements and cells of separate organs that form a resonant frequency, specific to the given organ. So, the frequency of EM activity of heart is within the limits of one hertz, of brain - within the limits of 5-20, and at a pathology - 0,5-70 hertz, etc.

Thus, genes, each cell, its structural elements, organs, and it is possible the organism as a whole, have simultaneously attributes both of substance, and wave. On the one hand, they function according to principles known in physiology, biophysics, biochemistry, that is they perceive, reproduce, transfer the information according to the laws of the classical mechanics. On the other hand, in parallel, at the same time, all structures perceive, reproduce and transfer the information each other with the help elementary EM and radio-waves, using principles of the quantum mechanics. Thus, they constantly co-operate both with internal, and with external natural and artificial EM and acoustic fields.

Hence, all mentioned structural elements multiple-level organism are in close interaction due to the wave genetic information. It allows billions of cellular nucleuses at a genome's level to be in instant EM contact and, hence, each cell of organism in the same time receives the information on a status and needs of all other cells. Such mechanism allows to consider the organism as super-coherent system functioning as a single unit. To mechanisms providing these purposes are: a) the quantum non-locality (everywhere and for zero time) genetic information, b) super-redundancy, c) super-informativity, connectivity, other (17,18,22).

So large volume of the let out and received information seems fantastic and inevitably results in two questions: a) whether has a gene of such capacity? and b) whether has a gene of sufficient interference-protecting of the wave genetic information?

Large capacity of memory and operative opportunities (the speeds of information interchange) DNA have allowed to put forward idea and to begin serious discussion of opportunities of creation of the bio-computer on DNA (33).

To February 25, 2003 on Conference of a National Academy of Sciences of Israel was informed, that the scientists of Institute of Sciences of a name Weizman in laboratory headed by the professor E. Shapiro closely came to creation of the bio-computer on a basis of DNA. Let's take advantage of the offered figurative comparisons for a rating of opportunities of such computer: one gram of dried up DNA can incorporate in itself so much information as it can contain in billion CD. Received on a basis of DNA the processor is so small, that in volume of one drop of water could be contained up to three billions of these DNA-computers.

Amaze also speeds of work of such computers: up to 66 billions operations per one second with the exact definition of 99,8 % (SciTecLibrary.com/ 5.03.2003). These figurative comparisons show, how great capacity of memory and operative opportunities of DNA.

As to the second question, the researchers believe, that multiple-cellular organisms have a high hindrance-defence of the gene's wave information. Thus one authors (16) consider that this is promoted by wave specificity, the extraction of signal at the expense of narrowing a strip of working frequencies, duplication of signals on several frequencies. Others (20) - believe, that it is provided also with redundancy of the wave information, and the high noise background is not a handicap for passage of signals, and on the contrary, serves their source and means of increase of information value, as allows to distinguish the information according to a context.

The high resonant frequency and high speeds of passage of a signal such as photon's (10⁻⁸ s) and atto (10⁻¹⁸ s) also are promoted by the noise-stability. The similar situation is well known: hundreds radio and tele-stations do not prevent each other, though every second they direct the wave information, which is in the same space. It has allowed to speak about effect teleportation in multiple-cells organism (18). The effect teleportation, which was confirmed by Bouwmeester D. et al. (34), creates conditions for unobstructed penetration of waves into any structures, in any direction, on any depth. All this allows genome to be in instant EM contact to billions cells of nucleuses, due to what organism consider as super-coherent system.

Hence, the hindrance-stability are promoted by wave specificity, the very high resonant frequency of signals, photon and higher (atto) speed of their passage, effect of teleportation. The high noise background created by huge quantity of signals, does not prevent their passage, and serves a source and means of increase of information value agrees "to a background principle" and principle "of perception of the information on a context". In it the universal phenomenon of a nature is reflected, when the complete knowledge of a part becomes possible only in view of properties whole (18,20).

For a long time the genetics believed, that only small part of genome (2-5 %) is coding and bears the useful information. The opening of a wave nature of genes has allowed to understand, that the not coding sequences DNA (about 95-98 % genome), which earlier carried to useless part of genome including "information dust "earlier, actually are the strategic information contents of chromosome (17,18). Probably, they execute a role of "conservators" and "liberals": on the one hand, protecting the gene information on structure and the functions of organism from sharp changes, with another – they accumulate the new information, "estimate" it, promote the adaptations of the man to new natural and socially-psychological conditions of existence.

Thus, the theoretical and experimental works have shown, that it is possible to consider the genetic information, to write down, to keep, to transfer and to enter to the bio-system-acceptor. It lied into a basis of hypothetical model of endogenic bio-wave (holographic) management of development of multiple-cells organisms from an embryo status to an adult (20).

It is possible to state the assumption, as other structural elements of organism, the including the molecule protein and water, also have a dual nature and have ability to read out, to write down, to keep, to transfer not only biological, but also wave information. The acceptance of situations of the quantum mechanics about a duality genome and structural elements of organism (cells, tissues, organs) allows us differently to consider interaction between the mother and her unborn child.

3. Concept of wave interaction between the mother and her prenate

As it was shown above any somatic cell of macro-organism and its compound, including a water, proteins, DNA have two sides. First of all, they are the substances. Second, they can radiate EM and radio waves, and also perceive wider range of wave fluctuations, including light and near-light (infrared, ultraviolet), extremely high frequency (EHF) and extremely highest frequency (EHstF), i.e. they are actually capable to let out and to perceive weak sound, laser light and radio-waves (1). The wave radiation of cells summarise and form a wave field of tissues, organs and organism as a whole. In fact, they create a wave information field around organism and forms an image of the man as multiple-cellular broadband nano-radio-station.

And what about sexual cells? What is the relation to growth and development of the unborn child, to the process of interaction between the mother and her child?

Burr H.S. (2) for the first time has found out, that the axis of electrical polarisation exists both in fertilised and unfertilised ovule, i.e. the ability to generate EM energy have not only somatic, but also sexual cells! What supports this idea?

The structure of ovum and spermatozoa includes molecules of water, proteins and DNA. All these components, as was shown above, have ability to generate and to perceive the wave information and, probably, at summarising form specific a EM wave of sexual cells. On a surface of female ovum the plenty of receptor proteins settle down, which recognise the protein on the surface of spermatozoa and its attachment to the membrane of ovum(3). These protein structure, probably, become original wave beacons for spermatozoa, on their head of which the protein substation (plasma membrane) with its own wave characteristic is disposed.

Besides both ovum and spermatozoa in their structure have molecules of water having its own frequency range. And, at last, both ovum and spermatozoa contain DNA with their wave activity and frequency range. It is possible to assume, that summarise EM waves of protein's molecules, DNA and waters form specific for ovum and spermatozoa frequency range. It creates conditions for formation of process "electromagnetic taxis", which

provides the spermatozoa with information, they are purposeful (and, as it seems, reasonable) driven to ovum, which with the help elementary EM, and maybe possible, with the radio-waves, informs them about her status and place of stay.

One may suppose that at the moment of their meeting a bio-resonant effect appears, at which their EM activity aspires to zero. This moment is a starting one for inclusion and/or amplifications of activity of enzyme systems providing introduction of the head of sperm (together with genetic material) through ovule membranes (4).

The genes of the father and mother, being united in a primary cell - zygote, on the one hand, become material substratum for synthesis RNA, protein and structural development of organism. On the other hand, the genes, as was shown above, have a wave energetic level ("super-genes", by Gariaev P.P.). This level includes spatial-temporary dispersed wave structures, original holographic lattices, plan of construction of organism (1). Probably, this plan is in dynamics: in process of expansion of the genetic program of construction and functioning of new organism between genes and super-genes there is a constant interaction and mutual support of activity of both components. This process (with participation of protein and water) goes under the influence of internal and external wave activity, which support creative processes. Though sometimes they can bring in handicaps and break the genetic program.

Zygote becomes new resonant mass generating already on its own frequency EM wave. With zygote appearance the situation EM changes: two energo-information subsystems (the mother and the child) take place in synergism and united by one range frequencies. Zygote with its own frequency range instantly intersperse in the "multiple-voices of chorus" of mother's genome ("Gene is a orchestra, chorus..." Lubischev A.A. wrote,5) and other structures, organs and systems sounding in mother's organism, bringing in its own information, its own "solo", which begins to subordinate to itself the mother's biorhythms, metabolic processes, emotions and mentality. In process of expansion of the genetic program according to the wave holographic plan of development new multiple-cell organism forms new wave communications between its cells, their sub-cell elements, genes.

Simultaneously with it there is a search of similar structures of mother's organism, having the same range frequencies. After the establishment of the wave communication between them from the fetus's structures to the appropriate structures of the mother, the information directed constantly on the processes at the fetus. First of all, wave information on construction of the appropriate structures and their functional status.

Simultaneously with it, from the same mother's structures (including her organs and organism as a whole) to the embryo- fetus the wave acknowledgement of correctness of realization of the holographic plan of construction of organism, written down in genome constantly comes: a) about accuracy of an arrangement of organs, b) about timeliness of inclusion of functions of cells and organs, c) about specialization, which is connected to process activating and repressing of genes which are responsible for those or other phenomenon, etc.

At level of organs such wave interaction is carried out with the help of wave flows (6,7). It is known, that each organ of organism has specific EM activity, specific frequency, which is fixed by devices in the form of curves having a specific configuration (for example, curve electrocardiogram - ECG, electroencephalogram - EEG, etc.).

That is, each mother's organ "summarizes" EM activity of its structures and generates quantum of energy of the certain resonant frequency, which are caught by the appropriate structures of the same organ of the child. It is possible to believe, that it lies in the basis of regulation of its formation, development and functioning, because genome includes not

only genes responding for synthesis of protein, but also genes determining spatial-temporary structure of biosystems.

Indirect acknowledgement of this is following. Believe that at the change of molecular structure of globulin the EM frequency of their radiation in an alive cell changes, and on the contrary, the changes of resonant frequency of a cell can testify to changes in the structure of its globulines (8). At the disease of any mother's organ is change its molecular, cellular and tissue structure. That results in change of its wave resonant frequency and direction of the deformed wave information to the same organ. It can result in formation of defect of development of a organ or its morpho-functional inferiority.

Let's explain it by an example. M.M. Shekhtman et al (9) . at research of 68 children in the age from 3 till 15 years, who were born from the mothers with a pathology of kidneys, has found out, that healthy were only four, others had diseases of kidneys or some - other organs (Tab. 2). The authors have found out high frequency of disembryogenesis on organ, tissue and subcellular (metabolism disorders) levels at absence of changes in immune system. It has allowed them to make the conclusion about a teratogen role of illnesses of urinary system of the mother in relation to urinary system of the child.

Diseases of children born from the mothers with the chronic pathology of urinary system

(By Shekhtman M.M. et al., 1982)

Table 2.

Groups	Ch ild - ren	H e a lt h		With a pathology of urinary system		With diseases of other organs	
	abs	a b s	%	abs	%	abs	%
In total	68	4	5. 9 5.	59	86.7	5	7.4
Nephritis	53	3	7 6.	47	88.7	3	5.6
Glomerulo- nephritis	15	1	7	12	80.0	2	13.3

Other facts have collected also.

The story of the girl of 16. When my mother was pregnant with me and stood under shower the hot water poured suddenly on her spine. I have on my spine a great region of red spots of different size. Isn't it bound with my mother's impressions during her pregnancy?

The story of the mother: When I was pregnant, once I stood in the kitchen before a mirror. The flame on a gas cooker suddenly flared up behind me. I have felt by the back strong heat, and I was frightened because of the fire. After the birth of my daughter on her back have found out an extensive red stain, which is kept before this time. The experts speak, that it a birth-stain of a not clear nature. Can it be connected to the event, which I well remember before this time?

These and other similar examples allow to put forward a hypothesis about existence of wave interrelation of organs of the mother and her unborn child by a principle "organ-to-organ". For example, as in the submitted supervision about connection of the appropriate areas of a skin of the mother and skin of the unborn child, kidneys of the mother and kidneys of the child.

The concept, offered by us, allows from some other positions to explain the well known facts of damage by a principle "organ-to-organ", to understand mechanisms and variety of these damages. The display of morphofunctional inferiority can be revealed after many years after birth (10,11). It drives us to a conclusion about necessity of the control behind a status of the mother's energetic field and its duly correction.

Above we have stopped on the principles of wave interaction of molecules, cells, organs of the child with the appropriate structures of the mother's organism. But we believe, that the

same mechanisms underlie on the basis emotionally-psychological interaction between mother and her unborn child. "From the moment of occurrence of zygote between the child and mother the dialogue begins" (12), and it goes not only on substantial level (hormone, neuropeptides, other BAS) but also on a wave level. Obligatory conditions of this dialogue are instantness and uninterruptedness of bilateral transfer of the information from appropriate DNA, cells, tissues, organs of the mother to the unborn child and back. It can be supplied with the mechanisms of quantum non-locality (everywhere and for zero time) genetic (chromosome) and extra-genetic (protein, water) wave information. Due to this mechanisms the information system of the mother and the child are in unique interaction ("here and now").

The quantum physics has given us a unique opportunity a little bit more widely to consider processes of **memory.** One may suppose that memory is not an exclusive prerogative of a brain and its neurone components. Some experts (13,14,15,16) speak about existence of cells' memory, in which the emotionally perceived impressions about events of which the participants or witness were the mother and her unborn child. But how does it occur? Not excepting the standard opinion on a role of neuropeptides, we shall consider the other opportunity.

First, according to modern performances, the genes that received by the child, contain in the memory which has come from the parents the information on their morphological and psychological features, and also the impressions about events, or more correct about the reactions on the events, originated with his ancestors (**genetic memory**). Secondly, the saturation of an individual by the own information, own impressions received with the participation of the own mother, parents with the occurrence of zygote begins (prenatal and perinatal memory).

The researches have shown (17), the memory of water is connected with restructure of its molecules and forming up them in clusters, that allows them to become accumulators of the information EM fields and their switchboards (re-translators). Formation and the destruction of clusters, probably, provides perception of information, recording in memory and its clearing. Proceeding from this, zygote, which includes 98 % of water, appears especially sated by fresh impressions. In the process of its division, the new formed cells of embryo, then fetus, pass not only genetic, but also urgent information coming to a developing child daily.

This information can be included in water and protein components of any cells of the developing child (and not necessarily only in nervous cells of the brain) and his genes, and to be kept there "poste restante". Though daily there is a constant renovation of cells, the wave information contained in growing old cells is not lost. It automatically passes to the young cells. Such approach supports the mentioned above opinion on existence of **cellular memory.**

Hence, the intrauterine development of child is accompanied by constant renovating of memory by the current impressions. This coded information as EM, acoustic waves can be restored, turn to the sensations, be passed and be perceived to the neurones of brain in conditions of stress of the child after birth or in adult. In the brain there is a code conversion, transformation of the codes in images, ideas, emotions. The brain in this situation carries out the very important role of acceptor and reformer.

It seems, that here it will be high time to recollect those scientists, who stated doubts that the neurone of brain are capable to produce ideas, and allocated to a brain a role of acceptor. Among them, neuro-physiologist Sir Ch. Sherrington (Great Britain) who received the Nobel Prize for researches of function of neurones, neurophysiologist J. Eccls (Australia) who received the Nobel Prize for research of ion processes of excitement and checking in nervous cells.

The known American neuro-surgeon B. Penfild, who brought in serious contribution to the development of neuro-physiology, in his last book "The Secret of Consciousness" (1976) expressed doubt that the consciousness is a product of a brain and that it is possible to explain it in the terms of anatomy and physiology of cerebrum. He wrote: "The brain is similar to the computer, and the mind is similar to the programmist". The neuro-physiologist N. Bekhtereva (Russia) agreeing with idea, that the brain is not producer of ideas, but only its acceptor, believes, that it does not concern ideas connected to maintenance of biological needs of organism.

The psychiatrist and psychotherapist S. Grof (USA) on the basis of the numerous clinical researches with the help LSD and holotropic breath, which change a status of consciousness of the man, believes, that the brain does not produce an idea, just as the liver

- the gall or the kidney - the urine. For the explanation of his thoughts he creates the interesting image: "Imagine that your TV has broken. You invite the foreman, who has twisted something somewhere, and you have had an opportunity again to see the images, and, rotating handles to switch from one station to another. The idea doesn't come to you that all these stations sit in this box ..." The psychologist D. Chamberlain (USA) investigating memory of birth has the similar point of view.

Speaking about the mechanisms of memory we would like especially to stop on the **solitones** (lonely waves). This phenomenon for the first time described J. Scott-Rassel in 1834, observing the formation of a lonely wave on a surface of water of the channel near Edinburgh. He noted self-organization and exclusive stability of lonely waves. In subsequent the phenomenon of solitones was investigated in various areas of classical and quantum physics, and also in biology and medicine. In opinion of A. Davidov (18) solitones are ideal carriers of energy hydrolysis of molecules ATF along alpha-spiral protein molecules. The author, developing the concept of the active participation of solitones in vital activity of living cells, connects with its molecular mechanisms of muscles reduction, general anaesthesia, intracellular dynamics and influence of EM radiation on cells.

The study of the EM and acoustic fields DNA resulted in understanding that solitones as the special super-steady EM-acoustic waves can generate in DNA molecules (19). They read out the information, are its bearers, carriers and actively participate in an exchange of strategic regulatory information between cells, tissues, organs of biosystem.

Proceeding from this, genome of the highest organisms is considered as the solitonic bio-holographic computer, which forms spatial-temporary structure of developing embryos according to the images-predecessors. The last is possible only in the case if the solitones are active participating in the realization of processes of memory and are the stores of the semantic information (1). The authors believe that the solitones have the two interconnected types of memory: a) the actual memory itself, i.e. the ability to remember the initial modes of excitements and periodically "to come back" to them; and b) the memory, which connected to fundamental property of bio-systems to restore the whole from its part (so-called quasi-holographic or fractal memory). It is reveal itself, for example, by the grafting of plants, by the regeneration of extremities at tritons, the tail at the lizards, and also whole organism from ovum. In realization of the described processes on the DNA level most probably takes part not only solitone but also other kinds of memory – the holographic and the phantom memory (1).

Last years was experimentally shown, that the quantum properties are inherent not only to separate microparticles, but to **ring flow** of such particles, as to a single unit, as to uniform physical system, though this system includes billions particles (20,21). By other words, the flow of micro-particles, radiating quantum of EM waves, bears with itself a flow of the wave information, in which reflection uniform structure and /or complete process is found.

It is possible to believe that the arising of EM-acoustic "clouds" are connected not only with DNA, but also with other structural elements of organism including protein and water component. One of the factors organising solitones, probably, are the mother's emotional reactions. To confirm this serve saved by us and other authors supervision according to which the various displays of the peculiarities of character, habits, behaviour of the child connected with sharp emotional experiences, emotional "bursts" of the pregnant mother as the reactions to those or other events, ideas, pictures.

That is, the emotional-psychological reactions transformed by unique ability of the perception and reaction of each separate woman, on those or other external events or own ideas are the system-forming factor strengthening the wave activity of structural elements of an organism. These reactions provide sharp, instant emission EM waves, which are organized to the solitones. These EM-acoustic "clouds" contain in the coded kind of event, pictures, images, emotions, ideas. The appropriate elements (DNA, molecules of protein and water) of the unborn child have the ability to perceive this coded wave information, as the mother and the child are connected by one wave of range.

The child keeps the perceived coded information with the same structures at any stage of his development. The developing cells and their components transfer to the following generation of cells not only the specificity of their structure and the specialized functions, but also the "stored bank of memory of the coded data". After birth the child, and then adult use this "bank" constantly. "Key" to the opening "bank" and to the reception of the information serve the emotions, ideas, which arise in the process of interaction with the social and nature environment causing the stress status of the man.

Thus, the information interchange in system the mother-unborn child occurs not only to blood current on umbilical's vessels but also by wave interaction. This hypothesis corresponds to opinion of a number of the scientists (22,23,24) who supporting idea of the wave vibrations of a power field as mechanism of transfer of the information from the mother to the child.

The submitted picture of interrelation of the mother and her unborn child would be superficial if we have not considered other aspects.

4. Multiple-level principle of information interchange in system "mother-unborn child".

Last third of 20th century became the time of approach and mutual penetration of Western and East philosophies in questions on the essence of the man and his health. By result of this approach was comprehension and discussion of the **man's multiple-level structure**, which includes such levels, as: biological, energetic, astral (emotional), mental, soul, spiritual, others. Their frequency range is similar to frequency a range of a musical line (1). That is the distinctions between these levels consist of frequency characteristics of waves, which radiate by molecules of proteins and water, DNA and the chromosome device as a whole, cells and subcellular elements, tissues, and organs. The individual frequency originality, probably, supplied chemically and biologically active substances (BAS): as by semselves, and so by their interaction with molecules of water, proteins and other elements constantly arising and breaking up connections as a result of occurring exchange processes. Frequency characteristics within the limits of the certain range continuously vary depending on a level of vital activity of man, hormonal correlations, food components, displays of emotions, slumber and awakedness, work etc.

The energetic level ("a ethereal body") is connected to a wave status of structural elements of the organism of mother and child. At this level there is a carrage of the wave information from the mother to her child and back, and also exchange of the wave information between external environment and system "mother - child". It is an exchange can occur according to a principle non-locality (everywhere and for zero time). But can occur in frameworks of acupuncture system providing circulation of a wave flow and wave information communication of various structural elements of organism: cells, tissues, organs. A morphological basis of acupuncture system are intercellular slot-hole contacts.

This system of the information, in opinion of V.F. Mashansky (2), is more ancient in comparison with nervous one. According to the theory of wave medicine the quantums of energy on bio-energetic system deliver the information practically instantly (1). The presence of two ways of an exchange of the wave information at a energetic level corresponds to a principle of duplication of processes (one of the basic laws of functioning of biological systems), and allows to understand a variety of effects of interaction between mother and her unborn child.

The first scientific research proving existence of bio-energetic fields of zygote, have appeared in 40th years 20 centuries (3). The theory of wave medicine allows to state the assumption, that in a basis of an exchange of the thin wave information lies the interaction of energetic fields between the mother and prenate, beginning since zygote. Proceeding from this, it is possible to make the following assumptions:

- 1. As a result of oocyte and spermatozoon confluence, the zygote becomes a possessor not only of cell structure for self-reproduction, but it is also the owner of holographic energetical matrix (a long-term project for body construction), which (from higher energetic level) controls a cell division process and cell-space localization, providing space organization of organs and a human being as whole.
- 2. Resonance interaction between mother's and zygote's energetic fields maintains creative process in the zygote, simultaneously providing its transference into the fetus receptacle
- and its implantation there, and only there, in the definite place (4). Later on, mother-unborn resonance interaction provides the formation, a maturing and synchronous functioning of organs and systems of an unborn.
- 3. The perceiving device of the mother is an acupuncture system formed by intercell slot-hole contacts (1,5). The high-frequency vibrations let out by zygote can be perceived by acupuncture system through biologically active zones located in area of fimbria and lengthways of epithelial layer of uterine pipe.

The acceptance of these assumptions allows to understand:

how the seemingly absolutely autonomous zygote of a microscopic size can inform the mother on its own appearance by seemingly disproportionately mighty impulses which are capable of immediately altering her female body biorhythms;

why the mother's system exceeding the zygote size in several hundred times possesses such a refined sensible organization that can respond to this action exerted by a microscopic zygote;

how the mother controls morpho-functional formation and engagement of certain organs and systems of the unborn child:

d) and, finally, this opens the way to elucidation why morpho-functional disorders in the mother may cause the dysfunction, the morphological impairment and even congenital malformation of the corresponding organ in her child according to the well known principle of disorder: organ to organ.

This interaction goes with use of various mechanisms. There is a probability of wave interaction between the mother and child as by a direct wave exchange between DNA, cells, organs, and with the help of mutual contact between two acupuncture systems, the channels of which connect various organs. The deformed wave information going from the illness organ of the mother, can result in development of defect or morpho-functional inferiority of the appropriate organ of the child or other organ connected with the same acupuncture channel.

The transfer of the deformed wave information from the mother to the child is one of the factors breaking his physical and mental health. We shall be repeated: it becomes a substantiation of necessity of the control above a status of a energetic field of the pregnant mother and its opportune correction.

The energetic level is an intermediate (organizing) part between biological and aastral level having higher frequencies (1).

The **astral** level is connected to emotional life of the man. The morphological substratum regulating emotional state as is known, is limbic system, "a visceral brain" (6,7).

It is known that the change of an emotional status can occur under influence of *internal* processes of changing neuro- endocrine- metabolic situation in organism. The emotional status can be changed also under influence of *external* circumstances (social conditions, radiating background, electromagnetic radiators, etc.). The man is capable himself, by *strong-willed effort*, to change an emotional status and accordingly EM situation (for example, with the help of labor activity, various kinds of art, sports, etc.).

By strong-willed effort the man can not only change emotional and EM situation, but also direct it at own discretion. For example, it probably takes place in oriental combat sport con-fu, or by transfer bio-energetic information from the man to the man. It is possible to believe, that the emotional reactions of the man promote the formation of solitones or strengthen existing solitones.

At occurrence of pregnancy quite often at the woman has change her emotional status, that is shown in the appeared originality her perception of the colour, sound, taste, smell. It can specify switching of the information arrived in her acupuncture system on the sympathetic

centres connected with the astral level. That is the pregnancy, resulting to change of metabolic processes affects and on a astral level.

Above we have already mentioned about our research, at which the change of an emotional status of the pregnant woman immediately resulted in change of character of cardial activity of prenate (8). These data were confirmed by the subsequent researches: at the increase of the mother's emotional stress the emotional anxiety at of the prenate grows, besides at both raises blood pressure and the cardial rhythm changes (9). The authors explain this phenomenon by the fact that the mother and child are connected with each other by circulation system. We are inclined to explain it by another, a wave way of transfer of the information. And that is why.

Besides reactions of cardio-vascular system of the child in reply to change of an emotional status of the mother, other type of reaction - movement of the child is known. The observant mothers have noticed, that when they appear involved in the conflict with the husband or environmental, or when they watch film with the intense plot, or listen to rock music (i.e. at their sharp excitation and irritation), they receive from children sharp and painful kicks or impacts fist. Some women marked, that it occured and in reply to mental reject of the child. At times it seems, that the child catches this idea, understands it and "revenges" mum for it, tries to protect itself.

From the position of concept, developed by us, it would be possible to explain such movements of the child by the following. In anger the man quite often shows bihavior reaction as by kick of foot or impact by a hand to offender. Probably, it is connected with involving during excitation of motor zones of cortex of brain. If the man can not carry out this impellent act by virtue of well-brought-up or inaccessibility of the subject, he is compelled to constrain external display of this reaction, but its mental reproduction does not stop. As the attitudes of the mother and child are under construction on a principle "organ-to-organ", it is possible to believe, that it concerns also head brain with its zones. From here, the excitation of motor zones of cortex of mother's brain is accompanied by excitation of the appropriate areas of brain of the child. At the same time he still lacks, generated during education, "censor" braking impellent reaction and it is reproduced in reply to a pulse from the mother in exact conformity with recording in his genetic code.

That is, the mother's emotional excitation results in excitation of neurons of her brain, with primary involving the motor zones. It is accompanied by occurrence of a EM wave cloud such as a solitone, which frequency range coincides with a frequency range of the appropriate zones of child's brain. The wave excitation of similar areas and structures (neurons of a brain) child is accompanied by the movement reaction according to recording in genome. The frequency characteristics of EM waves bearing the coded information, probably, are connected with the level of emotional reaction of the mother.

Thus, the child's kick to the uterine wall can be considered as open display of the detained mental desires of mother, as an original exposure by the child of her latent emotions and aspiration. About the same explanation it would be possible to give to change of cardiac rhythm and increase of blood pressure at the child in reply to similar emotional reaction of the mother. We believe, that the described reactions are more complex and also are carried out with involving several levels regulating function of circulation system and includes direct wave contacts of cell structures and genome appropriate to regulatory systems of both groups of muscles of the mother and child.

The **mental** level has higher frequency by a range and is connected with consciousness and unconsciousness of the person, his(her) intelligence and instinct, his(her) concrete ideas and thinking. Psychologists, psychotherapists, psychoanalysts have received the numerous

certificates indicating a reality of subside in memory of the man of events, which took place in the period his intrauterine development.

From conversation with the mother (43 years old) of the daughter (21 years), who has come concerning the decision, to change her sex:

"With occurrence of pregnancy the husband began me periodically to beat and to warn: if to be born the girl, he will kill me, or at the best - will expel, but will not live with me. Of course, I would ask the God that the boy was born. I dreamed of the boy and even imagined, with what he will be. But the girl was born. The daughter played in childhood with the boys, has mastered a speciality of the driver car at the fabric. At her the girlfriend has appeared, on which she has decided to marry. I was with her at the psychiatrist, she was on inspection in branch of Regional psychiatric hospital. The psychiatrists do not find at her of any mental diseases. Why she has decided to change the sex on man's? I can not understand. Really because I dreamed to give birth to the boy?"

The story of the mother (64 years): In the age of 24 years at term of pregnancy 24 weeks I was on small kitchen, soaps of a hand and suddenly has seen in a mirror a flame, that blaze up above a gas cooker, behind of me. I was frightened, has felt heat in the field of a back, has cried, has called the mum, and we together have extinguished the begun fire. I was very much exited, the mum began to calm me, resulting as argument presence of the fireman depot near us. After birth at the daughter in the field of her back has appeared a birth-mark. Long time in childhood, when we passed by the fireman depot, she showed the increased interest to the firemen, at times demonstrated highest respect and tremor before them and simultaneously fear, sufficing for hands of the parents at the offer to approach to them more close. To one of the professionals in other areas at her the so distinct emotional attitude was not observed. Whether such attitude to fireman can be connected to a sequence that I outlived during pregnancy?

In subsequent the daughter (40 years) has added the mother's story. When she learned in a sixth class on one of lessons the teacher began to utter to one of the schoolboys, that if he badly studying he can become only fireman. Kitty, having heard it, has found out such burst of feelings, that now, at the moment of the story, it is terrible to her "even to recollect": she was captured with horror from injustice to the most courageous, clever and noble people. She has asked the sanctions to leave from a class and in a corridor bursted into tears for insult for these people. Recollecting about it some days after, Kitty could not explain to themselves, that with her was, why she so strongly experienced and cried, that at all it was peculiar.

The similar supervision constantly are an information occasion for study of a question about an opportunity of dialogue of the mother and prenate at an emotional-psychological level. The researches, which have been carried out in this direction, have opened problems of unwanted children, adopted children, sexual identification of the person, other. It has allowed to consider the problem of aggression and violence from the position of perinatal psychology and medicine.

Our research (10) were directed to the study of emotional-psychological features of 210 women with wanted and unwanted pregnancy. The results of research we have compared to the psychological features of unwanted children and adults (11,12,13,14), and also with symptoms of the patients with mental disorders (15).

Psychological Characteristics of women with unwanted pregnancy, and the unwanted children

Table 3

Women with unwanted pregnancy

(Brekhman, Lapochkina 2000)

- Emotional dissatisfaction with a situation wounding their proud.
- An increased sensitivity to extrinsic irritants,
- -Infantile forms of interpersonal communications
- Diffidence
- High level of self-control with inclination to a lie.
- Timidity, hypochondriac
- Problems of social adaptability
- Problems of interpersonal communications
- An increased feeling of quilt passivity, bordering with masochism
- Need of overcoming the restriction
- Striving for getting rid of anxiety, masking it by marked certitude and independence
- Emotional immaturity
- Anxiety, distress
- Depressive reaction

The unwanted children (Matejcek e.a. 1980; Zacharov 1994; Janus 1997; other)

- A lowered cheerfulness
- A heightened touchiness
- An elevated excitation
- The absence of self-value (the possibility of retardation of a growing up process)
- Diffident, not sure of their strength and abilities; highly dependent, coping boldly with school curricula, neither honest nor industrious as students, either unsociable or hyper-sociable
- An abnormal want for recognition, frequent use of criminal ways of its realization (hence, antisocial tendencies).
- Ill-disposed, hostile to other people's success and happiness
- Indifferent, emotionally deaf
- The absence of mutual understanding in communication with the wanted
- Caustic, mordant, ironic
- In their parentage keeping away from bringing up their children
- Insufficient stress resistance
- Nervousness, masked depression
- Neuroses
- Psychotic symptoms

As it is visible from tabl. 3, the emotional-psychological characteristics of the investigated persons in all groups had obvious concurrence. From the certain share of care we would like to state the assumption, that between these three groups exist a certain internal connection. It can specify that some forms mental disorders take the beginning in the prenatal period and are connected to transfer from the mother to the child of the negative information. It coincides with opinion of the psychologists and psychotherapists that unwanted children perceive from the mothers emotions and ideas of rejection. In the subsequent after birth under the influence of violent education this experience is transformed to ideas of destruction and self-destruction. In our opinion, it not should be necessarily connected to undesirability: the essential role here can be played the psychological features of the mother and father, which do not suspect that their emotions and ideas are perceived by the child, or they do not wish about it to know. In all it the absence attachment and bonding is very important. Certainly, anybody from the researchers does not assert that the child perceives these ideas expressed by words literally. The speech goes about transfer and perception of the information with the help of system of codes, which language is not known for us yet.

The clinical supervision show, that the bright emotional experiences of the mother increase probability of perception by the child of this information, that can result in occurrence of mental disorders at the child. So, the stress during pregnancy can break mental and motor development of the child within first eight months after birth (16).

Strong stress (loss of the close man or works, the strong fright), transferred on 24-28th week of pregnancy, can result in development autism at the child (17). The given conclusion has the special importance if to take into account, that the previous researches of these authors were devoted to study of a role of the genetic factors in occurrence autism.

At the same time experts (18,19) state the idea, that by a gene of highest bio-systems, and separate of cell's nucleus are capable to generate and to distinguish text-figurative of regulatory structure with use of a background principle, holography and quantum non-locality. That is genome also is speech-like and logic, the chromosomes of separate cells can communicate among themselves in the "wave" language having certain similarity to human speech and figurative constructions. It becomes possible that various solitones - optical, acoustic and others, raised in poly-nucleotide, have wave ability "to read out" contextual RNA-sequence not only in parts, but also as a whole, transferring the information on significant distances. It has found experimental confirmation and has allowed the authors to state idea, that a genome as a whole and separate of cell's nucleus have ability to quasiconsciousness of a different level.

R. Gerber (1) believes, what the functioning of astral and mental levels leaves out of frameworks of the standard frequency range and addresses to the known Einstein's equation (E=mC²), which allows to predict such energies, which extend speeds, exceeding speed of light. Such of energy have the magnito-electrical characteristics and negative entropy and can be referred to negative space - time. From a position of the theory Tiller-Einstein, theory of positive-negative space-time, there is an opportunity to explain influence of emotions and thoughts of the mother on the child and its instant, and at times it seems anticipatory, reaction to the latent ideas of the mother, her intuitive displays which have not been verbal.

Summarising all said above, we come to understanding that all levels of all human beings are in constant interaction (1), but in pregnant woman these levels additionally interact with the levels of the child (2) in whom there are his own levels, which interact between each other (3), and at the same time, they interact with the levels of mother (4).

Discussing a question of transfer and perception of the information, we shall note that according to modern performances of the development of languages and human speech, submits to the laws of formal genetics (18). According to P.P.Gariaev (20) a genome eucariote has wave languages similar to human languages. "Texts" DNA (quasi-speech) and literature of the people, their conversations (true speech) as a matter of fact carry out the same functions of management and regulation, though and in different "systems of co-ordinates". Already first experiments on translation of the verbal information of the man-operator to the genome of plants through solitone structures of an EM field of the special generator have shown that genome (DNA) of highest bio-systems distinguishes sign field structures synthesised by consciousness of the man and displayed in structures bearing solitone field (19). Thus the authors in vivo have registered not only adequacy to reaction of genome of plants on a semantic charge of codes, but also the invariance it in relation to language. They observe the presence of reaction of plants on semantic speech of the man made in Russian and English languages, and absence of reaction on nonsense.

Mentioned above also illustrates an idea that "texts" DNA and human speech are close, at least, concerning own fractal structures. In opinion of P.P. Gariaev (20), it can specify that anthropogenous EM "smog", around our planet, is dangerous owing to high probability of casual synthesis of EM analogues of "harmful" lexical structures used by wave genome of inhabitants of the Earth. "The Earth planet is populated not only by alive essences, but also by thin information structure... The study of wave quasi-reasonable attributes of Genome of Highest Biosystems... automatically results us and already partially has resulted in under-standing of new potentially dangerous in global scales super-gene-language", - the author writes. He states the idea that the Earth's bio-sphere is range exobiological influences on a level of wave genes with speech-like structure, and sets a question: "In whose purposes?"

But what for to search for the enemy-malefactor outside our planet, if its inhabitants "villy-nilly" have introduced and continue to introduce to its informational layer of the negative terrible and self-destructive information, artificially destroying existing ecological balance. Considering interaction of two sub-systems of mother and her prenate it is necessary to mean their interaction with the external world,. Here it is represented pertinent to consider our ecological environment.

5. Violence against women - Violence against new generation of people

Aggression and violence probably existed at all times. Modern etology considers the aggression as display of an instinct, as style of the behaviour which has been written down in genes (1,2,3). By acknowledgement to this were the recent researches which have found out a gene Pet-1, which has appeared active in neurones of a brain producing one of the neurotransmitters - serotonine. At damage of this gene the defective neurones produce a little serotonine that is accompanied by strengthening of anxiety, aggression, impulse violence and depression at the people (4). The authors have proved that Pet-1 is necessary even at a embryo stage of development these neurones. Hence, in genome of the man and animals there are the genes supervising the anxiety and aggression, which in turn are the genetically inherited feature (5).

The etologists concern to aggression as to a necessary element in struggle for a survival, i.e. this is useful quality of all alive. Really, the struggle for existence have required from the primitive people to assert their interests and rule in the family, tribe, to struggle for the best piece of meat, for those boons, which seem to be significant to them. Besides, people were involved in the struggle for the house, for territory, on which they lived. With the development of mankind and civilisation this struggle has aggravated. The aggression began to involve increasing populations of people, whole peoples, communities, and states. Within centuries in various parts of the planet there were wars, revolutions, and various kinds of evil deeds were carried out. In one of the analytical institutes it was calculated, that in the history of mankind there were about 1600 serious wars and for only 392 years mankind lived in peace. But not only wars killed the lives of millions of people. Entertainment's, struggle for authority, and other, things at times illogical and absurd, killed thousands and thousands of people.

S. Grof (6) presents a brief list of such events and victims: arenas of Ancient Rome, auto-da-fe of medieval Inquisition, cruelty of Aztecs in Central America, Mongolian hordes of Gengiz Khan, the Great Alexander's campaigns, the spread of Islam and Christianity, Colonialism of Great Britain and other European countries, Napoleon's wars, and so on.

The development of civilization at the 20th century has not resulted in the reduction of violence, and its victims began to be estimated at tens of millions: the First and Second World wars, Nazi expansion and horrors of the Holocaust, Stalin's regime in Eastern Europe, civil terror in Communist China, South American dictatorship, Chinese genocide in Tibet, the Pol-Pots genocide, apartheid in South Africa, wars in Korea, Vietnam, in the Middle East, in Yugoslavia and Ruwanda, lots of terrorist acts and local wars in various countries.

The beginning of 21st century is marked by set of terror acts, local wars, threat of application the ominous (biological, chemical and nuclear) weapon of mass destruction of the people, occurrence of significant number of the terrorists-suiciders, including the women-suiciders.

Nowadays we are talking of the beginning of "the conflict of civilizations". No matter how we would like to call all these phenomena, the meaning is the same: mankind, seems to be incapable of living in peace, mankind continues to be at war: either for territories or for natural resources, for water, or "simply" for one rising above others. Violence can be caused by the necessity to obtain means of existence, and can be - is dictated "by insatiable greed" (S. Grof), or is undertaken for the sake of pleasure (sexual and/ or emotional).

Hence, aggression is a qualitative characteristic of all alive and, probably, is the genes information, which is found in individual or collective unconscious. And its complete elimination is impossible. It is possible to speak only about the decrease of the degree of aggression inherent in a given time, place and community. It is possible to speak only about the regulators of this process, that is factors which strengthen or weaken the display of these qualities.

First of all I want to speak about the factors strengthening aggression and violence. Among them, besides natural and socio-economic factors, a certain role is played by psychological factors. In this connection some speak that "mankind – warlikely!"

But maybe, it would be fairer to call warlike only certain groups of mankind? Maybe, it would be fairer to speak about some individuals who generate ideas of aggression and violence who involve ever larger quantities of people to them, consciously or unconsciously resounding and perceiving these ideas. The leaders and dominants gather around themselves individuals whom actively or passively submit to them, and they in turn make the others obey even if the latter do not want it. Certainly, there is always a small number of people who don't perceive these

ideas and do try to resist them. Bellicosity is inherent not only in people. But even if to admit that it is inherent in living things on Earth, only aggression of man is able to result in large-scale ecological accidents menacing the global civilization. That is why it seems logical to draw attention to those, who starts the global aggression – to *the man*.

Aggression and violence at the level of countries and peoples are certainly the display of an extreme degree of bellicosity, but its accumulation in the beginning occurs in small local communities named parties, religions, political trends, and also in criminal groups generated by aggressive individuals.

Hardly their ideas would be successful, if in a society enough of the people which have received "the lessons of violence" in family did not accumulated: as the observers and/ or are (more often) as the participants in a role attacking or victims. Not less important for the formation of aggressive features of the man is " the educational rate of violence " of the father in relation to the mother of child, parent(s) in relation to the child, including even to the *Unborn Child*. Let's consider this aspect in more detail.

The numerous research by psychologists, psychoanalysts, therapists established that the information received in the period of pregnancy by an unborn child, is fixed in his memory. This information in the combination with basic genetic information causes psychological and behavior of peculiarities of the child, teenager and adult. Scientists believe that the emotional experiences of unborn child depend on the emotional status of his/her mother. The latter, in its turn, is caused by psychological features, mutual relations with social environment: with her husband, relatives, colleagues etc., and also socio-economic events of life.

Positive thinking and the attitude to the unborn child on the part of the mother and other people become in the subsequent life a basis for blossoming of his talents and abilities as well as with his empathic attitude to the people surrounding him, and nature.

Unwanted children. If a mother sends some negative information, to her child, in particular, that he is not wanted, the psychological qualities, shown after birth, can complicate the life of an individual, restrict his relations in social environment, promote involving him into the conflicts of the greater or smaller degree. Unwanted people, besides various deviations in their health, demonstrate a lot of psychological features, which hinder their adaptation in society.

They often create conflicts, they are too sensitive, spiteful, they aspire to be distinguished, to draw attention to themselves which is their way of the self-establishment. They have a need for recognition, which is often reached in criminal ways therefore, they are likely to become a past of a hooligan, gang and even become their leaders (7). Unwanted children, having experienced hatred and rejection for the first time in the mother's womb, carry these feelings with in them and use them with various frequency and to various effects. They suffer from all this, and their families and society as a whole suffer as well.

If after birth parents reconsider their attitude to the child towards goodwill and love, these psychological tendencies are not shown so obviously. Though settled matrix of outcast can not correspond to the outlook of acceptance brought up during life,. It immerses the child/adult in a status of the not realized internal conflict expressed in discontent with himself, the environmental, unstable mood with propensity to depressive reactions. The presence of psychological discomfort quite often results in smoking, alcohol, and drug.

If after birth either mother or father, or both parents continue to reject the child, treat him severely, punish him physically, they raise a cruel child/adult, whose feelings of attachment and responsiveness are badly expressed, who is emotionally "blind" and "deaf"

(8). Under appropriate conditions psychopathic features are found in such an individual and at times he turns to a serial killer and/ or the suicider (9,10,11,12).

Why do perinatal psychologists pay so much attention to unwanted children as an essential factor of the increased aggression in a human society? First of all, it is a quantitative aspect: every third child comes into this world unwanted (13). According to the statistical data of Health Department of USA in 1973-1988 - 35 % of children (5,8 million) were born unwanted, from them - 30 % - obviously unwanted, and 70 % - unplanned children.

Why are there so many children like that, while many reliable contraceptive are available? Really, mankind has entered the era of industrial planning of family with the help of wide application of contraceptives. However, just their use with the purpose of preventing conception is a special form of spiritual aggression against the child that hasn't even been conceived yet. In such an atmosphere the occurrence of pregnancy is perceived with special ne-

gativism and set of feelings on the part of woman: disappointment, insult, awkwardness, humbleness, constraint, aggression, anger, and, eventually she makes a decision to interrupt pregnancy.

But unwanted children now can be removed with the help of abortions, which are legalised in the majority of countries of the world. Really, the number of abortions in different countries is exceeds the frequency of births by 2-3 times. The wide practice of planning a family with the help of interruption of pregnancy has made abortions an *ordinary event* in the lives of people in certain communities, and the idea of an abortion – an *ordinary idea*. It does not cause any protest in a community but it is a component of the atmosphere of outcast, humiliation, aggression and even violence against an unborn child.

Under these conditions a conceived child quite often receives his own first experience as an outcast. It can be added to the already possessed experience of being an outcast of one or both parents and which was already stored in the genes of both parents and the child who has already managed to get it from them. Their experience is enhanced, and therefore primary trauma - fear for their lives - is kept in genetic memory of those whose parents have decided to keep them. If mothers / parents make a final decision to continue the pregnancy and change the emotions of rejection to acceptance, the received trauma is kept, but is blocked by positive emotions, which to a certain extent may force out and suppress the experience of having been an outcast.

If pregnancy is kept together with the negative attitude to the child, he continues to receive lessons of rejection and carries them away in his memory after birth. There is a certain number of children who have survived after unsuccessful attempts by mothers to interrupt pregnancy. These children have the most serious psychological problems: depression, slow mental development, difficulties of interaction in social environment, propensity to aggressive thinking and action (10). As PG Ney writes (14), "With widespread abortion on demand we are dealing with a potentially species-lethal, ecological change." We must carefully study the full and far-reaching implications. He says, that we need begin with a careful analysis of abortion survivors, keeping in mind the future, when these descendants will receive authority, and will decide questions of life and death of the senior generation and those who should come into this world.

Violence against women. A special public attention is given to violence against women. The present burst of violence against women and their neglect are unprecedented. Minimum one of five women during their life time was exposed to physical or sexual violence on the part of the man (WHO Department, 1997). According to the data of World Bank, sexual violence is accompanied by such the death rate and bad health of these women between the ages of 15-44 years. Violence against women is worse than the occurrence of cancer of exceeds death from malaria and road accidents combined (World Bank, 1993).

The global character of violence against women over the last few years has become an object of steadfast attention. WHO, American Medical Association, International Federation of obstetrician-gynaecologists and other professional medical organisations have announced that violence against women is harmful not only for the health of women, but for the rest of the population.

This problem has started to draw attention of the UN. So, in 1993 at the session of the General Assembly UN one of the most all-round international political memorandums on violence was accepted: "The Declaration against Violence against Women". Later, the same year, UN issued the first Global message on Violence and Health devoted to the violence against women by their intimate partners. In 1996 the Fund of Development for the Women UN (UNIFEM) created trust fund to ensure a direct support of hundreds of projects of female development and the maintenance of realization of their opportunities all over the world. In 1999 UN announced November 25 the International Day of Elimination of Violence against Women. In October 2001 the University Centre of the Programs of Communication of Johns Hopkins opened a web site on the Internet named "The End of Violence against Women". The subject "Violence against Women" has become the subject of many conferences, publications, discussions.

These actions, first of all the protest against serious infringement of the human rights of women, are the attempt to eliminate the reasons for traumas and risk factors of numerous physical and psychological problems of women's health.

Violence against women and a new generation of the people. However, there is one more position, which is not discussed directly, and at times is not even thought of, which is the care of the future generation of people, who

will be conceived and delivered by the women exposed to violence. The meaning of violence against women is not only that they as people, as individuals are exposed to violence, which in itself causes a rough protest; not only that violence causes deterioration of their mental and physical health, which can cause concern of society. The meaning of this violence is that these are women and not men who bear a new generation; these are women who with their ideas and emotions influence mental and physical health of a new generation. A humiliated, depressed, embittered, intimidated woman is not able to bear a cheerful, optimistic, kind and benevolent, self-confident man. Scientist, who are working in the area of prenatal and perinatal psychology and medicine, has shown that a new generation (a child, and then an adult) bears in oneself matrixes of experiences of his mother. It can be some experiences of a mother in connection to the events, in which she was involved (voluntarily or involuntarily) during the whole period of pregnancy and delivery. It can be the ideas and feelings of the mother produced by herself due to her psychological peculiarities (mistrust, uneasiness, infantile, anxiety, and others). It can be the experiences restored by the woman mentally, images and emotions taken not only from her conscious memory, but also from her unconscious memory. This situation makes important any acts of violence experienced by the woman during her lifetime, since the intrauterine period.

In the Journal 'The Lancet' in 2002 a series of papers devoted to a problem of violence against women was published. Below we shall take advantage of survey paper Charlotte Watts a. Cathy Zimmerman (15), and reviews of other authors (43) as by an outline for the comment that to discuss value of violence against women from a position of prenatal psychology.

In a number of countries there is a tendency to artificially restrict the birth rate of girls. Not accidentally in such countries as China, Taiwan, Southern Korea, India, Pakistan, some countries of Africa there are more men than women (16). It is believed that it is caused by sexually selective abortions (15). A high opportunity of ultrasonic diagnostics of the sex of a child at pregnancy has facilitated an early removal of fetuses of a female, and actually of infanticide of an unborn child. In Southern Korea in 1990 there was a significant difference in the parity at birth: 117,2 boys on to 100 girls. And this difference in the sex correlation was increased: For the third of children it already was 185 boys to 100 girls (17). By various ratings in the world approximately from 60 up to 100 million girls and women are "missing". This situation is the result of a selective abortion, a deliberate murder of girls just after birth, a neglective attitude to the girls, their health and feeding after birth, which is accompanied by a high mortality among the girls younger than four years old, for example, in India. Not accidentally in this country according to the data census of 1991 there were only 929 girl and women to 1000 boys and men and their "missing" is estimated by 22-37 million (18,19).

However, these facts lack emotions, and maybe it is worth while considering a mother with her feelings. On the one hand, in the described atmosphere, when the woman aspires to please her husband and his family, bitterness of women is created. The point is that for such women it is very important not only the occurrence of pregnancy, but pregnancy by the child "of the necessary sex". The significant social motives, customs and traditions, form aggressive thinking in relation to the close relatives including unborn child.

On the other hand, is she always bitter, is she always happy when she is compelled to kill her baby, which was conceived by her and had developed in her womb? Does she

always do it voluntarily? Does she manage to erase in her memory the emotions and thoughts that accompanied the process of killing her child? Won't they appear again during the next pregnancy, which will start for her with the questions: "A boy or a girl? Will it be given the right to live or will it be killed?" Mother is playing of a murderer of her own child, of all her unborn children, still helpless, for whom she is the main and the closest defender!.. She is going to kill her child, whose only fault is that her sex doesn't correspond to her parents' expectations.

And here I cannot help asking another question: Isn't it a perversion of the instinct to prolong life on Earth given to a woman by nature? Aren't people bringing the destructive information into genes? Aren't we witnessing the formation of a generation of mothers with matrixes of cruelty, misanthropes, hating themselves and others, murderers and suiciders ready to destroy not only themselves, but also the Planet as whole?

A born girl (if she was given the opportunity to be born) or a baby-girl who survived the abortion, becomes a bearer of fear of death, which she managed to experience. It is also possible that the baby-girl will keep the memory of her mother's feeling guilty by enabling the girl to be born and the mother's rejecting of the girl. But the tragedy amplifies, if these feelings are kept in the parents after the birth of their child, if the born child is neglected, re-

jected, if she is treated with aggression and violence. And then there is a formation of a girl - a future mother whose way of thinking is already negative and in whose negative feelings there will be formed a new person.

Modern philosophy and technology birthcare. Here we want to briefly (though on the importance of it deserves the special discussion) to mention modern philosophy and technology birthcare and those who carry it out. The professionals mark, that today's obstetrics is excessively aggressive and quite often supports women's anxiety and fear after and during the labors, strengthening experiences and painful sensation. Rejection, neglect, verbal and physical violence, if the personnel are carried out it even with good intentions, reserve the heavy memories in the subsequent life not only in the mother, but also in the child (10,20,21).

Highly technical research and obstetrical procedures, manipulations and others of interventions render adverse influence on the pregnant woman and her baby, unborn or newborn, result in an inhumane process of pregnancy and delivery, robbed of individuality, and sometimes even put directly in harm. T. Verny (9) considers, that the application of such interventions should be limited to small number of women with a high clinical risk to pregnancy. The same concerns the excessive use of anesthesia and analgesia that some authors name "as obstetrics anesthetic violence" (22).

The special mention is to be made of preemies – babies born with low and extremely low birthweight. As writes P. Ingalls (23), the life of preemies from the moment of birth and further is filled by intensive traumatic stress connected to physical, emotional and mental influence. These children are kept for a long time on respiratory devices with tubes entered through the nose or throat. The mix is quite often a high concentration of oxygen. They are fed intravenous or by a davage tube in their stomach. They are exposed to medical emergency procedures, surgeries, tests, transfusions, and toxic medications, and so on. While in intensive care, they experience many death threats. This complex of influences (or its separate elements) can result in are cerebral palsy, organ damage, retinopathy, etc., and in subsequently - developmental delays, motor, speech, cognitive, and behavioral problem to varying degrees.

The prenatal journey (pregnancy) and perinatal events (labor) are quite often accompanied by violence to the child. The modern technological birthcare does not protect the child at all, and at times, on the contrary, promotes display of aggression and violence (24,25).

Although, as a rule, it is made with good intentions, there is no guarantee that the child is capable with gratitude to estimate all these efforts, and that the impressions in his memory will not be reflected on emotional, behavioral, and cognitive development.

The sexual violence against women. From the age of 10-13 years old the girls have the risk becoming sexually active, and, as a rule, this beginning is accompanied by violence (15,26,27). It is necessary to say, that it can leave an indelible trace in the memory of a future mother. This first experience can be supported by numerous, and at times regular sexual violence to the girls.

Compulsory prostitution is not something extraordinary, it is supplemented by trade in women, exploitation of their work, debt fetters, making the woman completely dependent on a man. It is necessary to keep in mind such elements of violence as deceit, cheating, lying, which painfully hurt the feelings of dignity of a women, and cause in her the appropriate ideas, emotions and reactions. Since as a rule, they are compelled to control themselves, these emotions can subside in memory, changing a mental status of a woman, reducing her cheerfulness, creating conditions for the occurrence of neurotic reactions, and depression. Simultaneously in the women inclined to the occurrence of psychosomatic reactions as the increase of the blood pressure, spasm of vessels and/or of various sections of gastrointestinal canal. Later, as the research show (28), they develop different somatic, and to be more correct the psychosomatic diseases. Psychological discomfort, which appears in the women, results in smoking, drinking, using drugs (29). The occurrence of these bad habits indicates a woman's psychological stress. Moreover, in my opinion there is a connection between smoking of the mother during her pregnancy and antisocial behaviour, criminality, hyperactivity and frequency of criminal arrests of their adult offsprings (29).

But now I would like to come back to the discussion of the psychology of female prostitutes. Probably, it would be incorrect to consider female prostitution exclusively as compulsory, as some of them choose this profession of their own free will or maybe due to some of their psychological peculiarities, or for economic reasons. However, it

is necessary to keep in mind, that this trade has the expressed risk not only in catching diseases transmitted in a sexual way, but also the violence (30). Being engaged in prostitution, a woman remains a woman from the point of view of the presence her parental instinct. Though not all, but most likely, many prostitutes aspire to have a house, family, children. Is it possible to assert, that all those feelings, sufferings and pictures, experienced by her and all the dreadful situation she participated in, will not emerge and continue emerging periodically during her pregnancy? Also that she will not "irrigate" the emotional world and memory of her unborn child with these feelings? M. Irving (31) in process of psychotherapy of the clients has found out, that sexual violence similarly a trauma of birth: physical, emotional and environmental influences form the similar symptoms, feelings and vital patterns.

Domestic violence. Another kind of violence is domestic violence when a woman is exposed to a mental and physical attack, violence on the part of the husband or intimate partner. It can be verbal abuse, all kinds of humiliations and it can be combined with physical violence. Violence can be experienced by no matter what status a woman belongs to: a pregnant future mother, a non-pregnant woman or a mother can be abused (32,33,34,35).

Violence against pregnant women. Pregnancy is not always is a status protecting a woman from violence. Sometimes absolutely on the contrary. It is known, that at the occurrence of pregnancy a man's psychological status also changes, it can be very benevolent, it can be expressed in the increased attention to his wife, care of the child, and about the future material well-being. But at times, the occurrence of pregnancy causes in the men chronic discomfort, anger, irritation, it makes them aggressive, they attack the women, beat and rape them, kick them in the breast and stomach. Such physical and mental attacks on pregnant women result in the occurrence of various complications during pregnancy, such as threat to and a real interruption of pregnancy, gestosis, unregular activity of uterus at pregnancy with deterioration of circulation in the child and delay of his development, and eventually various complications during labor, and problems of breastfeeding (36,37,38,39,40,41).

But what is even more important the information is transferring to the unborn child. Woman being abused at pregnancy causes negative feelings towards her husband. But at the same time a woman's attitude to her child can be ambiguous as well: from aspiration to protect him to the anger and even rejection, because he, her child, appears to be the reason for her sufferings and pain, for her bad relationship with her husband. The unborn child receives sad experience, which he will take away with himself in adult life.

The domestic violence against the pregnant woman creates around unborn child a negative environment. In his infancy and childhood it is expressed by the emotional and behaviour frustrations, and in mature age it can be shown also as both criminal and violent behaviour and suicides (42).

Private experience. I repeatedly came across in my clinical practice death of the unborn child in utero as a result of acute and deep sufferings of the mother in connection to the tragic events that she experienced.

For example, I observed the death of the unborn child, at the age of 38 weeks from conception as a result of a fright of his mother, when her relative who recently came back from prison, being drunk broke into her apartment and threatened to kill her. The next morning, she found out, that the child had ceased to move. He was born dead.

Another woman being pregnant for 36 weeks has received the news that her sexual partner is going to marry another woman. In a state of emotional distress she unexpectedly experienced a strong fright from a loud shout made by a passing man. Some hours later she has noticed her child was motionless. An urgent sectia cesarea was done because the doctors suspected a premature separation of placenta at pregnancy. The child was born dead. The separation of placenta didn't prove to be true.

I observed the abnormal, prolonged labor of some women after a serious conflict with their husbands or close relatives. During the labor we found out hypoxia of the unborn children and heavy asphyxia of the new-born children. Their resuscitation was difficult, sometimes these children died just after their birth.

Our psychological research, supplemented by art -diagnostics, frequently found out in pregnant women serious mental traumas that they experienced in the past, that at times continued to be relevant during pregnancy. Some women refused to discuss the contents of these traumas. They were afraid, that they would suffer again. The pictures they drew evidently reflected the traumas that were kept in their memories. Sometimes these traumas were connected to their births. On our request they asked their mothers to specify the circumstances of their own birth.

As a rule, the mothers told about heavy, prolonged deliveries, sometimes with the help of surgical intervention. Our research confirm the idea that the women experienced their own difficult birth. Subsequent they had complicated labor at the births of their own children. Some women drew symbolic pictures reflecting the verbal, sexual and/or physical violence experienced by them. These women demonstrated the increased level of anxiety.

But what is even more important, is transfer of the information to the unborn child. Being abused at pregnancy causes negative feelings in a woman towards her husband. But at the same time a woman's attitude to her child can be ambiguous as well: from aspiration to protect him to anger and even rejection, because he, her child, appears to be the reason for her sufferings and pain, for her bad relationship with her husband. The unborn child receives sad experience, which he will take with him into his adult life.

Violence against women - mothers which is carried out before the children's eyes forms in them the concept, that violence is a normal behaviour in the family and community. In such children there can be observed a favourable attitude towards violence, or they can even make use of such a behaviour in their future lives including their family lives. So, social environment in which violence is socially accepted is gradually formed. (28).

Philosophy of violence and woman-mother. As the research which have been carried out at different time and world-wide, shows in a young girl's genes even before she gets pregnant there is already fear of violence and abuse, which is inherited by her children in their own turn. Thus, this philosophy becomes basic of her thinking and behaviour. This philosophy causes the appearance of a new generation of people inclined to aggression and violence or at least to tolerating them. Very few people manage to avoid this or trauma during pregnancy and birth.

Summary. In this section we wanted even briefly show that "smog" of violence, which exists on our Planet. Here pertinently to remind properties of the information: to be kept, to be multiplied and to be distributed. Unfortunately, last years the information in many respects carries negative character. Modern mass media, Internet, TV, radio, newspapers, magazines are promoted its fast and wide circulation. Primary and selective use of plots of horrors and violence in telecasts, movies and video-films corresponds to searches of the majority of the consumers of this information. Numerous recurrence of plots of violence on various channels a little whom leaves not informed and simultaneously convinces many of universal distribution of violence.

This informative- wave "fog" shrouds us and irrespective of our desire enters into our feelings, emotion, idea. It surrounds the potential parents and can appear in genes of sexual cells. It surrounds "the pregnant parents" and with their help directs the information on violence to the unborn child. It surrounds the newborn and growing child, forming his thinking and behaviour.

We have given here primary attention to violence against the women, which with their psychological features or under influence of external circumstances, to be exact of people creating these circumstances, can strengthen or weaken the generically due qualities of character of the child and to introduce to him new positive or negative properties.

But unless the generically caused qualities of character of the child are connected only to the psychological information stored in genes of mother's ovum? Whether it is possible to itself to present, that the father's sexual cells also bearing a genetic material, do not include the information on his psychological features? And in such case unless the violence, widely distributed in the world, does not mention genes and other components of sexual cells of the men?

And still. Unless other women born the men? Unless the boys do not receive the same information from the mother, as girl? Unless they are not exposed to violence before and after birth? Unless they do not test feeling of fear, anxieties, indignation, aggression in relation to offenders? These emotional experiences, probably, are kept not only in somatic, but also in sexual cells of the man. We state this idea as a hypothesis and hope it will become the evidences.

Conclusion Remarks

Grigori I.Brekhman, Peter G.Fedor-Freybergh

Epidemic of violence has captured today almost all world. It has appeared at the centre of attention of the political figures, public, press. In attempts to understand the reasons of this phenomenon the diversified aspects are discussed. But only very small group of the experts while understands and considers prenatal (prebirth) sources of violence.

The aggression is the integral characteristic of all alive, and this quality as vitally necessary is found out in the memory of genes. Therefore its complete elimination is hardly probable possible. We can really speak about the regulation of display of this quality, namely, about decrease of aggression to a level of not admitting transition to the violence.

The scientists, who is working in area prenatal and perinatal psychology and medicine, are trying to involve attention of a public to the prenatal period of life of the man, when there is a unique opportunity of primary preventive maintenance of infringements of physical and mental health of the people, a unique opportunity to interrupt a circle of violence.

The following opening of last decades became the basis for such statement: a) of emotional - psychological perception of the unborn child, b) of emotional - psychological interaction between the mother and her unborn child, c) presence at him of the prebirth memory. We have begun to understand, that the memory of the unborn child can tenaciously to keep impressions from events emotionally experienced by the mother, hers latent ideas and emotions, which in subsequent render the influence on a mentality, emotional reactions, and style of behaviour of the child and adult.

These opening have allowed to understand ways of preservation and escalating of the giftedness of children. But they have found out prenatal sources of the psychological problems of the man, which before were not a reasonable explanation. These opening have allowed to understand, that the raised aggression and violence have perinatal roots connected to inclusion in memory of the child of the impressions from emotional non-acceptance, and mental repudiating by the mother of her child, her attempts to make an abortion.

On this background the child can perceive the not complicated labor as threat to life, as the next violence directed against him. These feelings of the child can be supported in a case of obstetrics' operations, violent and painful manipulations, dissociation the child with his mother in branch of the new-borns. The perinatal traumas after birth can be transformed and promote formation of a complex of psychological features, and violent education, rejecting, humiliation or indifference can realise the child's/ adult's propensity to violence. In case of the appropriate conditions such individual can show cruelty, violent actions, indifference and cynicism in relation to a victim, to make murder and suicide. If such individual occupies a high rule in a community due to his own mind, acquired knowledge, organising talents, the damage from him to a community is difficult for predicting, and the number of his victims can appear incalculable.

The impressions, which the child received before, in time and after birth, can be summarised and be accumulated. They probably create at the person the requirement to receive the energizing from the scene of violence. The founders of films of horrors on TV and in cinema, removing and showing scenes of violence, actually carry out the social - psychological order of the large group of the spectators, who is resonant on the same wave of violence. The psychiatrists and psychotherapists even give a substantiation to violence on the screen: the people should reset both the stress and aggression. But if at the man the level of aggression not so high, he by willy-nilly is

immersed to the atmosphere of violence, begins to consider violence as "a social norm", and according to it builds his behaviour or as the minimum is tolerant concerns to the acts of violence.

All this promotes "smog" of violence existing now in the world as the domestic and street violence, ideological, national and religious extremism, state revolutions and interstate wars, and global terrorism, which we observe today.

Believe, that the state violence can not be the answer to the street violence, that the violence begets violence. But how to be with the terrorists, which announce themselves suicide bomb? How it is necessary to act today, when there is actually a terrorist war in the world?

Deciding tactical questions on destruction of terrorist organisations, the community has to give a special attention of the long-term strategy directed on elimination of those factors, which promote occurrence of the people inclined to violence.

We believe that the first step to this can be **rearrangement of public opinion** about necessity of the careful relation to the unborn child from the moment of conception on the basis of new realities connected to detection of emotional - psychological perception of the unborn child and presence at him prebirth memory.

This process can appear long and painful as it requires the deep transformation of philosophical sights of huge number of the people, which well have got on with existing now performances, and new of it - can be for them for whatever reasons inconvenient, unacceptable, limiting their behaviour: for example, the refusal of abortions or selective abortions.

The resistance to the development of the prenatal and perinatal psychology can be seen at our times. The resistance to the new philosophy can go on the part of the men, which got accustomed (and hardly probable want to part) with the leading position in a society. According to the religious instructions in a Christianity, Islam, Judaism the conducting role belongs to the men, and it is the sign of their self-value, and self-esteem. We do not conduct here speech about change of an existing situation. The dominant role of the men long since connected with the getting of means both to existence and protection of the women and children. However, at times the men forget about it and this mutual relation accept the ugly forms: the defenders are converting to assaulters.

The violence against the women has resulted them to the organised protection against the men. The ideas of feminism creatively developed and came for example to such slogan: the woman has the right to be in command of her body. It meant, that the struggle with violence against the women has caused other form of violence: the women against of unborn children, also has resulted in legalisation of abortions in many countries.

The authors of this book are unanimous in the opinion: every child should be wanted child. The child has to feel the love of both parents during all the months of mother's pregnancy.

The efforts of a society should be directed to the maximal elimination of psycho-traumatic events, both aggression and violence against the woman and her child. Pregnant women have to aspire to the maximal protection of children from negative influences social and natural environment, to elimination of handicapes of their mental and physical development.

Already now in the different countries of the world the schools of the prebirth education of the child, and actually for parents are functioning. Unfortunately, they are still not numerous and have not involved in itself the general attention, but it be necessary to lift their status up to a level state and to ensure with the trained staff, Programs and equipment.

The formation of **new philosophy and technology birth-care** should become the second step. It is necessary to strengthen social - psychological education of the personnel, that will allow competently to conduct psychological support and to render support to the pregnant woman from the first trimester of pregnancy. It is called to reduce a level of stress of the mother, the volume of the negative information, received by her, to warn compelled of intervention of the professionals, which can put not only physical, but, first of all, psychological trauma to the child.

The continuation of **scientific researches** in area of prenatal psychology should become the third obligatory aspect. They should find the answers to key theoretical questions: what ways and mechanisms of transfer of the information from the mother to the child and back, what is the mechanisms of memory of the baby and restoration of the information at the adult in the subsequent life?

The answers to these and other questions will allow closer to approach to understanding that we name by mentality of the man, to the decision of a line of psychological problems of the living people and prevention of those at the future generations of the people.

Thus, the professionals who working in area of prenatal and perinatal psychology and medicine, show that the prebirth period of life of the man is the time, when the strengthening of aggressive and other negative qualities of character of the born man is possible. On this background the subsequent violent education of the child, the social conditions and environment are capable to realise these qualities, which are shown as violence of a different de-

gree: down to murders (single, serial or terrorist action) and suicides (single or suicide-bomb). The professionals simultaneously bring in a lot of the offers, which are called to weaken the level of violence, to reduce number of the persons inclined to violence. The realisation of these offers definitely will bring in harmony to life of a human society. The realisation of these offers definitely will bring in harmony to life of a human society and will promote decrease of a level of violence in the world.

REFERENCES

To the article Peter G. Fedor-Freybergh

¹Fedor-Freybergh PG, Vogel V 1988 Encounter with the Unborn: Philosophical Impetus behind Prenatal and Perinatal Psychology and Medicine. In: Fedor-Freybergh PG, Vogel V (eds) Prenatal and Perinatal Psychology and Medicine. Encounter with the Unborn: A comprehensive Survey of Research and Practice. Parthenon Publishing, Carnforth (pp. XVIII-XXXII). ²See 1. ³Turner JRG & TGN, 1998 Conception: Vital Link in Relationships in Prenatal Psychology Int. J. of Prenatal and Perinatal Psychology and Medicine, V.10(1):29 -37. ⁴Fedor-Freybergh PG 1982 Prenatálni a perinátálni psychologie a medicina: Nový pristup k primári prevenci. Kontext 8(2):6-9. Preceeded by Fedor-Freybergh, Peter G, 1983 Psychophysische Gegebenheiten der Perinalzeit als Umwalt des Kindes. In: Schindler, S. Zimprich, H. (eds.) Okologie der Perinatalzeit, Hippocrates, Stutt-gart, pp.24-49. ⁶Brekhman, Grigori I, 2000 The conception of the multiple-level co-ordinated action between the mother and her unborn child: the methodological approach and the methods of research. ISPPM Congress. Cagliari, Sardinia, IT 22-24 Jun. ⁷See 1. ⁸See 1. ¹⁰See 5. ¹¹See 5. ¹²See 1. ¹³See 1. ¹⁴See 1. ¹⁵Fedor-Freybergh PG 1990 Presidence of the method of the method of research. ISPPM Congress. Cagliari, Sardinia, IT 22-24 Jun. ⁷See 1. ⁸See 1. ¹⁰See 5. ¹¹See 5. ¹²See 1. ¹³See 1. ¹⁴See 1. ¹⁵Fedor-Freybergh PG 1990 Presidence of the method of th dential Address. 9th International Congress on Prenatal and Perinatal Psychology and Medicine, Jerusalem. Pre- and Perinatal Psychology Journal. 4:241-48. ¹⁶See 1. ¹⁷Tyano S 1987 Personal Communication. ¹⁸ Fedor-Freybergh P 1985. The Biochemistry of Bonding. 2nd International Congress of the Pre- and Perinatal Psycho-logy Association of North America, San Diego, 1985. 19 Fedor-Freybergh PG 1990 Continuity from Prenatal to Postnatal Life. In: Papini M, Pasquinelli A, Gidoni EA (eds) Development, Handi-cap, Rehabilitation: Practice and Theory. Excerpta Medica, Amsterdam, p.259-63. ²⁰See 1. ²¹See7. ²² Fedor-Freybergh PG 1992 The Prenatal and Perinatal Science and Practice in the Changing World. Presidential Address. 10th International Congress on Prenatal and Perinatal Psychology and Medicine, Cracow. Int. J. of Prenatal and Perinatal Studies 4:155-60. 23 Turner JRG & TGN, 1988 Birth Life & More Life: Reactive Patterning Based on Prebirth Events Chapter 27 p 309-16. Prenatal and Perinatal Psychology and Medicine Editors: Peter G. Fedor-Freybergh & ML Vogel.Parthenon Publishing, Carnforth. 24 See 22. 25 See 5. See 21. 27 David HP, Dytrych Z, Matêjcek Z, Schüller V 1988 Born unwanted. Springer, New York and Avicenum, Prague. ²⁸ Matějček Z, Dytrych Z, Schüller V 1987 Kinder aus unerwünschter Schwangerschaft geboren. Longitudinale Studie über 20 jahre. In: Fedor-Freybergh PG (ed) Pränatale und Prenatale Psychologie und Medizin.Rotation, Berlin, pp. 77-92.²⁹ Matějček Z, Dytrych Z 1994 Abgelehnte Schwangerschaften und ihre Folgen. In: Häsing H, Janus L (eds) Ungewollte Kinder. rororo, Reinbek, pp.194-99.

Turner JRG & Turner-Groot TGN 1997 Personal Growth in Parenting: A Vital Link to Prevention in Prenatal Psychology, Int.J. of Prenatal and Perinatal Psychology and Medicine, V.9(3), 275-86. See 5. See 1. 33 See 29. World Health Organization 1986 Health Research Strategy for Health for All by the Year 2000. WHO, Geneva. World Health Organization 1966 Health Research Strategy for Health for All 5, the Fear 2001. The strategy for Health V 1993 Dimensions of Health and Disease: Biological, Psychological and Social. Int. J. of Prenatal and Perinatal Psychology and Me-dicine. 5(3):265-76. Tedor-Freybergh PG 1976 Hormone Therapy in Psychiatry. In: Itil TM, Laudahn G, Herrman WM (eds) Psychotropic Action of Hormones. Spectrum Publ. Inc., NY, pp. 1-51. Tedata For All 5, the Fear 2001.

Saint-Exupéry A de 1946 Le Petit Prince. Librairie Gallimard, Paris. ³⁹ See 1.

To the article Ludwig Janus

Chamberlain D 1998 The Mind of the Newborn Baby. North Atlantic Books, California. DeMause L (2000) Was ist Psychohistorie?. Psychosozial, Gießen. DeMause L 2001 Die Ursachen des zweiten Weltkrieges und des Holocaust. In: Kurth W, Rheinheimer M (Ed.) Gruppenfantasien und Gewalt. Mattes, Heidelberg. DeMause L 2002a The Emotional Life of Nations. The Institute of Psychohistory, 140 Riverside Drive, New York, NY 10024. DeMause L 2002b Die Kindheitsurgründe des Terrorismus. In: Kurth W, Janus L (Eds.) Psychohistorie und Persönlichkeitsstruktur. Mattes, Heidelberg. Erikson E (1966) Kindheit und Gesellschaft, Klett-Cotta, Stuttgart, Föster M (Ed.) 1984 Jürgen Bartsch – Nachruf auf eine Bestie, Torso, Essen. Füllgrabe U 1997 Kriminalpsychologie.

Edition, Wötzel. Gareis B, Wiesnet E 1974 Frühkindheit und Kriminalität. Goldmann, München. Gélies J 1989 Die Geburt. Diederichs, München. Haarer J 1940 Dei Deutsche Mutter und ihr erstes Kind. Lehmanns, München. Häsing H, Janus L (Eds.)1994 Ungewollte Kinder. Hamburg, Rowohlt Taschenbuch Verlag GmbH, Reinbek.286p. Hüther G 2002 The influence of early affectional relationship on brain development and behavior: A neurobiological view on prenatal education programs for a culture of peace and nonviolence. In: Janus L (Ed.) The Significance of Early Phases of Childhood for Later Life and for Society. Heidelberg, Mattes. Janus L 2001 The Enduring Effects of Prenatal Experience. Heidelberg, Mattes. Janus L, Kurth W (Eds.) 2000 Psychohistorie, Gruppenphantasien und Krieg. Mattes, Heidelberg. Janus L (Ed.) 2002a The Significance of Early Phases of Childhood for Later Life and Society. Heidelberg, Janus L 2002b Überlegungen zum 11. September. In: Ottmüler U, Kurth W (Eds.) Trauma, Angst und Feindbilder. Mattes, Heidelberg. Kandel E, Mednick SA 1991 Perinatal Complications Predict Violent Offending. Criminology 29: 519-27. Karr-Morse R, Wiley MS 1997 Ghosts from the Nursery - Tracing the Roots of Violence. Atlantic Monthly Press, New York, Kempe A 1994 Veiled Powers of Culture. Maternal Mortality and the Unborn Child in Yemen. Int J of Prenatal and Perinatal Psychology and Medicine 6: 355-72. Kurth W, Janus L (Eds.) 2002 Psychohistorie und Persönlichkeitsstruktur. Mattes, Heidelberg. Kurth W, Rheinheimer M 2001 Gruppenfantasien und Gewalt. Mattes, Heidelberg. Levend H, Janus L (Eds.) 2000 Drum hab ich kein Gesicht. Echter, Salzburg. Mednick SA 1971 Birth Defect and Schizophrenia. Psychology Today 4: 48-50, 80-81. Nyssen F, Janus L (Eds.) 2000 Psychogenetische Geschichte der Kindheit. Psychosozial, Gießen. Ottmüller U 1991 Speikinder-Gedeihkinder. Edition discord, Tübingen. Ottmüller U 2002 Gewaltfreies Konfliktmanagement. In: Ottmüller U, Kurth W (Eds.) Trauma, Angst und Feindbilder. Mattes, Heidelberg. Ottmüller U, Kurth W (Eds.) 2002 Trauma, Angst und Feinbilder. Mattes, Heidelberg. Raine A 1994 Birth Complications Combined with Early Maternal Rejection at age 1 Predispose to Violent Behavior at Age 18 Years. Archives of General Psychiatry 51.984-88. Puhar A 2000 Die Kindheitsursprünge des Krieges in Jugoslawien. In: Janus L, Kurth W (Eds.) Psychohistorie, Gruppenphantasien und Krieg. Mattes, Heidelberg. Shorter E 1984 Der weibliche Körper als Schicksal. Piper, München. Shorter E 1986 Die große Umwälzung in den Mutter-Kind-Beziehungen vom 18.-20. Jahrhundert. In: Martin J, Nitschke A (Eds.) Zur Sozialgeschichte der Kindheit. Alber, Freiburg. Sonne J 2000 Abortion Survivors at Columbine. Journal of Prenatal and Perinatal Psychology and Health 15: 3-18. Verny T 1997 Birth and Violence. Int J of Prenatal and Perinatal Psychology and Medicine 9: 1-16. Verny T 2002 Tomorrow's Baby. Simon and Schuster, New York.

To the article Thomas Verny

Blomberg S 1980 Influence of Maternal Distress During Pregnancy on Postnatal Development. Acta Psychiatrica Scandinavica 62:405-17. Bustan, MN a. Coker, AL 1994 Maternal Attitude toward Pregnancy and the Risk of Neonatal Death. American J. Public Health 4(3):411-14. Chamberlain, D 1995, The Primal Roots of Violence: A Tale of Two Criminals. APPPAH Headquarter's Report, Winter/Spring, p.3. Curtis, CG 1963, Violence Breeds Violence--Perhaps? Amer. J. Psychiatry 120:386. David, H.P., Dytrych, Z, Matejcek, Z, Schuller, V 1988 Born Unwanted: Developmental Effects of Denied Abortion. Springer Publishing Co., New York. Garnezy, W 1985 Stress Resistant Children: The Search for Protective Factors. In: Stevenson, JE (Ed.) Recent Research in Developmental Psychopathology. Pergamon Press, Oxford. Harlow, HF a. Mears, C 1979 Primate Perspectives. John Wiley & Sons, NY, Jaffe, P, Wolfe, DA e.a. 1986 American J. Orthopsychiatry 56:142. Kalmus, D (1984), J. Marriage and Family 46:11. Kandel, E, Mednick, SA 1991, Perinatal Complications Predict Violent Offending. Criminology 29(3):519-27. Kaplan, LJ 1996 No Voice Is Ever Wholly Lost. Touchstone, New York. Klein, M 1952 Developments in Psychoanalysis. In: Rivere, J (Ed.), Hogarth Press, London. Kornfield, J 1996 A Path with Heart: A Guide Through the Perils and Promises of Spiritual Life (Bantam, New York). Kratwski, PC 1985 Journal of Adolescence 8:145. Litt, S 1972 Perinatal Complications and Criminality. Proceedings, 80th Annual Convention, Amer. Psychological Association, Washington, DC; Mednick, SA 1971 Birth Defects and Schizophrenia. Psychology Today 4(11):48 -50. Mungas, D 1983 An Empirical Analysis of Specific Syndromes of Violent Behavior. Journal of Nervous and Mental Disorders 171(6):354-61. Myhrman, A 1986 Longitudinal Studies on Unwanted Children. Scandinavian Journal of Social Medicine 14:57-

6. Owens, DJ, a. Strauss, MA 1975 Aggressive Behavior 1:193. Parke, R a. Collmer, C 1975 Child Abuse: An Interdisciplinary Review. In: Hetherington, EM (Ed.), Review of Child Development Research, Vol. 5. Univ. of Chicago Press. Raine, A e.a. 1990 Relationships Between Central and Autonomic Measures of Arousal at Age 15 Years and Criminality at Age 24 Years. Archives of General Psychiatry 47:1003-1007 Rivera, C 1995 Report to the U.S. Congress. The Advisory Board of Child Abuse and Neglect. Los Angeles Times, Apr. 26. Rohrbect, CA a. Twentyman, CT 1986 Neglect and Abuse. J. Consulting and Clinical Psychology 54:231. Wolfe, DA, Jaffe, P e.a. 1985 J. Consulting and Clinical Psychology 53:657.

To the article Stan Grof

Ardrey, R 1961 African Genesis. Atheneum, New York, Bastians, A1955 Man in the Concentration Camp and the Concentration Camp in Man. Unpublished manuscript, Leyden, Holland.Cohn, C 1987 Sex and Death in the Rational World of the Defense Intellectuals. Journal of Women in Culture and Society 12:687-718. Dante, A 1990 Il Convivio, III. VI. 3. (R. H. Lansing, transl.). Garland, New York,. Darwin, C 1952 The Origin of Species and the Descent of Man. In: Great Books of the Western World. Encyclopaedia Britannica, Chicago: (Original work published 1859.) Dawkins, R 1976 The Selfish Gene. Oxford University Press, New York, Freud, S 1955 Beyond the Pleasure Principle. The Standard Edition of the Complete Works of Sigmund Freud, Vol. 18. (J.Strachey, ed.), The Hogarth Press & The Institute of Psychoanalysis, London,. Fromm, E 1973 The Anatomy of Human Destructiveness. Holt, Rinehart &Winson, New York,. Grof, S 1975 Realms of the Human Unconscious. Viking Press, New York. Jacobson, B e.a. 1987 Perinatal Origin of Adult Self-Destructive Behavior. Acta psychiat. Scand. 76:364-371. Ka-Tzetnik 135633 1955 The House of Dolls. Pyramid Books, New York,. Ka-Tzetnik 135633 1977 Sunrise Over Hell. W.A. Allen, London, Ka-Tzetnik 135633 1989 Shivitti: A Vision. Harper & Row. San Francisco, CA. Keen, S 1988 Faces of the Enemy: Reflections of the Hostile Imagination. Harper, San Francisco, Lorenz, K 1963 On Aggression. Harcourt, Brace & World, New York,. MacLean, P 1973 A Triune Concept of the Brain and Behavior. Lecture I. Man's Reptilian and Limbic Inheritance; Lecture II. Man's Limbic System and the Psychoses; Lecture III. New Trends in Man's Evolution. In: The Hincks Memorial Lectures (Boag T a. Campbell D, eds.), University of Toronto Press, Toronto. De Mause, L 1975 The Independence of Psychohistory. In: The New Psychohistory. The Psychohistory Press, New York,. Mc Kenna, T 1992 Food of the Gods: The Search for the Original Tree of Knowledge. Bantam Books, New York.. Morris, D 1967 The Naked Ape. McGraw-Hill, New York,. Odent, M 1995 Prevention of Violence or Genesis of Love? Which Perspective? Presentation at the Fourteenth International Transpersonal Conference in Santa Clara, California, June. Tinbergen, N.: Animal Behavior. Time-Life, New York, 1965. Wilber, K 1980 The Atman Project: A Transpersonal View of Human Development. The Theosophical Publishing House, Wheaton, IL.

To the article Williams Emerson

Bloch G 1985 Body & self: elements of human biology, behavior, and health. William Kaufmann, Inc., Los Altos, CA. De Zulueta F 1993 From pain to violence. Whurr Publishers, London. Emerson W (1993). Treatment outcomes. Emerson Training Seminars, Petaluma, CA. Emerson W 1994 Trauma impacts, Audio taped presentations. Seattle 1992, Petaluma 1992, and March 1993. Emerson Training Seminars. Emerson W 1995 The vulnerable prenate. Paper presented to the APPPAH Congress, San Francisco. Available on audio tape from Sounds True, (303) 449-622. Emerson W (1995/1996) Treating birth trauma during infancy: A series of five videos. Petaluma, CA: Available from Emerson Training Seminars, (707) 763-7024. Laing RD 1976 The facts of life. Pantheon Books, New York. Magid K, McKelvey C 1988 High risk: children without a conscience. Bantam Books, New York. Piontelli A. (1992) From fetus to child. Routledge, New York. Verny T 1995 Working with pre-and perinatal material in psychotherapy. ISPPM-Journal. 7(3): 271-84.

To the article John Sonne

Bion, W 1977 Two papers: The grid and the caesura (originally presented as talks to the Los Angeles Psychoanalytic Society in 1971 and 1975 respectively). Rio de Janeiro: Imago Editora, reprinted by Karnac, 1989. Blos, P 1967 The second individuation process in adolescence. The Psychoanalytic Study of the Child, 22, 162-186. Bollas, C 1987 The shadow of the object: Psychoanalysis of the unthought known. London: Free Association Books. Bowen, M 1978 Toward the differentiation of self in one's family of origin. In M. Bowen (Ed.), Family therapy and clinical practice, p. 529-47. New York: Jason Aronson. Chamberlain, DB 1994 The sentient prenate: What every parent should know. Pre-and Perinatal Psychology Journal, 9(1), 9-31. Cheek, D a. LeCron, L 1968 Clinical hypnotherapy. New York: Grune and Stratton. DeMause, L 1982 Foundations of psychohistory. New York: Creative Roots, Inc. DeMause, L 1996 Restaging fetal traumas in war and social violence. Pre-and Perinatal Psychology Journal, 10 (4), 229-260. Edelman, G 1989 The remembered present. New York: Basic Books. Edelman, G 1992 Bright air, brilliant fire: On the matter of the mind. New York: Basic Books. Erikson, E 1950 Childhood and society. New York: Basic Books. Feldmar, A 1979 The embryology of consciousness: What is a normal pregnancy? In D. Mall and W. Watts (Eds.), The psychological aspects of abortion, p. 15-24. Washington DC: University Publications of America. Ferenczi, S 1929 The unwelcome child and his death instinct. International Journal of Psychoanalysis, 10, 125-129. Republished in Michael Balint (Ed.), Final contributions to the problems and methods of psycho-analysis, p.102-7. New York: Basic Books (1955), Grof, S 1988 Adventures in self-discovery, Albany: State University of New York Press. Grotstein, JS 1992 Personal correspondence, July 7, 1992. Jacobson, E 1964 The self and the object world. New York: International Universities Press. Janus, L 1989 The hidden dimension of prenatal and perinatal experience in the works of Freud, Jung and Klein, International Journal of Prenatal and Perinatal Studies, 1, 51-65, Johnson, A a. Szurkek, S 1952, On the genesis of antisocial acting out in children and adults. Psychoanalytic Quarterly, 21, 323-

d) Kafkalides, A 1980 The knowledge of the womb. Corfu, Greece: Triklino House. English translation by Sandra Morris, 1995. Heidelberg, Germany: Mattes Verlag. Kandel, ER 1989 Genes, nerve cells, and the remembrance of things past. The Journal of Neuropsychiatry and Clinical Neurosciences 1 (2), 103-125. Kestenberg, J a. Borowitz, E 1990 On narcissism and masochism in the fetus and the neonate. Pre-and Perinatal Psychology Journal, 5(1), 87-95. Kohut, H 1977 The restoration of the self. New York: International Universities Press. Lake F 1981 Studies in constricted confusion: Exploration of a pre-and perinatal paradigm. Nottingham: The Clinical Theology Association. Liley, WA 1972 The foetus as a personality. Australian and New Zealand Journal of Psychiatry, 6, 99-105. Mahler, MS, Pine, F a. Bergman, A 1975 The psychological birth of the human infant. New York: Basic Books. Ney, P 1983 A consideration of abortion survivors. Child Psychiatry and Human Development, 13(3), 168-179. (Republished in ISPPM-Journal, 10(1), 19-28, 1998). Piontelli, A 1992 From fetus to child. New York: Routledge. Ploye, PM 1973 Does prenatal mental life exist? International Journal of Psycho-Analysis 54, 241-246. Sonne, JC 1966 Feticide as acting out. Voices, 2, 49-53. Sonne, JC 1967 Entropy and family therapy. In G. H. Zuk and I. Boszormenji-Nagy (Eds.), Family therapy and disturbed families, p. 85-95. Palo Alto: Science and Behavior Books. Sonne, JC 1975 Pregnancy, abortion and the unconscious. Marriage and Family Newsletter, 6 (1,2,3), 1-24. Sonne, JC 1979 Entropic communication in adolescents. International Journal of Family Therapy, 1, 276-289. Sonne, JD 1984 Music and marriage. International Journal of Family Psychiatry, 5(10), 95-119. Sonne, JC 1994a The relevance of the dread of being aborted to models of therapy and models of the mind. Part I: Case examples. ISPPM-Journal, 6 (1), 67-86. Sonne, JC 1994b The relevance of the dread of being aborted to models of therapy and models of the mind. Part II: Mentation and communication in the unborn. ISPPM-Journal, 6 (2): 247-275. Sonne, JC 1994c Social regression and the global prevalence of abortion. ISPPM-Journal, 8 (1): 27-46. Sonne, JC 1995 Prenatal themes in rock music. Pre-and Perinatal Psychology Journal, 10 (2), 103-119. Sonne, JC 1996 Interpreting the dread of being aborted in therapy. ISPPM-Journal, 8 (3), 317-339. Sonne, JC 1998 Coping defenses of abortion survivors. Paper presented at the 12th ISPPM-Congress, London (Sept.). Sonne, JC 1999 Abortion dynamics and the trench coat mafia. Paper presented to Celebrate Life (July). Steele, BF 1970 Parental abuse of infants and small children. In C. J. Anthony and T. Benedek (Eds.), Parenthood: Its psychology and psychopathology. Boston: Little Brown. Stern, DN 1985 The interpersonal world of the infant. New York: Basic Books. Verny, T., and Kelly, J 1981 The secret life of the unborn child. New York: Bantam Doubleday Dell. Wilheim, J 1988 A caminho do nascimento: Una ponte entre o biologico e o psiquico. (On the way to being born: A link between the biological and the psychical.). Sao Paulo: Imago Editora. Winnicott, DW 1949 Birth memories, birth trauma, and anxiety. In Through paediatrics to psychoanalysis. New York: Basic Books.

To the article David Chamberlain

Adamson-Macedo, EN a. Attree, JLA 1994 TAC-TIC therapy: The importance of systematic stroking. British J. Midwifery, 2(6), 264-9. Als, H, Lawhon, G, Duffy, FH, e.a.1994 Individualized development care for the very low birthweight preterm infant: Medical and neurofunctional effects. JAMA (Sept. 21), 272 (11), 853-8. Balough, RD a. Porter, RH 1986 Olfactory preferences resulting from mere exposure in human neonates. Infant Behavior and Development, 9, 395-401. Brackbill, Y 1979 Obstetrical medication and infant behavior. In Osofsky, J (Ed.) Handbook of infant development, p. 76-125. New York: Wiley. Brackbill, Y, McManus, K, a. Woodward, L 1985 Medication in maternity: Infant exposure and maternal information. International Acad. for Research in Learning Disabilities. Monograph Series, #2. Ann Arbor, MI: University of Michigan Press. Brumitt, GA 1994 Epidural anesthesia during labor: Effects on newborn habituation and novelty preference. Poster, Int. Conf. on Infant Studies, Paris (June). Busnel, M-C, Granier-Deferre, C, Lecanuet, JP 1992 Fetal audition. Annals of the New York Academy of Sciences, 662, 118-34. Bustan, MN a. Coker, AL 1994 Maternal attitude toward pregnancy and the risk of neonatal death. American J. Public Health, 84(3), 411-4. Chamberlain, DB 1987 The cognitive newborn: A scientific update. British J. of Psychotherapy, 4(1), 30-71. Chamberlain, DB 1990 Babies remember birth. New York: Ballantine Books. Chamberlain, DB 1992 Is there intelligence before birth? Pre- & Perinatal Psychology Journal, 6(3), 217 -37. Chamberlain, DB 1994 The sentient prenate: What every parent should know. Pre- & Perinatal Psychology Journal, 9(1), 9-31. Cheek, DB 1994 Hypnosis: The application of ideomotor techniques, Boston: Allyn and Bacon, Cooper, R a. Aslin, RN 1990 Preference for infant-directed speech in the first month after birth. Child Development, 61(5), 1584-95. Correia, IB 1994 The impact of television stimuli on the prenatal infant. Ph.D. Dissertation, University of New South Wales, Sydney, Australia. David, HP, Dytrych, Z, Matejcek, Z, e.a.1988 Born unwanted: Devel- opmental effects of denied abortion. New York: Springer. DeCasper, A a. Fifer, W 1980 Of human bonding: Newborns prefer their mother's voice. Science, 208, 1174-6. DeCasper, A, Lecanuet, J-P, Busnel, M-C, e.a. 1994 Fetal reactions to recurrent maternal speech. Infant Behavior and Development, 17(2), 159-64. Ekbom, A, Trichopoulos, D, Adami, e.a 1992 Evidence of prenatal influences on breast cancer risk. The Lancet, 340 (Oct. 24), 1015 -8. Feldmar, A 1979 The embryology of consciousness: What is a normal pregnancy? In D. Mall, and W. Watts, (Eds), The psychological aspects of abortion, p. 15-24. Field, T 1990 Alleviating stress in newborn infants in the intensive care unit. Clinics in Perinatology, 17(1), 1-9. Gatts, J, Winchester, S, a. Fiske, K 1992 The safety of partial intrauterine analog transition: A literature review and discussion. Neonatal Intensive Care, 5, 51-7. Giannakoulopoulos, X, Sepulveda, W, Kourtis, e.a 1994 Fetal plasma cortisol and B-endorphin response to intrauterine needling. The Lancet, 344 (July 9), 77-81. Harlow, HF.1958 The nature of love. American Psychologist 13, 673-85. Ianniruberto, A a. Tajani, E 1981 Ultrasonographic study of fetal movements. Seminars in Perinatology, 5(2), 175-81. Jacobson, B, Nyberg, K, Eklund, G, e. a. 1988 Obstetric pain medication and eventual adult amphetamine addiction in offspring. Acta Obstetrica Gynecologica Scandinavica, 67, 677-82. Jacobson, B., Nyberg, K., Gronbladh, L. et al (1990). Opiate addiction in adult offspring through possible imprinting after obstetric treatment. British Medical Journal, 301, 1067-1070. Jacobson, J. L., Jacobson, S. W., Padgett, et al (1992). Effects of prenatal PCB exposure on cognitive processing efficiency and sustained attention. Develop-mental Psychology, 28(2), 297-306. Jacobson, S. W., Jacobson, J. L., Sokol, et al (1993). Prenatal alcohol exposure and infant information processing. Child Development, 64(6), 1706-1721. Kandel, E. a. Mednick, S. A. (1991). Perinatal complications predict violent offending. Criminology, 29(3), 519-

529.Klaus, M. H. a. Kennell, J. H. (1976/1983). Maternal-infant bonding: The impact of early separation or loss on family development, St. Louis: C. V. Mosby, Klaus, M. H., a. Klaus, P. (1985). The amazing newborn, Reading, MA: Addison-Wesley. Klaus, M. H., Kennell, J. H. a. Klaus, P. (1995). Bonding: Building the Foundations of Secure Attachment and Independence. Reading, MA: Addison-Wesley. Leader, L. R., Baillie, P., Martin, B., et al (1982). The assessment and significance of habituation to a repeated stimulus by the human fetus. Early Human Development, 7, 211-219. Leboyer, F. (1975). Birth without violence. New York: Knopf. Lewis, D. O., Shanok, S. S., Pincus, J. H. et al(1979). Violent juvenile de-linquents: Psychiatric, neurological, psychological, and abuse factors. J. Amer. Academy Child Psychiatry, 18, 307-319. Lewis, D. O., Pincus, J. H., Bard, B., et al (1988). Neuropsychiatric, psychoeducational, and family characteristics of fourteen juveniles condemned to death in the U. S. Amer. J. Psychiatry, 145(5), 584-589. Lind, J. (1978). The family in the Swedish birthing room. Birth and the Family Journal, 5(4), 249-251. Litt, S. M. (1971). Perinatal complications and criminality. Doctoral Dissertation: University of Michigan, Ann Arbor, MI. Magid, K. a. McKelvey, C. A. (1988). High risk: Children without conscience. New York: Bantam Books. Manrique, B., Contasti, M., Alvaredo, M. A., et al (1993). Nurturing parents to stimulate their children from prental stage to three years of age. In T. Blum, (Ed.), Prenatal perception, learning, and bonding (pp. 153-186). Berlin and Hong-Kong: Leonardo Publishers. Manrique, B. (1994). What is CEDIHAC-CEDI? Partial results from 2nd day to sixth year of life. Caracas, Venezuela: CEDI. McLaughlin, C. R., Hull, J. G., Edwards, W. H., et al (1993) Neonatal pain: A comprehensive survey of attitudes and practices. J. of Pain and Symptom Mangagement, 8(1), 7-16. Melt-

zoff, A. a. Moore, M. K. (1977). Imitation of facial and manual gestures by human neonates. Science (Oct. 7), 75-78. Mirmiran, M. a. Swaab, D. F. (1992). Effects of perinatal medication on the develop- ing brain. In Nijhuis, J. G. (Ed.), Fetal behavior (pp. 112-125). Oxford: Oxford University Press. Moon, C., Cooper, R. P. a. Fifer, W. P. (1993). Two-day-olds prefer their native language. Infant Behavior and Development, 16(4), 495-500. Mosser, C. (1989). Effet physiologique des stimulations sonores chez le premature. Ph.D. Dissertation. University of Paris XII, France. Nelson, N. M., Enkin, M. W., Saigal, S., et al(1980). A randomized clinical trial of the Leboyer approach to childbirth. New England J. of Medicine, 302(12), 655-660. Newnham, J. P., Evans, S. Michael, C. A., et al (1993). Effects of frequent ultrasound during pregnancy: A randomized controlled trial. The Lancet, 342 (Oct. 9), 887-5Panthuraamphorn, C. (1993). Prenatal infant stimulation program. In Blum, T. (Ed.), Prenatal perception, learning, and bonding (pp. 187-220). Berlin: Leonardo. Pasamanick, B. (1956). Pregnancy experience and the development of behavior disorders in children. Amer. J. of Psychiatry, 112, 613-3. Pernick, M. S. (1985). A calculus of suffering: Pain, professionalism, and anesthesia in 19th century America. New York: Columbia University Press. Prescott, J. W. (1971). Early somatosensory deprivation as an ontogenetic process in the abnormal development of the brain and behavior. In: I. E. Goldsmith and J. Moor- Jankowski (Eds.), Medical primatology 1970. New York and Basel: S. Karger. Prescott, J. W. (1995) The origins of human love and violence. Newport Beach, CA: Institute of Humanistic Science (1829 Commodore Rd., New Port Beach, CA 92660.). Raine, A. (1993). The psychopathology of crime: Criminal behavior as a clinical dis- order. San Diego, CA: Academic Press. Raine, A., Brennan, P., a. Mednick, S. A. (1994). Birth complications combined with early maternal rejection at age one year predispose to violent crime at age 18 years. Archives of General Psychiatry, 51, 984-988, Raine, A., Buchsbaum, M. S., Stanley, J., et al (1994). Selective reductions in prefrontal glucose metabolism in murderers. Biological Psychiatry, 36, 365-373. Rovee-Collier, C. K. a. Lipsitt, L. P. (1982). Learning, adaptation, and memory in the newborn. In P. M. Stratton, (Ed.), Psychobiology of the human newborn (pp. 147- 190). London: Wiley and Sons. Row, K. V. a. Drivas, A. (1993). Planned conception and infant functioning at age three months: A crosscultural study. Amer. J. Orthopsychiatry, 63(1), 120-125, Salk, L., Lipsitt, L. P., Sturner, W. O., et al (1985), Relation-ship of maternal and perinatal conditions to eventual adolescent suicide. The Lancet, 1, (# 8429), 624-627. Solter, A. (1995). Why do babies cry? Pre- and Perinatal Psychology Journal, 10(1), 21-43. Solter, A. (1984). The aware baby: A new approach to parenting. Goleta, CA: Shining Star Press. Sontag, L. W. a. Wallace, R. F. (1934). Study of fetal activity: Preliminary report of the Fels Fund. American J. Diseases of Children, 48, 1050-1057. Stiefel, G. S., Plunkett, J. W., a. Meisels, S. J. (1987). Affective expression among pre- term infants of varying levels of biological risk. Infant Behavior and Development, 10(2), 151-164. Taddio, A., Goldbach, M., Ipp, M., et al (1995). Effect of neo-natal circumcision on pain responses during vaccination of boys. The Lancet, 345 (Feb. 4, 1995), 291-292. Tajani, E. a. Ianniruberto, A. (1990). The uncovering of fetal competence. In M. Papini, A. Pasquinelli, and E. A. Gidoni, (Eds.), Development, handicap, rehabilitation: Practice and theory, (pp. 3-8). Amsterdam: Elsevier Science Publishers. Thoman, E. B. a. Ingersoll, E. W. (1989). The human nature of the youngest humans: Prematurely born babies. Seminars in Perinatology, 13, 482-494. Trichopoulos, D. (1990). Hypothesis: Does breast cancer originate in utero. The Lancet, 335 (Apr. 21), 939-940. Ungerer, J. A., Brody, L. R., a. Zelazo, P. R. (1978). Long-term memory for speech in 2-4 week-old infants. Infant Behavior and Development, 1, 177-186. Van de Carr, R. a. Lehrer, M. (1988). Prenatal University: Committment to fetal-family bonding and the strengthening of the family unit as an educational institution. Pre- and Perinatal Psychology Journal, 3(2), 87 -102. Van de Carr, R. a. Lehrer, M. (1992). The prenatal classroom: A parent's guide for teaching your baby in the womb. Atlanta: Humanics Learning. Verny, T. R. a. Kelly, J. (1981/1986). The secret life of the unborn child. New York: Dell. Wellington, N. a. Rieder, M. J. (1993). Attitudes and practices regarding analgesia for newborn circumcision. Pediatrics, 92(4), 541-543.

To the article the Turners

Brekhman, Grigori I., (2000) The conception of the multiple-level co-ordinated action between the mother and her unborn child: the methodological approach and the methods of research. p.1 Materials ISPPM-Congress, Cagliari, Sardinia, Italy. Chamberlain DB (1994) The Sentient Prenate: What Every Parent Should Know. Pre and Perinatal Journal 9 (1) 9-31. Chamberlain DB (1998) Babies Remember Birth republished as The Mind of Your New Born Baby, North Atlantic Books. Fedor-Freybergh PG (1989) Presidential Address Proceeding 9th ISPPM- Congress Jerusalem, March 26-30. Fedor-Freybergh, Peter G., (1993)Prenatal and Perinatal Psychology and Medicine: A New Approach to Primary Prevention Int. J. Prenatal & Perinatal Psychology and Medicine Vol. 5 No. 3 pp. 285-292. Proceeded by Fedor-Freybergh, Peter G., (1983) Psycophysische Gegebenheiten der Perinalzeit als Umwalt des Kindes. In: Schindler, S. Zimprich, H. (eds.) Okologie der Perinatalzeit. Hippocrates, Stuttgart, pp. 24-49. Ferenzi, Sandor (1913) Entwicklungssufen des wirklichkeitssinnes (Stages in the Development of the Sense of Reality) Int. Zietscrift fur Psychoanalyse, 1, 124-138. Transl. (1924) Psycho-Analysis

Chapter 8 Maresfield Reprints, London. Fodor, Nandor (1949) Search For the Beloved: A Clinical Investigation of the Trauma of Birth and Prenatal Condition Hermitage Press.

Graber, Gustav Hans (1924) Die Ambivalenz des Kindes (The Ambiance of Children) Psychoanalytic Press Vienna. ISPP was transformed into the ISPPM at the 1986 International Congress in Badgastein, Austria in the Presidency and Chairmanship of Prof. Dr.Peter G. Fedor-Freybergh. It marked the establishing of the ISPPM as an interdisciplinary organization. Shortly afterwards Prof. Fedor-Freybergh established the International Journal of Prenatal and Perinatal Psychology and Medicine now in it 11th year of publication. Pearce, Joseph Chilton 1996 shared this information at a Touch The Future Conference in San Raphael, CA USA. Rank, Otto (1924) Das Trauma der Geburt und seine bedeutung fur die Psychoanalyse (The Trauma of Birth: Its Meaning For Psychoanalysis). International Psychoanalytic Press Vienna Transl. (1952) Brunner NYC. Turner JRG & Turner-Groot TGN (1988) Birth, Life and More Life: Reactive Patterning Based On Prebirth Events Chapter 27 Prenatal and Perinatal Psychology and Medicine: Encounter with the Unborn Editors: Peter G. Fedor-Freybergh & ML Vanessa Vogel, Parthenon Publ.N.J. p. 309-316. Turner JRG & Turner-Groot TGN (1991) Prebirth Memory Therapy Int. J. Prenatal and Perinatal Studies Vol.3 No. 1/2, 111-118. Turner JRG & Turner-Groot TGN (1992) Discovering the Emotional DNA: The Emotional Continuity for the Unborn Child Through Prebirth Memory Therapy. 11th ISPPM International Congress Kracow, Poland 15-17 May 92. Turner JRG & Turner-Groot (1993) Prebirth Memory Therapy Including Prematurely Delivered Patients" Pre & Perinatal Psychology J. Vol.7 (4). 321-332. Turner JRG & Turner-Groot TGN (1997)Personal Growth in Parenting: A Vital Link to Prevention in Prenatal Psychology, Int.J.PPPM Vol. 9 (3), 275-286. Turner JRG & Turner-Groot TGN (1998) Conception: A Vital Link in Prenatal Psychology. ISPPM-Journal. Vol.10(1). 29-37. Westermann S (1996) Die Antwort Bist Du Selbst: Whole-Self Ein innerer Weg Ryvellus Medienverlag, Seehaupt-Munchen.

To the article Paula Ingalls

bBillups, A. (2000), Hillary calls for Study on Use of Mood-Altering Drugs by Children. The Washington Times, March 21, 2000. 2.Kalb, C. (2000), Drugged-Out Toddlers. Newsweek, March 6, 2000. 3. Nabokov, V. (1955), Lolita. Quoted in the Columbia Dictionary of Quotations, Columbia University Press, New York, 1993. 4. Gay, P. (1988), Freud: A Life of Our Time. W.W. Norton & Company, New York, NY. 5. Gruenberg, S.M. (1957), Infancy and Infant Care. The Encyclopedia Americana, The International Reference Work, Americana Corp., NY, Vol.15:104-07. 6. Greenspan S. & Greenspan N.T., (1985), First Feelings, Mile-stones in the Emotional Development of Your Baby and Child. Penguine Books, NY. 7. Janus, L. (1996), The Prenatal Experience: Psychotherapeutic Situation and Possibilities for Prevention.ISPPM-Journal, Vol.8(1):29-38. 8.Chamberlain, D.B. (1990), Babies Remember Birth. Ballentine Books, NY. 9. Chamberlain, D.B. (1995), Babies Are Not What We Thought: Call for a New Paradigm. San Diego, CA.10. Restak, R.M. (1986), The Infant Mind. Double-Day & Company, Inc., Garden City, NY.11.Ingalls, PMS (2001) Born to Live: Preemies and Multiple Birth Traumas, In press, ISPPM-Journal; published in English and Russian in Perinatal Psychology and Medicine. Psychosomatic Disorders in Obstetrics, Gynecology, Pediatrics and Therapy, Part II, The All-Russia Conference with International Participation, Ivanovo 6-8 June, 2001, p.3-72.12. Squire, L.R. (1987) Memory and Brain. Oxford University Press, New York, NY.13. Verny, T. (1992) Obstetrical Procedures: A Critical Examination of Their Effect on Pregnant Women and Their Unborn and Newborn Children. Pre and Perinatal Psychology Journal, Vol. 7(2): 101-112.14. Goleman, D. (1995), Emotional Intelligence. Ban-tam Books, New York, NY.15. Benešová, O. (1996), Perinatal Pharmacotherapy and the Risk of Late Neuro-Immuno Behavioral Deviations. ISPPM-Journal, Vol. 8(1): 53-62.16. Bolle, R. (1996) Am Ursprung Der Seelischen Welt. ISPPM-Journal, Vol. 8(4): 479-502.17. DeMause, L. (1996), Restaging Fetal Traumas in War and Social Violence. Pre- and Perinatal Psychology Journal, Vol.10(4): 229-260.15. Kotulak, R.M. (1996), Inside the Brain. Andrews and McMeel, A University Press Syndicate Company, Kansas City.16. Lewontin, R. (2000), The Triple Helix: Gene, Organism, and Environment. Harvard University Press, Cambridge, MA.17. Blakeslee, S. (2000) Rewired' Ferrets Overturn Theories of Brain Growth. The New York Times, 4/25/2000, F1-6.18. Stolberg, S.G. (2000) As the Tiniest Babies Grow, So Can Their Problems. The New York Times, 5/8/2000, p. A1-20.19. Mark V.H. & Ervin, F.R. (1970), Violence and the Brain. Harper Row, Publishers, Inc., Hagerstown, MD.20. Swerdlow, J.L. (1995), Quiet Miracles of the Brain. National Geographic, Vol. 187(6), p. 2-41.21. Begley, S. (1996), Your Child's Brain. Newsweek, 2/19/1996, p. 55-62.22. Nash, M.J. (1997), Fertile Minds. Time, 2/3/1997, p. 47-60.23. Brady, J.P., et.al. (1994), Risk and Reality: The Implications of Prenatal Exposure to Alcohol and Other Drugs. The Education Development Center, Inc., http://aspe.os.dhhs.gov/hsp/cyp/drugkids.htm. 24.Ingalls, P.M.S., (1999), Cloning: Who Defends the Offspring? ISPPM-Journal, Vol. 11(3): 329-343.25. Jones, M. (2000) The Genetic Report Card. The New York Times Magazine, June 11, 2000, p. 80.26. Eichhorn, D. & Verny, T.R. (1999), The Biopsychosocial Transactional Model of Development: The Beginning and the Formation of An Emergent Sense of Self in the

Newborn. Journal of Prenatal and Perinatal Psychology and Health, Vol.13(3-4):223-234.27. Russakoff, D. (1999), Brain Development Altered by Violence. Washington Post, 5/15/1999. P. A3. 28. Sara, S.J. (2000), Retrieval and Reconsolidation: Toward a Neurobiology of Remembering. Learning and Memory, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, Vol.7(2):73-84. 29. Shepherd, P. (1977), Transforming the Mind.30. LaDoux, J. (1998), The Emotional Brain: The Mysterious Underpinnings of Emotional Life. Simon & Schuster, New York, NY. 31. Ingalls, PMS (1996), Derepression and Reprocessing: Food for Thought from a Patient. ISPPM-Journal, Vol. 8 (4), December, 1996, p. 433-450.

To the article Mirta Grynbaum et al.

e) Kiriacou D, Anglin D. Taliaferro E. (1999) Risk factors for injury to women from domestic violence. N Engl J. Med. 341:1892-8. 2. Mc Cauley I, Keru D, Kolodner K.(1995)The battering syndrome: prevalence and clinical characteristics of domestic violence in primary care internal medicine practice. Ann intern Med. 123(10):737-46. 3. Iohnson D, Elliot B. (1997) Screening for domestic violence in a rural family practice. Minn Med.80(10):43-5. 4.Eisenstadt S, Bancroft L. Domestic violence.(1994) N Engl J Med. 341(12):886-91. 5.Quillian I.(1996) Screening for spousal or partner abuse in a community health setting. J Am Acad Nurse Pract. 8(4):155-.60. 6.Rabin S, Tsur H, Kitai A. (1998)The problem of battered women: a challenge for the primary care physician. Harefuah. 134:548-50 (Hebrew).7. Gross R, Brammli-Greenberg S. (2000) The health and welfare of women in Israel: findings from a national survey. Jerusalem: JDC-Brookdale Institute, November: 44-54. 8.Fisher M, Lebcowicz R.(1998) Family violence during pregnancy. Harefuah. 134:550-2 (Hebrew). 9. Poirier L. (1997) The importance of screening for domestic violence in all women. Nurse Pract. 22(5):105-8, 111-12, 115. 10.Morse D, Suchman A, Frankel R. (1997) The meaning of symptoms in 10 women with somatic disease and a history of childhood abuse. Arc/I Fam Med;6)5):468-76. II.Breslau N, Davis G, Andreski P.(1991) Traumatic events and PTSD in an urban population of young adults. Arc/I Gen Psych. 48(3):216-22. 12.Peebles-Kleiger M, Zerbe K. (1998)Post-trauma-tic stress disorder, Postgrad Med.103(5):18I-96, 13. Walker L. (1991) PTSD in women: diagnosis and treatment of battered women's syndrome. Psychotherapy.28(1):21-9. 14.Feldhaus K, Kozioz-Mc Lain I, Amsbury H. (1997)Accuracy of 3 brief questions for detecting partner's violence in the emergency department. JAMA.277(17): I 357-61. 15. Penal Law of Israel, art. 368. 16. Sperber AD, Develis RS, Boehlecke B. (1994) Cross cultural translation, methodology and validation. J.Cross Cult Psych. 25:501—24. The paper was published IMAJ 2001;3:907-910. (From: Department of Family Medicine, Faculty of Health Sciences, Ben-Gurion University of the Negev, Beer Sheva, Israel 2 Department of Epidemiology, Faculty of Health Sciences, Ben-Gurion University of the Negev, Beer Sheva, Israel)

To the article Marina Kuligina et al.

1.Bartlett, K.T. (1991). Feminist legal methods. In: K.T. Bartlett and R. Kennedy (eds)., Feminist Legal Theory: Readings in Law and Gender, Boulder, Colo.: Westview Press, 370-403. 2. Bodrova B., Goldberg H. (2002) Reproductive health of the women in Russia (by results of the researches which have been carried out in Perm, Ekaterinburg and Ivanovo area in 1996 and 1999 years. // Sociology of medicine. Moscow. 1. P.21-32. 3. Bowker LH. Beating wife beating. Lexington, Ky: Lexington books; 1983. 4. Boychenko L. D (1996), Participation of Women's Organisations of Karelia in the Establishment of Civil Society, In: K. Heikkinen and E. Zdravomyslova (eds)., Civil Society in the European North, Concept and Context, Centre for Independent Social Research, St. Petersburg, pp. 124-126. 5. Boychenko L. (1997), Development of the third sector on an example of Republic Kareliya, Civil society(community) — in searches of path. The application to a magazine "Northern Palmira", St.-Petersburg, P. 104-111. 6.Boychenko L. Heynikken K. (2000) Frontier cooperation of female organizations. On an example of Republic Kareliya. The Neva time March 4, 2000, N 42 (2165), 7. Brekhman, G.I., (2000) The conception of the multiple-level coordinated action between the mother and her unborn child: the methodological approach and the methods of research. ISPPM Congress. Cagliari, Sardinia, IT 22-24 Jun. 8.Brekhman G.I.(2002) Aggression and Violence as a ecological problem and the prebirth education of new generation people. Materials 7th International Conference "Ecology and North-West Russia development". Saint-Petersburg, August 2-7, 2002. P.132-140. 9. Campaign for reaching of equality between the men and women and improvement of a women position// Information of UNO Center in Moscow. Department of the public information UNO, DPI/2112, DPI 2035. 10. Campbell J., et al., (2002) Health consequences of intimate partner violence. The Lancet. April 13, 2002. 359(9314): 1331-6. 11. Chamberlain D (1998) The Mind of the Newborn Baby. North Atlantic Books, California. 12. Emerson W.R. (1998) The Vulnerable Prenate. ISPPM-Journal. V.10(1): 5-18. 13. Feldhaus K, Kozioz-Mc Lain I, Amsbury H. (1997) Accuracy of 3 brief questions for detecting partner's violence in the emergency department. JAMA.277 (17): I 357-

- -14.Fedor-Freybergh, Peter G., (1993) Prenatal and Perinatal Psychology and Medicine: A New Approach to Primary Prevention. ISPPM-Journal. V.5(3): 285-92. 15.Gazmararian JA, Lazorick S.,Spitz AM.,Ballard TJ., Saltzman LE., Marks JS. Prevalence of violence against pregnant women. JAMA, June 26, 1996. V. 275 (24): 1915-1920. 16.Gelles RJ. Violence and pregnancy: a note on the extent of the problem and needed resources. Fam Coordinator, 1975; 14:40-47. 17.Grynbaum M., Biderman A., Levy A., Petasne-Weinstock S. Domestic Violence: Prevalence among Women in a Primary Care Center. The Israel Medical Association Journal. 2001. 3:907—910. 18.Heikkinen, K. (1992), Women, Marginality and the Manifestation of Everyday Life. A Study of the Present-day Feasts of the Veps and the Man (in Russia). Ethnology Fennica, vol. 20, pp. 5-17. 19.Heikkinen, K. (1996), Religion, Gender and Ethnic Organization, in K. Heikkinen and E. Zdravomyslova (eds)., Civil Society in the European North. Concept and Context. Centre for Independent Social Research, St. Petersburg, pp. 146-149. 20.Heise L., et al. Ending violence against women. Population Reports, Series L., № 11. Baltimore: Johns Hopkins University School of Public Health. Population Information Program (December 1999). 21.Huizink AC., Robles de Medina PG., Mulder E J.H., Visser GHA., Buitelaar JK. Stress during pregnancy is associated with developmental outcome in infancy. Journal of Child Psychology and Psychiatry 44:6 (2003), pp 810-818. 22.Janus L (2001) The Enduring Effects of Prenatal Experience. Mattes, Heidelberg. 23.Johnson JK, Haider F., Ellis K., Hay
- -DM., Lindow SW. The prevalence of domestic violence in pregnant women. BJOG, March 2003, V.110(3): 272-5. 24.McCauley I, Keru D, Kolodner K. (1995) The battering syndrome: prevalence and clinical characteristics of domestic violence in primary care internal medicine practice. Ann intern Med. 123 (10):737-46.
- -25.Parsons L.H., Zaccaro D., Wells B., Stovall TG.. Methods of and attitudes toward screening obstetrics and gynecology patients for domestic violence. Am.J.Obstet.Gynecol.1995;173:381-7. 26.Sonne J. C. Abortion Survivors At Columbine. Journal of Prenatal and Perinatal Psychology and Health, 2000, 5(1), 3-22. 27.Sperber AD, Develis RS, Boehlecke B. (1994) Cross cultural translation, methodology and validation. J. Cross Cult Psych. 25:501-24. 28.Straus MA, Gelles RJ Physical Violence in America: Risk Factors and Adaptations to Violence in 8 145 Families. New Brunswick, NJ: Transaction Publishers; 1990. 29.Turner JRG & TGN, (1998) Conception: Vital Link in Relationships in Prenatal Psychology ISPPM-Journal. V.10(1):29-37. 30.Van den Bergh BRH. The relationship between maternal emotionality during pregnancy and the behavioral development of the fetus and neonatus. In: Prenatal and Perinatal Psychology and Medicine. Eds. P.Fedor-Freybergh, ML Vanessa Vogel. The Parthenon Publishing Group, NJ, 1988. P.131-142. 31.Women's Environment both Development Organization/News and Views // Vol. 11, No. 1. 32.Watts Ch., Zimmerman C. Violence against women: global scope and magnitude. Lancet 2002; 359: 1232—37. 33.Zdravomyslova, E. (1996), Problems of Becoming a Housewife, In: A. Rotkirch and E. Haavio-Mannila (eds.). Women's Voices in Russia Today. Aldershot, Dartmouth, pp.33-48.

To the article Grigori Brekhman Chapter 1

-Cunningham F.G. et al. 1997 The Williams Obstetrics, 20th Edition. P.167-173. 2. Thurlow R.W. a. Brace R.A. 2003 Swallowing, urine flow, and amniotic fluid volume responses to prolonged hypoxia in the ovine fetus. Am. J. Obstet. Gynecol. 189:601-8. 3. Hooker D. 1952 The prenatal origin of behaviour. Lawrence, Kansas: University of Kansas Press, 4. Humhrey T. 1978 Function of the nervous system during prenatal life. In: Stave U. (ed.) Physiology of the Perinatal Period. V. 2. Plenum Medical, New Jork, NJ. P. 751-796. 5. Hill L.M. et al. 1983. An ultrasonic view of the developing fetus. Obstet. Gynecol. Survey. V. 38 (7): P.375-398. 6. Anand K.J.S., Hickey P.R. 1987 Pain and its effects in the human neonate and fetus. New England J.Med.317(21):1321-29. 7. Nelsson L. 1988 The Miracle of Life. Video. 8. Smyth C.N. 1965 Experimental methods for testing the integrity of the fetus and neonatale. J. Ob / Gyn. British Commonwealth. V. 72. P. 920-4. 9. Liley A.W. 1972 The fetus as a personality. Australian and New Zealand j. Psychiatry. V. 6 (2): 99-105. 10. Dubowitz L.M.S. et al. 1980 Visual function in the Preterm and Fullterm New-born Infant.Dev. Med. Child.Neurol. V.22. P.465-75. 11. Birnholz J.C., Benecerraf B.R. 1983 The development of human fetal hearing. Science.V.222.P.516-8. 12. Logan B. 1988 The ultimate preventive: prenatal stimulation. In: Fedor-Freyberh P. and Vogel M.L.V. (eds.) Prenatal and Perinatal Psychology and Medicine. The Parthenon Publishing Group, Lancs U.K.P. 559-62. 13. Mistretta C.M., Bradley R.M. 1975 Taste and swallowing in utero: A discussion of fetal sensory function. British. Med. Bulletin.V. P. 80-4. 14. Mistretta C.M., Bradley R.M. 1977 Taste in utero: theoretical considerations. In: Weiffenbach J.M. (ed.) Taste and Development: The Genesis of sweet preference. Washington DC: US Government Printing Office. P.51-69. 15. Cowart B.J. 1981 Development of taste perception in humans: Sensitivity and preference throughout the life span. Psych. Bulletin.V.90.P.47-73. 16. Roper S.D. 1989 The cell biology of vertebrate taste receptors. Annual Review of Neuroscience. V. 2.P. 329-17. Van Dongen L.G.R., Goudie E.G. 1980 Fetal movement patterns in the first trimester of pregnancy. British. J. Ob/Gyn. V.87.P. 191-3. 18. Rammon-j-Cajal S. 1928 Degeneration and regeneration of the nervoux system. Transl. and ed by R.M.May.V.1. NJ., Hafner.1959.V.1, XX + P.396. Prtr.1959. V.2, VIII + P. 397. 19. Ramon-j-Cajal S. 1929 Studies on vertebrate neurogenesis. Transl. by Lloyd Guth

from French version. Springfield (III) Themas.1960.XIV + P. 432. 20. Moore K. 1989 Before We Were Born, 3rd ed. P. 278. 21. Goldenring J. 1982 Development of the Fetal Brain. New England J. Med., Aug. 26.P.564-9. 22. Procenko E.V. 1997 Diagnostics of maturity of fetuses and new-born with extremely low weight of body depending on current of pregnancy. Abstract of Dis. Ivanovo, 14 p. 23. Purpura D.1975 Dendrite differentiation in human cerebral cortex; normal and aberrant developmental patterns. Adv Neurol..V. 12. P. 91-116. 24. Vaugh H.G.Jr. 1975 Electrophysiological analysis of regional cortical maturation. Biol. Psychiatr. V. 10. P. 513-26. 25. Anokhin P.K. 1980 Central questions of the theory of functional system. M.: Science. 196p.26. Pert C.

1986 Neuropeptides link brain, immunity. Brain / Mind Bull.V. 11(4): jan 20. 27. Pert C. 1999 Molecules of Emotion. New York: Simon&Schuster. 28. Fedor-Freybergh PC 1985 The Biochemistry of Bonding. 2nd International Congress of the Preand Perinatal Psychology Association of North America, San Diego, 1985. 29. Campbell S. 2002 4D, or not 4D: that is the question. Ultrasound Obstet Gynecol. 19:1-4. 30. Fedor-Freybergh PG, Vogel V 1988 Encounter with the Unborn: Philosophical Impetus behind Prenatal and Perinatal Psychology and Medicine. In: Fedor-Freybergh PG, Vogel V (eds) Prenatal and Perinatal Psychology and Medicine. Encounter with the Unborn: A comprehensive Survey of Research and Practice. Parthenon Publishing, Carnforth (pp. XVIII-XXXII). 31. Grof, S. 1985 Realms of the Human Unconscious: Observations from LSD Research. New York: Dutton. 32. Turner

JRG & TGN. 1998 Conception: Vital Link in Relationships in Prenatal

Psychology. ISPPM-Journal. V.10(1): 29-37. 33. Verny T., Kelly J. The Secret Life of the Unborn Child. Summit Books, New York. NJ.- 1981. 34. Janus L. 2000 The Enduring Effects of Prenatal Experience: Echoes from the Womb. Mattes Verlag: Heidelberg. 277p. 35. Chamberlain D.B. 1988 Babies Remember Birth. Jeremy P.Tarcher, Los Angeles. 36. Chamberlain D.B. 1992 Babies are not what we thought: Call for a New paradigm. Int. J. Prenatal a. Perinatal Studies.V.4(3/4).P.161-77. Fedor-Freybergh, P.G.1993 Prenatal and Perinatal Psychology and Medicine: A New Approach to Primary Prevention. ISPPM-Journal. V. 5(3).P.285-292. 38. Gu W, Jones CT The effect of elevation of maternal plasma catecholamines on the fetus and placenta of the pregnant sheep. *JDevPhysiol* 1986 Jun;8(3):173-86. 39. Naumenko EV, Dygalo NN. 1989 Role of Maternal Corticosteroids and Epinephrine Changes during Pregnancy in alteration of Pituitary-adrenal Reactivity of Adult Offspring. In: Stress: The Roll Catecholamines and Other Neurotransmitters. V. 2. Ed. by E. Usdin, R. Kvetnansky, J. Axelrod.P.839-47. 40. Brekhman G.I. 2001 Conception of the Wave Multiple-Level Interaction Between the Mother and Her Unborn Child. ISPPM-Journal. V.13(1/2). P. 83-93. 41. Verny T., Weintraub P. 1992 The inner work of pregnancy. In: Preperinatal psycho-medicine. Ed. Rudolf Klimek, Cracow, DWN DReAM.P. 293-320. 42. Chamberlain D.B. 1988 Babies Remember Birth. Jeremy P.Tarcher, Los Angeles. 43.Mathison L. 1981 Does Your Child Remember. Mothering, Fall.

Chapter 2

·Fomin M.I. 1996. Integrated medicine. SPb: Palada.232 p. 2. Teterin N.A. 2003 Transformative property of electrons . www. SciTecLibrary.ru. 2003, June 24. 3. Wiener N. 1948 Cybernetics. Cambridge, MA. MIT Press. 4. Evreinov E.V. The report on the 6th International Forum of Informatisation. November 26, 1997 5. Friedman J.R. et al. 2000 Quantum superposition of distinct macroscopic states. Nature. July 6. V.406: 43-45. 6. Van der Wal C.H. et al. 2000 Quantum superposition of macroscopic persistent. Current States. Science. 2000, Oct 27. V.290: 773-7. 7. Petrosyan V.I. et al. 2000 Water, paradoxes and greatness of small sizes. Biomedical radio-electronics, №2: 4-9, 8, Devjatkov N.D. et al. 1991 Millimetre wave and their role during ability to live. M.: Radio and Connection. 126 p. 9. Betzky O.V., Devjatkov N.D. 1996 Electromagnetic millimetre wave and alive organisms. Biomedical radio-electronics. №3 In: The Radio-engineering, №9: 23-28. 10. Petrosyan V.I. et al. 2000 Interactions of the water-content environments with the electromagnetic fields. Biomedical radio-electronics., №2:10-17. 11. Brill G.E.et al. 2000 Contents structural matrix of water is a conducting mechanism of regulation of homeostasis in alive systems. Biomedical radio-electronics. №2: 18-23. 12. Simeonova N.K. 1993 Homeopathy – astro-chemistry. Northern Caucasus. 202p 13. Smirnov K.K., Garasko E.V. 2000 Microbiological investigations of electrochemically activated water efficiency. Materials of 4-th International Scientific Technological Conference " Physics and Radio-electronics in medicine and ecology ". P.1. Vladimir, June 2000.P.115-6. 14. Zenin S.A. 1999 On the mechanism of water activation. Electrochemical activation - 99/ Second international symposium " Electrochemical activation in medicine, agriculture, industry "Ed. Bakhir KMP.P. 123-4. 15. Tatarinov Ju.P. et al. 1998 Spectro-photo-metrical research non-contact energo-informative influence on a liquids. Consciousness and Physical reality. 3:57-61. 16. Rein G., McGraty R. 1994 Structural Changes in Water and DNA Associated with New Physiologically Measurable States. J. Sci. Explor., 8: 438. 17. Zenin S.V. 1999 Water - keeper and compiler of the information.. National medicine, 1:13-18. 18. Ludwig W., Odenthal H. 1986 Die Verordnung uber Allgemeine Bedingungen Fur Die Versorgung Mit Wasser (AVBWasserV), Ed. 3rd. Sigillum. 268p. 19. Khmelevsky Yu.V., Usatenko O.K. 1984 Basic biochemical constants of the man in norm and at a pathology. Kiev: Zdorov'ja.64p. 20. Chirkova E.N. 1999 Immunospecific of the wave information in living organism" M.:New Centre. 304p 21. Agre P. et al. 1998 The Aquaporins, Blueprints for Cellular

Plumbing Systems. J Biol Chem. V.273 (24):14659-62. 22. Lee, M. D. et al. 1997 Genomic organization and developmental expression of aquaporin-5 in lung. Chest 111: 111-3 23. Preston GM et al. 1992 Appearance of water channels in Xenopus oocytes expressing red cell CHIP28 protein. Science. 1992 Apr 17; 256 (5055):385-7. 24.Gariaev P.P. 1994 The Wave genome. M.: Obschaja Polsa. 279 p. 25. Gariaev P.P. 1997 Wave genetic code. M.: Isdatcenter. 107p. 26. Gariaev P.P. et al. 2000 Wave biocomputer functions of DNA. Consciousness and Physical reality. V.5 (6): 30-48. 27. Prangishvilli I.V. et al. 2000, Genetic structures as a source and receiver of the holographic information. Gauges and systems, 2:2-8. 28. Einstein A. et al.. 1935 Can quantum-mechanical description of physical reality be considered complete? Phys. Rev. V.47: 777-80. 29. Birstein B.I.et al.. 2001 Why we can not treat AID and cancer? (the linguistic-probability-wave version). http: www. Sci-TecLibrary.com/ January 2001. 30. Dzyan Kandgen Yu.V. 1993 Bioelectromagnetic fields - material carrier of the biogenetic information. Aura-Z. 3:42-54. 31. See 24. 32. See 27. 33. Popp, F.A.

1994 Electromagnetism and living systems. In: Ho, Mae-Wan, Popp, F.A., Warnke, U. (eds).: Bioelectrodynamics and biocommunication. World Scientific Publishing, Singapore, pp. 33-80. Ed. World Scientific. 34. Popp F.A. 1998. A New Approach to the Driving Force of Life: Biophoton Research. May 6, 1998. 35. Li, K.H., Popp, F.A. 1990 Dynamics of DNA excited states. In: Mishra, R.K. (ed).: Molecular and biological physics of living systems. Kluwer, Boston-Dordrecht, P.31-52. Rattemeyer, M. et al. 1981 Evidence of photon emission from DNA in living systems. Naturwissenschaften. V.68 (11): 572-3. 37. Gariaev P.P. et al. 1997 Biocomputers on genetic molecules as a reality. Informative technologies. 5: 42-6. 38. Lipton, B.H. 1999 Consciousness and the New Biology. Journal of the ASK Us, conference. 39. See 24. 40. See 25. 41. See 29 42. Gariaev P.P. et al. 2000 The DNA-wave Biocomputer. Materials of the Fourth International Conference on Computing Anticipatory Systems. CASYS, August 7-12th, HEC LIEGE, Belgium. Symposium 4. P 8-

12.43. See 20. 44. See 32. 45. Bouwmeester D. et al. 1997 Experimental quantum teleportation. Nature. V.390: 575-9. 46. See 25. 47. See 24. 48. See 25. 49. See 27.

Chapter 3

1. Birstein B.I.et al.Wave antiviral immunity. http://sciTecLibrary.com 28.02.2001. 2. Burr H.S. 1972 The Fields of Life. New York: Balantine Books. 3. Swanson W.J. et al. 2001 Polymorphism survey in abalone fertilization proteins is consistent with the neutral evolution of the egg's receptor for lysine

(VERL) and positive Darwinian selection of sperm lysin. Molecular Biology a. Evolution. 18:376-383.

- 4. Brekhman G.I., Smirnov K.K. 2001 Water as Energoinformative Connection Channel Between an Unborn Child, Its Mother and Invironment. ISPPM-Journal. V.13(1/2): 93-8. 5. See 1. 6. Lubischev A.A. 1925 On the nature of the hereditary factors. Perm.120 p. 7.Friedman J.R. et al. 2000 Quantum superposition of distinct macroscopic states. Nature. July 6. V.406: 43-45. 8.Van der Wal C.H. et al.
- 2000 Quantum superposition of macroscopic persisten. Current States. Science. 2000, Oct 27. V.290: 773-7. 9. Chirkova E.N. 1999 Immunospecific of the wave information in living organism" M.:New Centre. 304p. 10. Shekhtman M.M., Barkhtova T.P.. 1982 Diseases of Internal Medicine and Pregnancy. M.:Medicine. 272 p. 11. Barker D J P et al. 2001 Size at birth and resilience to effects of poor living conditions in adult life: longitudinal study. BMJ.323:1273-7 (1 December). 12. Forsén T et al. 1999 Growth in utero and during childhood among women who develop coronary heart disease: longitudinal study. BMJ; 319: 1403-7. 13. Fedor-Freybergh PG, Vogel V 1988 Encounter with the Unborn: Philosophical Impetus behind Prenatal and Perinatal Psychology and Medicine. In: Fedor-Freybergh PG, Vogel V (eds) Prenatal and Perinatal Psychology and Medicine. Encounter with the Unborn: A comprehensive Survey of Research and Practice. Parthenon Publishing, Carnforth (pp. XVIII-XXXII). 14. Emerson W 1998 The vulnerable prenate. ISPPM-Journal. 10(1):5-17. 15. Laing RD 1976 The facts of life. Pantheon Books, New York. 16. Farrant, G. 1985 Cellular consciousness. Paper presented to the 2nd International Congress on Pre- and Perinatal Psychology, July 1985. San Diego, CA. 17. Lipton B.,1995; Quot. Emerson W., 1998. 18. Petrosyan V.I. et al. 2000 Interactions of the water-content environments with the electromagnetic fields. Biomedical radio-electronics., №2:10-
- 17. 19. Davidov A.S. 1988 Solitones in molecular systems. Kiev: Naukova Dumka. 304 p. 20. Gariaev P.P. 1994 The Wave genome. M.: Obschaja Polsa. 279 p. 21. See 1. 22. Gerber R 1997 Vibrating Medicine. 23. Bertin M.-A. 1988 La Periode Prenatale Influence-T-Elle Notre Vie? Materials

Conference a l'OMAEP, Paris. 24. Turner J.&T. 2001 Whole-Self Perinatal Psychology Therapy. In: Perinatal psychology and medicine. Psychosomatic disorders in obstetrics, gynaecology, paediatrics and therapy/ Materials of All-Russian Conference with International participation. Ivanovo, June 6-8, 2001. Ivanovo.P.138-150.

Chapter 4

1. Gerber R. 1997 Vibrating medicine. 320 p. 2. Mashansky V.F. 1977 On possible structural bases non-nervous transfer of the information in epithelial tissue. The Reports of the Academy of Science of USSR V.235 (6):1453-8. 3. Burr H.S. 1972 The Fields of Life. - New York: Balantine Books. 4. Orlov V.I. et al. 1998 The female reproductive system in aspect of the

Doctrine on the dominant, morpho-functional asymmetries and theory of the P. K. Anokhin. The Vestnik of the Russian Association Obstetrician-Gynecologists. 3:65-8 5. Mashansky V.F. 1983 Topography of slot-hole contacts in a skin of the man and their possible role in non-nervous transfer of the information. Archive of anatomy, histology and embryology, V.84(3): 53-8. 6. Maclean P. 1949 Psychosomatic disease and the 'Visceral Brain': Recent developments bearing on the papez theory of emotion. Psychosomatic Medicine, V.11, P.338-53. 7. Gelhorn E., Loofborow J. 1966 Emotions and emotional disorders.M.: Mir, .672 p. 8. Brekhman G.I. 2001 Conception of the Wave Multiple-Level Interaction Between the Mother and Her Unborn Child. ISPPM-Journal. V.13 (1/2). P. 83-93 9. Monk C. et al. 2003 Effects of Women's Stress-Elicited Physiological Activity and Chronic Anxiety on Fetal Heart Rate. J Dev Behav Pediatr. V.24 (1):32-8. 10. Brekhman G.I., Lapochkina N.P. 1998 Psycho-sympathetic parities at the women interrupting pregnancy. In: Sano thinking, theory and practice. M., p.43-8 11. David HP et al. 1988 Born unwanted: Developmental Effects of denied Abortion.. New York: Spring Publishing Company. Prague, Avicenum. 12. Emerson W. 1989 Psychotherapy with infants. Per- and Perinatal Psychology J. 3, 190-217. 13. Janus L.1994 Fruhes Verhangnis und seine Folgen. In: Ungewolte Kinder. Hasing H., Janus L. (Eds). Sachburg: Rowolt Taschenbuch Verlag GmbH: 202-7. 14. Zakharov A.I. 1994 What the parents are necessary to know before birth of the child. SPb: Obrazovanie.68 p. 15. Kaplan H I. et al. 1994 Kaplan and Sadock's Synopsis of Psychiatry. 7th Edition. Williams*Wilkins. Baltimore-Tokyo. P 731-51. 16. Huizink A.C. et al. 2003 Stress during pregnancy is associated with development outcome in infancy. J. Child Psychol.a. Psychiatry. V.44

(6): 810-818. 17. Beversdorf D. Brief report: macrographia in high-functioning adults with autism spectrum disorder. J Autism Dev Disord. 2001 Feb; 31 (1):97-101. 18. Makovsky M.M. Linguistic genetics. M., Science., 1992. 19. **Gariaev** P.P.et al. 1994 Verbal - semantic modulations of resonance Fermi -Past- Ulam as methodology of entry in command-image structure of genome. J. of Russian Physical Idea. 1-4:17-28 20. **Gariaev** P.P 1991 Wave genetics as a reality. http://Skyzone.ru/tech/gariaev01/html

Chapter 5

- 1. Lorenz K. 1966 On Aggression. London. 2.. Dolnik V.R. 1993 Disobedient baby of biosphere. M.: Moscow State University.250p. 3. Protopopov A. 2000 Treatise about love, as it understand uncanny tiresomer 2nd Edition. 4. Hendrics TJ et al. 2003 Pet-1 ETS Gene Plays a critical role in 5-HT Neuron development and is required for normal anxiety-like and aggressive behavior. Neuron. Jan 2003: 37(2): 233-47. 5. Hettema J. M. et al. 2003 A Twin Study of the Genetics of Fear Conditioning. Arch Gen Psychiatry.60:702-8. 6. Grof S. 1985 Beyond the Brain: Birth, Death and Transcendence in Psychotherapy. State University of NJ Press. 335 p. 7. David HP et al. 1988 Born unwanted: Developmental Effects of denied Abortion. New Jork: Sping Publishing Company. Prague, Avicenum. 8. Zakharov A.I. 1994 What the parents are neccesary know before baby's born. SPb.: Obrasovanie. 68 p. 9. Verny, T.R. 1992 Obstetrical Procedures: A Critical Examination of their Effect on Pregnant Women and their Unborn and Newborn Children APPPAH-Journal.V. 7 (2):101-12. 10. Emerson W.1998 The Vulnerable Prenate. ISPPM- Journal.10: 5-18. 11. Sonne J 2000 Abortion Survivors at Columbine. Journal of Prenatal and Perinatal Psychology and Health 15: 3-18. 12. Janus, L. 1996 The Prenatal Experience: Psychotherapeutic Situation and Possibilities for Prevention. ISPPM- Journal, V. 8(1): 29-38. 13. Häsing H, Janus L (Eds.) 1999 Ungewollte Kinder. Text-o-phon, Wiesbaden. 286p. 14. Ney PG 1998 A Consideration of Abortion Survivors. ISPPM- Journal. 10: 19-
- 28. 15. Watts Ch., Zimmerman C. 2002 Violence against Women: global scope and magnitude. The Lancet. V.359. April 6,2002.P. 1232-7. 16. Cohen A. 2000 Excess female mortality in India: the case of Himachal Pradesh. Am. J. Pub. Health. 90:1369-71. 17. East-West Center Program on Population. 1995 Evidence mounts for sex-selective abortion in Asia: Asia-Pacific population and policy report no
- 34. Honolulu: East-West Center. 18. Coale AH. 1991 Excess female mortality and the balance of the sexes in the population. Popul Dev Rev 17:517-23. 19. Sen A. 1992 Missing women BMJ. 304:587-
- 88. 20. Chamberlain D 1998 The Mind of Your Newborn Baby. North Atlantic Books, California. 240 p. 21. D'Oliveira AFPL. et al. 2002 Violence again women in the health-care institutions: an emerging problem. The Lancet. V.359. May 11. P.1681-5. 22. Monk, H. 1996 Obstetric Anesthesia Abuse:
- Delivering Us from Evil. Pre- and Perinatal Psychology J. 11 (1), 31-54. 23. Ingalls, PMS 2001 Born to Live: Preemies and Multiple Birth Traumas. ISPPM-Journal. V.13(1/2):99-110. 24. Ingalls, PMS 1996, Derepression and Reprocessing: Food for Thought from a Patient. ISPPM-Journal, V.8 (4): 433-
- 50. 25. Humes E. 2000 Baby ER. NJ: Simon & Shuster. 26. Jewkes R. et al 2002 Rape of girls in South Africa. The Lancet. V.359 January 26. P.319-20. 27. Campbell J. 2002 Health consequences if intimate partner violence. The Lancet. V.359 April 13, 2002. P.1331-6. 28. Jewkes R. 2002 Intimate partner violence: causes and prevention. The Lancet. V.359 April 20, 2002. P.1423-9. 29. Brennan P.A. et al 2002 Relationship of Maternal Smoking Pregnancy with Criminal Arrest and Hospitalization for Substance abuse in Male and Female Adult Offspring. Am. .J. Psychiatry. 159(1):P.48-54.30. Church S. et al. 2001 Violence by clients towards female prostitutes in different work settings: questionnaire survey. BMJ. 322: 524-5. 31.

Irving, M. 1997 Sexual Assault and Birth Trauma: Interrelated Issues. APPPAH-Journal. V. 11(4), 215-50. 32. Poirier L. 1997 The Importance of screening for domestic violence in all women. The Nurse Practitioner. May 1997. V.22. P.105-22. 33. Grynbaum M. et al. 2001 Domestic violence: prevalence among women in a primary care Center. IMAJ. V.3: 907-10. 34. Umnau J. et al.2002 Atypical autonomic regulation in perpetrators of violent domestic abuse. Psychophysiology. 39:117-23. 35. Garcia-Moreno C. 2002 Dilemmas and opportunities for an appropriate health-service response to violence against women. The Lancet. April 27, 2002. 359:1509-14. 36. Gazmararian J. et al.1996 Prevalence of violence against pregnant women. J.A.M.A. 275:1915-20. 37. Bewley S. 1997 Domestic violence and pregnancy. Brit. J. Obstet. Gynaecol.104:528-31.38. Koenig L. et al. 2002 Violence during pregnancy among women with or at risk for HIV Infection. Am. J. Public Health. V.92(3):367-70. 39. Norton L. et al. 1995 Battering in pregnancy: An assessment of two screening methods. Obstet. Gynecol. V.85(3):321-5. 40. Pool G. et al 1996 Trauma in pregnancy: The role of interpersonal violence. Am. J. Obstet. Gynecol. 174:1873-8. Wilson L.M. et al., 1996 Antenatal psychosocial risk factors associated with adverse postpartum family outcomes. Can. Med. Assoc. J. 154(6):785-90. 42. Gilliland, A. L. et al. 1999 The Effects of Domestic Abuse on the Unborn Child. APPPAH-Journal. V.13(3-4), 235-46. Venis S., Horton R. 2002 Violence against women: a global burden. Lancet. 359: 1172.

Conclusion

1. Bahat, A. et al. 2003 Thermotaxis of mammalian sperm cells: A potential navigation mechanism in the female genital tract. Nature Med.9:149-150. 2. Sun, F. et al. 2003 Lack of species-specificity in mammalian sperm chemotaxis. Dev.Biol. 255:423-7. 3. Brekhman G.I., Smirnov K.K. 2001 Water as Energo-informative Connection Channel Between an Unborn Child, Its Mother and Invironment. ISPPM-Journal. V.13(1/2): 93-8.. 4. Prangishvili I.V. et al. 2001 Genetic structures as a source and receiver of the holographic information. Gariaev P.P. 1994 The Wave genome. M.: Obschaja Polsa. 279 p. 6. Gariaev P.P.1997. Wave genetic code. M.: Isdatcenter. 107 p.

About the authors

- **Grigori I. Brekhman** (Israel, Russia), M.D., Ph.D., D.Sc., Professor of the Obstetrics and Gynecology Department at the Medical State Academy, Ivanovo, Russia. Founder (1997) and President (from2001) Honorary President of the Russian Association for Perinatal Psychology and Medicine (RAPPM) and Ivanovo APPM(1994). Author more than 250 publications and monograph "Uterine Myoma: psychosomatic aspects, conservative therapy and prophylaxis".
 - 3. **David Chamberlain** (USA), Ph.D., psychologist, researcher, one of the Pioneers of a new field of knowledge prenatal and perinatal psychology, Author more than 40 papers and the book " The Mind of Your Newborn Baby ", published in USA by the third edition and translated on ten languages. One of the Founders (1983) Associations Pre and Perinatal Psychology and Health (APPPAH), with 1991 on 1999 its President. He is the founder and editor a web site of APPPAH: www.birthpsychology.com.
 - 5. William R. Emerson (USA), Ph.D., psychologist, psychotherapist, Pioneer in the field of pre and perinatal psychology. He is among the first in the world to develop prenatal and perinatal treatment methods for infants and children, is a renowned expert in treatment methods for adults, and is recognized world-wide for his contributions. He is the author of six books, 15 journal articles, and also of four video programs. He has held university appointments as Honorary Faculty, Director of Clinical Training, International Lecturer, and Assistant Professor of Psychology. As an acknowledgment of his contributions to psychology, he received an honorary fellowship from the National Institute of Mental Health.
 - 7. **Peter G. Fedor-Freybergh** (Sweden, Czech Republic), M.D., Ph.D., Professor Pioneer and modern leader in prenatal and perinatal science, obstetrician-gynecologist, psychiatrist, children's psychiatrist, psychotherapist, professor on psychoneuroendocri-nology; the professor of faculty of children's psychiatry of Charles University in Prague. The Founder and Editor-in-Chief of the International Journal of Prenatal and Perinatal Psychology and Medicine. The Editor-in-Chief of Journal Neuroendocrinology Letters. The author more than 100 books and papers. With 1983 on 1992 President of the International Society for Prenatal and Perinatal Psychology and Medicine (ISPPM), now Life Honourable President ISPPM.
 - 9. **Mirta Grinbaum** (Israel), M.D., resident of Department of Family Medicine of the Faculty of Health Sciences at Ben Gurion University in Beer Sheva, Israel. Co-authors: Dr **Selma Weinstock-** assistant; Dr **Amalia Levi** epidemiologist, Dr **Aya Biderman** the Deputy Head of the department of Family Medicine, and the Director of Yud Alef Clinic of Klalit health services, Beer Sheva.
 - 10. **Stanislav Grof** (USA), M.D., Ph.D., Professor, psychiatrist with more than forty-five years of experience in research of non-ordinary states of consciousness. He is a Professor of Psychology at the California Institute of Integral Studies (CIIS) in San Francisco, conducts professional training programs in holotropic breathwork and transpersonal psychology, and gives lectures and seminars worldwide. He is one of the founders and chief theoreticians of transpersonal psychology and the founding president of the International Transpersonal Association (ITA). Author more than 100 papers and 15 books among its are the books LSD Psychotherapy; The Adventure of Self-Discovery; Beyond the Brain; The Cosmic Game; Psychology of the Future
 - 11. **Paula M.S. Ingalls** (USA), Published Freelance researcher in pre and perinatal psychology, neurosciences, clonning, prematurity, and related topics. Papers presented in Europe, Russia, the USA. Published in Germany, 17the Netherlands, Russia, and the USA.
 - 13. **Marina V.Kuligina** (Russia), M.D., Ph.D. D.Sc., Manager of the Department medical-social research Ivanovo Research Institute of Motherhood and Childhood of Health Ministry, Russia. Author more than 100 publications. She is researcher of health of newborn and babies.
 - 14. **Janus, Ludwig** (Germany), MD, psychoanalyst and psychotherapist. Researcher in prenatal psychology and psychohistory. Past-President of the International Society for Pre- and perinatal Psychology and Medicine (ISPPM) and President of German Society for Psychohistory. Author more than 100 publications including 10 pooks.
 - 16. **Lubov V.Posyseeva** (Russia) M.D., GrandPh.D., D.Sc., Professor. Director of the Ivanovo Research Institute of Motherhood and Childhood of Ministry of Health, Head of the Department of Obstetrics and Gynecology Iva-

novo State Medical Academy. Author more the 350 papers and books. Academician of the Academy Medical Science and New York Academy of Science. Manager of the Leading Science Medical School in Russia.

- 18. **John C. Sonne**, (USA), M.D., psychoanalyst and family therapist, has written extensively on communication systems, abortion and adoption. He is Clinical Professor of Psychiatry, Robert Wood Johnson Medical School, N.J.; Honorary Clinical Professor, Jefferson Medical School, Philadelphia; Clinical Associate, University of Pennsylvania School of Medicine; and Senior Attending. Department of Psychiatry, Pennsylvania Hospital, Philadelphia, PA.
- 20. **Jon RG Turner** (NL), Co-Founder: Whole-Self Discovery & Development Institute, Inc.; Pioneered Pre-birth Memory Therapy; discovered the Emotional DNA; taught Whole-Self Psychology, Philosophy & Education in 27 countries. He published 40 articles. Two term elected Vice-President ISPPM; an Executive Board Member; 200 of the co-editors of the ISPPM Journal; English Language Consultant Neuroendocrinology Letters.
- 22. **Troya TGN Turner-Groot** (NL), Co-Founder: Whole-Self Discovery & Development Institute, Inc.; Pioneered Pre-birth Memory Therapy; discovered the Emotional DNA; taught Whole-Self Psychology, Philosophy & Education in 27 countries. She published 40 articles. Founder of the ISPPM-NL Chapter; International Consultant & writer; Dutch Association for Prenatal Education. Her book 'Seeking a Miracle' is translated in several anguages.
- 24. **Thomas R. Verny** (Canada), M.D., Ph.D., Professor, psychiatrist, the adjunct professor of prenatal and perinatal development at St. Mary's University, Minneapolis, Minnesota, and is on the faculty of the Santa Barbara Graduate Institute. He is a Founder of the Prenatal and Perinatal Psychology Association of North America (APPPAH), which he served as President for eight years. The author of thirty-three papers and articles, and five books: the international bestseller "The Secret Life of the Unborn Child" (with John Kelly), "Love Chords" (a compilation of classical music for pregnancy, with Sandra Collier) and others.

Our thanks to Jon Turner, Dora Turyansky, Mark Volchkov and Nikol Volchkov for the help in the preparation this book to the publication in English