Vienna Symposium

2001

The Significance of the Earliest Phases of Childhood for Later Life and for Society

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Edited by Ludwig Janus

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Adress:

ISPPM - Sekretariat
c/o. A. & J. Bischoff
Friedhofweg 8

D-69118 Heidelberg
Germany

Tel. 0049 6221 892729
Fax. 0049 6221 892730

e-mail: secretary@isppm.de
web: http://www.isppm.de

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The Vienna Symposium 2001 on the Significance of the Early Phases of Childhood for Later Life and for Society

Introduction
In June 2001, the Vienna Academy for the Future and the Movement to Nurture Warmheartedness from Japan organised a scientific symposium entitled **"Peace in Motion"**, chaired by Prince Alfred of Liechtenstein and Kenzo Kassai, on the significance of the early phases of childhood for later life and society as a preparatory conference for the World Summit for Children. Experts on early human development were invited by Ludwig Janus, President of the International Society of Prenatal and Perinatal Psychology and Medicine (ISPPM), to present short statements about the formative factors that shape early development from the time before birth until the first few years of life, focusing on the significance of the prenatal period and the time during and after birth. These statements were then discussed, and the most important points were summarised in the following resolution. An explanatory commentary was also added (Annex). The experts' statements are presented in the second part of this documentation on the symposium.

Vienna Resolution 2001
The significance of the early phases of childhood for later life and for society

Basic statement

Human life begins in the womb. That means that fully human life, personal, psychological and relational life begins before birth. The foundation of our basic feelings of security and trust are laid down during this period. It is especially important that society should support future parents in order to help them give their child the love necessary for its development. Being a parent begins with the desire to have a child - at the latest at conception. This is the starting point of parents' relationship with their child.

Basic facts

Scientific observation has now shown that there is a developmental continuity between life before and after birth. These early experiences influence the holistic development of the growing child. The basic structures of our central nervous system are modelled by the interaction of our genes and early environmental factors. The bond between parents and the child in the womb is one of these factors. This is the basis upon which later attachment builds.

Stress that parents are unable to cope with may have harmful effects upon the child. Unborn children can therefore be adversely affected in many ways, and every effort should be made to allow them a healthy development. The basic values of a society are transmitted to the child through its experiences during the earliest phase of life.

The development of inner peace requires continuity in early formative relationships. This starts during the prenatal phase of life, includes birth and continues in the stable relationship of the child to his or her mother and father. Successful integration into family life, kindergarten, school, society and the world as a whole builds upon this basic trust.

Recommendations to society

These suggestions are targeted at all members of society throughout the world. However, they are particularly addressed at health and community services, ministries of education, teachers, politicians, economists and doctors, especially obstetricians and gynaecologists, midwives, psychologists, psychotherapists and everyone engaged in cultural studies.

- Revise education programmes to include knowledge of early human development, both psychological and physical; relationship skills; a better understanding of the roles of men and women; parenthood and the parent-child relationship and personal life-time development
- Enable future parents to give their child room for its emotional development before birth and space for its arrival; creation of economic security for young families
- Be aware that problems in early development are expensive for society, whereas early preventative measures are cheap
- Be aware that behaviour begins before birth and that prenatal experience influences subsequent development
- Be aware that preventing early trauma is a prerequisite for the foundation of a peaceful society
- Provide well-guided groups to support future parents and give them adequate information
- Help parents to develop a positive, communicative and educational approach towards their child from the prenatal period onwards
- When necessary, support and counsel mothers and fathers during pregnancy
- Re-establish the true value of pregnancy and birth
- Proactively facilitate and encourage more positive attitudes towards women, especially during pregnancy and towards having children
- Study the significance of prenatal and perinatal feelings, fantasies and motifs in culture

Some thoughts for future parents

- Be aware that fully responsible parenthood begins with the desire to have a child - at the latest at conception!
- Take time to establish an inner relationship with your child in the womb before birth
- See and feel your child as a coactive and unique human being
- Take time for yourself and your relationship with your partner
- Make use of help and support, e.g. by having contact with other pregnant women and with midwives
- Take a look at your own prenatal period and birth
- Take a look at your relationship with your parents and your own role as mother or father
- Look critically at the expectations placed upon you by present-day social demands
- Use the development and arrival of your child as an opportunity to refocus your own life
- Take a look at your own life-history and your plans and the role that your child is to play in them
- Use relaxation and cognitive coping strategies to avoid being overwhelmed by stress
- Learn from your growing child to take time, to be patient and to trust in the processes of life
- Don't try to be an ideal parent but just the one you can be.

PEACEinMOTION
The Scientific Council Symposium
Schönbrunn Palace, 19^{th} June 2001

Annex

Preliminary remarks

The recommendations made in the UN programme "Action for a Culture of Peace for the Decade" largely focus on traditional school education. However, elementary emotional and relational education and imprints before that need to be emphasised, particularly in the period up until the age of 3 and at kindergarten. The present draft resolution emphasises the beginning of life.

New insights into early human development

In the course of the past few decades, intrauterine film and ultrasonographic scans have drawn the public's attention to the life and behaviour of the child before birth. This has also led to an increasing awareness of the child's experiences during birth and in the postnatal period. "Gentle birth" and "rooming in" were the catch phrases for this development. In this context, a new way of dealing with pregnancy and birth developed, whereby the focus was on self-determined birth and the prenatal relationship with the child. A further new development is marked by the so-called crying clinics and the new baby therapies, which provide the baby with psychological help to deal with stress experienced during the prenatal period and during birth.

Since the 1950s, empirical science has gathered extensive knowledge about the negative repercussions of prenatal stress. Studies have shown that stress experienced by the mother during pregnancy may lead to a greater susceptibility to disease and to neurotic, psychosomatic and dissocial disorders in both childhood and adulthood. Prenatal deficiencies such as malnutrition may also result in a later disposition towards hypertension or diabetes. It has repeatedly been observed and reported in various psychotherapeutic settings that traumatic experiences from the prenatal and perinatal period may be re-enacted during stressful situations. They are thus stored in the preverbal memory of experience and in the physical memory.

The well-known results of learning research in development psychology, which show that prenatal experiences and sensory perceptions are "retained" and may be recognised after birth, such as songs or stories heard before birth, fit in with this. The findings concerning the significance of environmental influences on cerebral development, prenatal synapse formation and gene expression highlight the formative influence of prenatal experience. Furthermore, psychohistoric research shows that the conditions of collective primary socialisation during the prenatal period and the first few years of life have a great impact on the overall atmosphere and on a society's view of life and are reflected in its own particular rites and myths. Poverty and the suppression of women are particularly significant in this context.

Social significance and resistance

Despite the more or less unambiguous results of empirical research and the findings of case studies in psychotherapy, there is social resistance to prenatal and perinatal

psychology as such, which has hampered and even prevented the practical consequences up to now. The assumption that there are emotional and psychological experiences before and during birth seems improbable to many. Due to the great significance of the knowledge that exists in the field of prenatal and perinatal psychology in terms of health policy and society, it is important to understand this resistance.

It is largely connected with the fact that, as a result of economic and social need and a lack of knowledge on the part of parents and doctors, early socialisation was highly traumatic in historical societies and may continue to be traumatic even today. Thus, in Germany, newborns used to be regularly separated from their mother for several days after birth and left in agonising isolation in so-called infant rooms. The incessant crying of the newborn babies was thought to be beneficial for the functioning of their lungs. Later childhood was largely governed by beatings and strict constraints. Pregnancy, too, also involved considerable stress due to the fears and feelings of insecurity of the women as a result of the existential risks connected with giving birth and the economic worries. All this meant that devoting attention to the child in oneself, let alone the baby that one once was, was distorted by a rigid layer of traumatic experiences. Psychoanalysis and psychotherapy, which developed over the course of a century and which aims to integrate early feelings, long had to face social resistance similar to the resistance faced by prenatal and perinatal psychology today.

However, in Germany, in particular, early socialisation has been able to greatly improve and become more relationship-based as a result of the mutual interaction with growing economic and social security and under the positive influence of Western democracies. This has been accompanied by an increasing ability to deal with conflicts and to live in a democracy and the decline of the earlier culture of authority and warriors. On the basis of this and of the observation of comparable developments in other countries, we can see what is important for a culture of peace and non-violence for the children of the world: The decisive factor is an improvement in children's position from the beginning of their prenatal life onwards so that they are less traumatised in their early development than has been the case in the course of history so far.

In Germany, the level of traumatisation has decreased over the past 10 years to such an extent that the idea of emotional and psychological experience before, during and after birth is no longer automatically rejected because the perception of early traumas of our own from this period would be too threatening. This enables us to deal with children more empathetically at the beginning of life when the foundations of our ability to deal with conflicts and to live with other people are laid. This also allows guidelines to be developed for a new way of dealing with parenthood, pregnancy and birth, which is fundamental for the objectives of the UN initiative. In this context, the insight gained in the field of psychotraumatology is significant.

Psychotraumatology

In the past few years, our knowledge about the significance of traumatic experiences in terms of development psychology has grown considerably. This is particularly important for our understanding of the child before and during birth, because it is fundamentally dependent on the mother during this period and hence particularly vulnerable. Impairments can easily lead to existential risks and a fight for survival. Of decisive

importance for our ability to cope with stress and to deal with experiences is the security experienced in a supportive relationship. As we now know from the study of unwanted children and their tormenting feelings of worthlessness and their tendency to have negative attitudes, this particularly applies to the period of life before birth. Conversely, impressive results have been obtained on how the way in which children view life and their social skills can be dramatically improved if they are shown affection before birth.

Consequences

The way in which we deal with parenthood, pregnancy and birth is one of the central paradigms and stylistic elements of societies because it not only reflects the way in which a society sees life and its basic values, but also creates and shapes these views and values.

We have to face up to the fact that established antenatal care still largely regards the child as a biological entity without any rights as a being that has feelings and experiences. This corresponds to a tradition of parenthood and upbringing that focuses on the right of disposal over children and less on children's autonomy and their right to a relationship of solidarity. In this sense, parenthood and education was of a largely normative nature.

The UN initiative asserts basic values of humanity for children too. It is important to ensure that such values are not taught to small children verbally, but through actions and relationships. This applies to an even greater extent to the way in which we deal with children before birth. We are thus called on in our ability to teach these values directly in our dealings with children and, conversely, to consider what values are conveyed in our behaviour and relationships towards children. What does a child learn about basic human relationships and its own individual value if, after being born prematurely, it lies in an incubator for several weeks isolated from human contact and in a state of sedation, for example? We need to begin by becoming aware ourselves of the deep sense of depersonalisation and lack of relationships of such a situation if we want to convince the child of a humane world. On quite a different level, this also applies to traditions in which lively sensuality was taboo and depersonalisation in sensory and physical terms was thus introduced into early relationships, as reflected in a rough and non-sensual way of dealing with children. If this needs to be considered for infants and small children, it is all the more true of our dealings with pregnancy and birth, during which affective distortions in a culture are lived out very emphatically and unconsciously, as shown by the fact that, as mentioned above, newborns in Germany and in Central Europe as a whole were taken away from their mother and left to cry.

As a necessary condition and a source of energy to make the way in which we deal with children more humane, the parents' relationship has to be based on a truly mutual relationship of love and respect that allows the parents to assume their parental responsibility and be supportive. Our socialisation with its one-sided focus on intellectual and physical performance neglects this dimension in a highly problematic way. The values of the outdated hierarchical warrior cultures still persist here. A crucial value in socialisation and education must therefore be the ability to form and maintain human relationships, in which the values mentioned in the UN initiative such as

peace, respect, equality, democracy, understanding, tolerance, solidarity, participatory communication and the free exchange of ideas can be realised.

It is usually assumed that this dimension of life is conveyed in the arts subjects. However, this is usually done in an unpsychological and abstractly "intellectual" manner that fails to address the specific emotional dimension of human relationships that is vital in the relationship between partners and parents. The fact that so many relationships fail and the divorce rates are so high should be a warning to us here. In this context, a banal economic factor also plays a role in that, in the long run, society is unable to pay for the costs of the failings caused by social misery and poverty in childhood development at the beginning of life, in particular, in the form of somatic, psychosomatic, neurotic and dissocial disorders. In addition to intellectual performance and sport, we therefore require a third dimension of school education concerning emotional and relationship-based individuation that helps the individual to develop an understanding for him- or herself and for his or her own options in life as a man or a woman, as a mother or a father.

This would also enable us to look at and understand how we came to be who we are, something that is currently only possible in the modern psychotherapies in emergency situations in the event of mental illness. In the course of the last century, a wealth of information has been accumulated concerning the foundations of human individuation, and this should find its way into general education too. Only by taking such a broad approach can the objectives set by the UN initiative be achieved in a more relationship-based way of dealing with children before birth.

II. The Statements of the Experts

Intoduction

By invitation of the International Society of Prenatal and Perinatal Psychology and Medicine (ISPPM), 15 leading experts formulated short statements on basic issues and aspects of early development; these statements were circulated before the symposium and formed the basis of comments and discussions during the symposium. This part of the work in preparation for the symposium was carried out by Ludwig Janus, President of the ISPPM. The statements are presented below. The main idea behind these invitations was for leading experts from universities and practice to present the important areas of early development during the prenatal period and during and after birth.

The papers are arranged such that the new aspect of the inclusion of the prenatal period and birth is presented first under the title **Basic Aspects**. The papers by Peter Fedor-Freybergh, Terence Dowling and Ludwig Janus provide an overview of the new area of research in the field of prenatal psychology. Specific results of research on the decisive impact of prenatal influences are presented in the papers by Peter Hepper and Bea Von den Bergh. Neurobiological aspects are presented by Gerald Huether, and József Vas outlines ideas on interactive neurobiology. This newly acquired knowledge calls for a new, more relationship-oriented way of dealing with the problem of premature birth, as developed by Elvidina Adamson-Macedo.

This topic then leads us on to **Primary Prevention**, an area of particular importance, because children's emotional relationship to themselves and the world and their basic behavioural patterns are determined at the beginning of life on a preverbal level; prevention can therefore be much more effective here than it is during later stages of life. The paper by Sakamoto Shoichi on the alarming rate of domestic violence shows the urgent need for preventive action to be taken. The various methods and levels of prevention are presented in the papers by Thomas Müller-Staffelstein, Ludwig Janus and Jenö Raffai. The way that an individual's ability to form ties is impaired by early disturbances is discussed by Helmut Niederhofer, and the midwife's point of view is presented by Eva-Maria Markfort. The most important consequences of the experience of psychotherapists for therapy and prevention is presented by Heiner Alberti.

The recognition that young parents need to be supported and assisted in developing competence is implemented in the **New Parenting** project presented by Sigrun Haibach under the heading "Parenting Is Something You Have to Learn". Gerda Verden-Zöller has developed a very specific programme in this context to promote the physical level of the mother-child relationship. Finally, Klaus Evertz gives an insight into the **Cultural Significance of Early Childhood**, particularly the prenatal roots of art.

In addition, there are also four statements by experts who were not able to attend the symposium in person. Thomas Verny looks at the significance of prenatal psychology for future healthcare policy. Rupert Linder shows new ways of dealing with impending premature birth in order to prevent it, and Lucio Zichella describes ways of encouraging the prenatal mother-child relationship. Finally, on the basis of new insight into the psychology of early development, Gaby Stoecken and Rien Verdult have drawn up a

"Charta on the emotional rights of the prenatal and the newborn child".

The statements are rounded of by two papers from the workshop for pregnant women, fathers-to-be and young parents entitled "Communicate with the unborn - Encounter your child"; the first is by Gabriella Ferrari on prenatal ties, and the second by Gino Soldera on prenatal education, both of which present the new ways of supporting future parents that have been developed in Italy.

1 Basic Aspects of Early Development

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

Peter G. Fedor-Freybergh

Correspondence to: Professor Peter G. Fedor-Freybergh, M.D., Ph.D,
Mail Boxes Etc 377, Birger Jarlsgatan 39, S-111 73 Stockholm, Sweden,
Tel.: 0046 866 40109, Fax.: 0046 866 40771, E-Mail: editor@nel.edu

Keywords: Primary prevention; health; continuity; prenatal care; pregnancy; risk pregnancy; learning process; psychoneuroendocrinology

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. We need to extend the standard definition of life's continuum to include the prenatal experience, which is part of life's continuum, helping to shape us and determine 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 a chance for self-realization. For the rest of us this encounter with the unborn is the chance 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.

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, 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 with an effort to look for and find a common language in order to diminish semantic misunderstandings as well as 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 the dialogue. This dialogue begins at conception and continues through the prenatal, perinatal and postnatal stages of life. It influences the outcome of the birth and the way the individual during its childhood, adolescence and adult life will treat other people as well as its ability to love and respect others and to make commitments.

The prenatal stage of life represents a unique opportunity for the primary prevention of psychological, emotional and physical disorders in later life. [1], [2] 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.

Pregnancy can be conceived as an active dialogue between mother and child. [3]

This dialogue is not limited but is enlarged via the dialogue between the mother and the father and the mother's psychosocial 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 psychoneuroendocrinological levels.

I have never heard a mother refer to the child in her womb as "my embryo" or "my foetus." 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." [4] 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 reality 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. The dialogical experience is independent of the degree of morphological development of the child. [2], [6]

There is a strong impact of hormonal, psychological and immunological influences already on the whole embryonal and fetal development.

Birth is 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 and its bonding impact on 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 labour 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 labour and very much his bonding abilities with the child during birth, the prenatal and postnatal periods.

Pregnancy can be considered as the first ecological position of the human being, the womb as the first ecological environment. [7], [8] 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 and are still 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" [9], 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.

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. [10]

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. [11]

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.

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. [12] 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." 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.

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. [13]

Various highly specific biochemical functions (hormones, neurotransmitters 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-ad renal 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. [14]

The intrauterine experience is also a learning process for the child. [15] This learning is a vital prerequisite for survival since it makes it possible for the organism to adapt itself to new circumstances. 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 psychotherapeutical procedures, such as hypnosis, dream analysis, prenatal memories, etc.). 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 [16] 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 socio-cultural environment after birth. The unborn already has its psychological processes which function long before birth; no child is tabula rasa.

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, but it very often needs to be taught. This requires research concerning appropriate socio-pedagogical implementation within the family and in our educational system. 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 World Health Organization (1986) Health Research Strategy for Health for All by the Year 2000. WHO, Genevawould 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.

The ideal child should already be loved prenatally. There should not be unwanted children. Unwanted children are morally threatened and are a moral threat to society. 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. [17], [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. [18]

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. 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.

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. The mother-child dialogue is almost always characterized by a mixture of positive, negative and ambivalent emotions. The 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."

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 firmlyWorld Health Organization (1986) Health Research Strategy for Health for All by the Year 2000. WHO, Geneva 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)World Health Organization (1986) Health Research Strategy for Health for All by the Year 2000. WHO, Geneva 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. [20], [21]

Pregnancy and delivery are not diseases per se, only very exceptionally, but they 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.

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 bWorld Health Organization (1986) Health Research Strategy for Health for All by the Year 2000. WHO, Genevay 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". [22] As Zikmund [23] 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 1974 [24] 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 (a) the constructive integration of the dialectically changing, individually depending conditions with a simultaneous maintenance of the homeostasis of the "milieu interieur," and (b) 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 specificities 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 the world evil in the world.

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, all living things.

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-Exupry: "On ne connait que les choses que I"on apprivoise", ... "Tu deviens responsable pour

toujours de ce que tu as apprivois." [30]

In this way the bonding process is created and feelings of reassurance and well-being are established.

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.

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, primarily between the "humanistic" and "natural" sciences, is reachable. In this journal there has been an interdisciplinary (not to be confused with multidisciplinary) dialogue from the very beginning, which has contributed to tearing down many established barriers to a common ground.

In an issue of the Universitas (Robert Schurz: "Ist lnterdisziplinaritt mglich?" Universitas 11, 1995, 1070-1089), a distinguished German journal for interdisciplinary sciences, a paper was published questioning whether interdisciplinary communication is possible at all. It was a paper with a very careful methodology and which concluded that interdisciplinary communication is a difficult task, probably not attainable but certainly worth aiming for.

I believe that we have succeeded so far because of the use of "prenatal science" as a model for the indivisibility of the "psychological" and "somatic" processes in the continuum of human life, and because the phenomena and processes of the central nervous system and the immuno- and neuroendocrine processes are inseparable have also been put into the praxis. In our journal, the International Journal of Prenatal and Perinatal Psychology and Medicine, psychoanalysis, endocrinology, immunology, developmental psychology, obstetrics and midwifery, just to mention a few, have crossed each other's paths and today we are able to talk together at our congresses and read each other's thoughts in the journal without interpreters.

In order to undertake such 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.

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 in-

tegrative processes within politics, economics,Matjcek Z, Dytrych Z (1994) Abgelehnte Schwangerschaften und ihre Folgen. In: Häsing H, Janus L (eds) Ungewollte Kinder. rororo, Reinbek (pp. 194-199) 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 everyone'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, 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.Matjcek Z, Dytrych Z (1994) Abgelehnte Schwangerschaften und ihre Folgen. In: Häsing H, Janus L (eds) Ungewollte Kinder. rororo, Reinbek (pp. 194-199)

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, 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.

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, Vol. 5, No. 3).

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."

As we have said elsewhere (Int. J. Prenatal and Perinatal Studies, Vol. 4, Nos. 3/4, pp. 155-160), if we want to create a healthy, non-violent, creative human being, society or economic system, we must return to the primary uWorld Health Organization (1986) Health Research Strategy for Health for All by the Year 2000. WHO, Genevarges 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.

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.

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

This also has to do with 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.

The great humanist, writer and philosopher, Vclav Havel, President of the Czech Republic, stressed in his speech in Philadelphia, USA, on July 4, 1994, the uniqueness of the individual, their rights, individual knowledge and the ability to transcend, the individual's respect toward the miracle of being, wonder of the cosmos, of nature and of his own existence. He said "The only reliable way towards coexistence and togetherness in peace and creative co-operation in the multi-cultural world of today must be anchored in human hearts and minds much deeper than any political opinions, antipathies or sympathies, namely, in the human ability to transcend - transcendence as an understanding hand offered to someone close as well as to a stranger, to the human community, to all living beings, to nature, to the cosmos; transcendence as the deeply and joyfully experienced need for harmony with that which is not us, with that which we do not understand, which seems to be distant in time and space, but with which we are secretly in contact because this, together with us, builds one, unique world. Transcendence as the only real alternative to non-existence." (Translation from Czech by the Author)

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

The title of the 11th ISPPM Congress in Heidelberg, 1995, "A Time to Be Born", proposed by the past president of the ISPPM, Rudi Klimek, stressed not only the individual freedom of mother and child to decide the term of labour 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.

Studies of Psychohistory (Lloyd DeMause, Robert MacFarland, Alenka Puhar, et al.), studies in Epidemiology (Matejcek, Dytrych, Hau, et al.) and studies in Psychotherapy (Janus, 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.

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.

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.

In closing I indeed agree with what Andr Gide said, "Everything has been said already, but as no-one listens, we must begin again."

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1.2 Beyond the Birth Trauma

Terence Dowling

Correspondence to: Terence Dowling, Krahnengasse 12, 69117 Heidelberg, Germany, Phone: 0049 6221 21214, Fax: 0049 6221 21214, e-mail: terencedowling@gmx.de

We live in an epoch marred by conflicting interests on a global level. On the one hand, many peoples benefit from technological achievement and the non-stop gain in our understanding of natural processes holds out the promise of even more progress. At the same time, human intervention in and control of natural processes - often for very short term economic benefits - has led to a situation in which we are threatened by ecological catastrophe. For the pessimists, this precarious situation heralds imminent collapse, for the optimists it is but the birth of a new age.

Nowhere is the tension greater than in the area of human reproduction. Modern reproductive technologies are in a position to clone, create, genetically manipulate and select (pre-implantation diagnostic) human life. Human embryos can be frozen and stored for generations. They can be implanted and sustained to term in women who only a few years ago were condemned by age, disease or dysfunction to infertility. Invariably these 'manufactured' babies are then delivered by Caesarian section.

Prenatal diagnostic (primarily ultrasound and amniocentesis) has now become very widespread, even routine in many countries. However, it all too often has the effect of increasing the mother's anxiety. She and her partner are often presented with suspicions, false or inadequate diagnosis. In the case of confirmed 'bad news', they are then faced with medical and moral decisions beyond their competence.

Through prenatal surgery, that is operations carried out on the unborn child, doctors are now able to correct many physical deformities long before the baby sees the light of day. The long term effects of such medical intervention upon the life of the child are of course unknown. The question of whether the foetus requires anaesthetic or not during such operations is quite disputed and unclear.

Advances in obstetrics, neonatal medicine and especially in the care of the premature puts us in a position to maintain human life where only a short few years ago the babies at such risk were doomed. In Germany there are at the moment 58,500 premature births for 780,000 pregnancies pro year. Many of the negative, long term effects of such dramatic perinatal rescues are at last becoming the subject of debate. New life - but at what price? What price financially? What price emotionally?

All this medical-reproductive achievement is occurring in a world in which many pregnancies are unwanted and in which many unborn children are aborted. It can no longer be doubted that many women experience reproductive complications because of a previous abortion. Equally problematic is the fact that many fertile couples in the so-called First World are choosing not to have children. As a result, many populations in the West are declining rapidly.

All these facts concerning modern trends in human reproduction and the important

ethical debates which accompany them receive regular media coverage and are thus more or less common knowledge.

There is, however, a body of scientific knowledge concerning human reproduction which is rarely cited in these debates and is still little known. Especially in the last thirty years, research in **pre- and perinatal psychology and medicine** has revolutionised our understanding of the beginnings of human life.

Pre- and perinatal psychology and medicine is a cumbersome expression. To many it may sound like just another highly specialised branch of modern science. However, that is far from the case. Pre- and perinatal psychology and medicine is the name of an highly interdisciplinary scientific undertaking which has required and fostered international co-operation. It is a forum in which experts from very diverse fields of specialist study come together to share their knowledge in order to shed light on the beginnings of human life.

The most fundamental insight that this work has affirmed may be stated quite simply as follows: human life begins in the womb before birth. Now that may seem perfectly obvious. However, what has been demonstrated is that it is fully **human** life that begins in our uterine home and not simply human biological life or human physical or bodily life. Pre- and perinatal psychology and medicine has revealed in ever greater detail that

human psychological, personal, relational or, if you prefer,

spiritual life begins in the womb before birth.

This is a new fact of life which has radical implications. When fully understood and taken seriously, it has the potential to motivate great personal and social transformation.

One of the first implications of this fact is that the biography of every person living on this planet begins not in kindergarten or at some other date after birth. It begins with conception. Everything which then influences the child during the next nine months and at birth is of significance for his or her postnatal development and health, both physical and psychological. In fact, modern study has shown that everything which influences the development of a human being up to the acquisition of speech and a stable, personal identity, that is, all influences upon the preverbal phases of life, is of enormous significance.

Important contributions to pre- and perinatal psychology and medicine have come from epidemiological studies. Thus it can no longer be doubted that the intrauterine milieu exercises a decisive influence upon the development of various chronic illnesses in adult life, an influence which is then detectable over several generations. For example, a recent study (Moran A et al.: Influence of intrauterine environment on development of insulin resistance. **J Pediatr** 136 (2000) 567-569) has shown that children (aged 10 to 16 years) whose mothers had high levels of blood sugar during the pregnancy have higher blood pressure, higher insulin values and higher Body Mass Index than children of mothers whose blood sugar was normal.

Several studies have now confirmed that male new-borns with a birth-weight under 2500 grams have a 50% higher risk of heart disease in later life, female new-borns under 2500 grams, a 30% higher risk. This finding helps us to understand why, for example, there is such a high incidence of heart disease in many Third World countries like India where all other well-known risk factors are so low. (See Der Speigel, "Entscheidung im Mutterleib".) This statistic underlines the urgency of more detailed study of all the factors influencing birth-weight.

Even more stunning are the studies which have shown that anaesthetics administered to the mother during labour have long-term adverse effects upon her child's behaviour. A recent study (K. Nyberg et al. Perinatal Medication as a Potential Risk Factor for Adult Drug Abuse, Epidemiology, 2000;11:715) has confirmed the results of previous research: high doses of opiates or barbiturates at birth lead to a four- to fivefold increase in the chance of becoming an adult drug addict. A marked increase in drug abuse has been documented in several populations approximately twenty years after doctors began to be liberal with medication at birth.

Several studies of suicide conducted in the 1980's revealed a link with birth trauma. Dr. Lee Salk (1984), for example, discovered that three risk factors, either singly or in combination, were found more frequently in the suicide victims' birth records than in their peers: no prenatal care in the first twenty weeks of pregnancy, chronic disease of the mother during the pregnancy and respiratory distress of the new-born for more than one hour after birth. The work of Prof. B. Jacobson in Sweden has even demonstrated a link between the method of suicide and the type of birth trauma. For example, violent suicide was correlated with mechanical birth trauma (ed. forceps delivery), whereas suicide by asphyxia was correlated with severe asphyxia at birth.

Depth psychosomatic therapy with people who have suffered a verified pre- and or perinatal trauma (according to medical records and/or parental report) underline the knowledge gained from statistics in a dramatic way. During the last twenty years of intensive therapeutic body-work, the following observations have been made:

- Patients who were underweight at birth, whose mothers smoked or suffered stress through too much work, familial conflict or financial burden, or who were under-nourished or had an eating or metabolic disorder during the pregnancy (especially in the first trimester) tend to overweight, to have high blood pressure and high pulse under minimal levels of stress. They compensate stress by over-eating. They tend to form symbiotic, co-dependent relationships. They tend to have a 'helper-syndrome', sacrificing themselves for others. They have difficulty with adult independence and autonomy and with finding and maintaining a healthy distance in relationships.

- Patients whose mothers drank alcohol, took drugs or medication for an extended period of time during the pregnancy (especially in the last trimester) or whose mothers were very ambivalent towards the pregnancy (that is, contemplated or attempted an abortion) tend to extreme eating disorders and underweight (anorexia and bulimia). They compensate stress by narcissistic withdrawal. They tend to be self-aware and self-centred. They often have an extremely negative self-image which they are permanently attempting to correct. They have difficulty in re-

laxing except when alone and unobserved. They are usually quite aware of their ambivalence and inability to form happy and relaxed relationships.

- Patients whose mothers received general anaesthetics during labour (especially opiates and barbiturates) tend towards substance abuse. They often have concentration and awareness disorders. They tend to be ambivalent in relationship but are themselves unaware of the fact. Partners often experience them as absent. They often have a marked inferiority complex and a fear of autonomous and spontaneous action.

- Patients with major birth trauma (long labour, vacuum extraction, forceps or emergency Caesarian section) tend to be withdrawn, trapped in various forms of compulsive behaviour from minor facial ticks to full blown obsession. They tend to be emotionally cold, often very discipline and strict with themselves and sadistic to others. Emotional reactions, when they occur, tend to be explosive. When a birth traumatised baby is not gently helped into the postnatal world, there is a danger that he or she will remain psychologically unborn, that is, stubbornly reacting - against all signs to the contrary - as if still in the womb. This is the core of the autistic position.

Observations such as these have helped to demonstrate that early memories, even the very earliest, those of life in the womb and of birth, the traumatic as well as the good, are stored in the body-self. They are imprinted into our flesh and bones, into the various embryo/foetal/infant tissues as they develop. Early traumatic memories are especially stored in the way we react to stress.

Years of experience in the further education of parents, therapists, doctors and midwives has shown that in order to be able to recognise early trauma and then be able to create a loving environment in which it can heal requires the re-membering of one's own earliest experience. For example, experience has shown that a midwife who has experienced and understood the significance of her own prenatal life and birth is in a position to empathise not only with the mother in labour but also with the child who is also struggling to be born. This empathy creates a completely different atmosphere of competence and trust during the delivery. Equally, a therapist who is no stranger to his own birth trauma is often in a position to form a friendship with an autistic person where all others have failed. This therapeutic friendship can then encourage the person trapped in the foetal position to face the terrible memories of birth and come out of himself.

In summary: the new facts of life, the results of research in pre- and perinatal psychology and medicine, call for radically new concepts of prevention of early trauma. An increase in the financial and personal resources invested in the kindergartens and schools of our world is necessary and good but - for many children - too late. The new facts of life, however, also help us to understand broken babies - the infant or toddler in need of immediate specialist care as well as the broken baby to be found in the so many afflicted adolescents and adults. The new facts of life help us to create therapeutic environments in which people suffering from early trauma can heal.

1.3 Current Status of Research in Prenatal Psychology and Prenatal Psychology-Based Psychotherapy

Ludwig Janus

Correspondence to: Janus, Ludwig, M.D., Kpfelweg 52, D-69118 Heidelberg, Germany, Tel.: 0049 6221 889926, Fax.: 0049 6221 801525, e-mail: LuJanus@AOL.com

Introduction

Scientific insight into the psychobiological reality of the prenatal period and birth was gained on several, initially independent levels. The basis of our knowledge about the biology and physiology of prenatal development is the result of research efforts undertaken in the nineteenth and the first half of the twentieth century, upon which modern prenatal and perinatal medicine was able to build. It was as a result of the research efforts in the field of psychoanalysis in the mid-1920s that the psychological significance of prenatal and perinatal experience began to attract attention, and it did not become acknowledged as a relevant aspect until the last few decades of the twentieth century. An important forum for this development was the International Society of Prenatal and Perinatal Psychology and Medicine (ISPPM), founded in 1972 (www.isppm.de) and the International Journal for Prenatal and Perinatal Psychology and Medicine (first published in 1989, Mattes Verlag, Heidelberg).

Psychotherapists observed that traumatic experiences before and during birth were able to resurface in later life and in the psychotherapeutic setting. It initially seemed that this was only relevant to highly traumatised and severely impaired patients. However, as experience was accumulated, it became apparent that we all have basic and formative experiences before and during birth concerning our being in the world and ourselves. Prenatal experience and prenatal relationships are a significant factor in the way in which we later view life and ourselves (Janus 2001). Support for these studies came from the results of research into the preverbal memory systems (Shacter and Tulving 1995), research into prenatal and postnatal learning and the investigation of prenatal behaviour.

Prenatal psychology

All the results from the various psychotherapeutic settings and from modern baby therapies indicate that the prenatal period of development and sphere of life have a real significance of their own. Sensory organs, motor activity and affectivity function in a differentiated form very early on during pregnancy, and the developing child not only interacts with the maternal organism in bio-physiological terms, but apparently also has a very deep affective relationship with the mother. The regulation of affect and of relationships is not merely an issue that becomes relevant in the postnatal setting, it is also a fundamental element of the prenatal sphere of life (Mikes 1999). We are now able

to present a large body of evidence showing the repercussions of prenatal experiences in the way individuals later feel about their bodies, in their dreams, fantasies, behavioural peculiarities and, under stress, in neurotic, psychosomatic and dissocial symptoms (Emerson 1998).

These observations take on particular significance for cultural psychology inasmuch as they strongly suggest that the prenatal sphere of life and affective experiences during this period form a interpretive backdrop that shapes the way in which we later view life and the world. Our sense of belonging in the prenatal sphere seems to be a model for our later social sense of belonging. In the macrocosm of our cultural creations, we are trying as it were to find and to recreate aspects of the microcosm of the prenatal sphere of life (Rank 1924, 1932).

Perinatal psychology

On the basis of the psychotherapy of adults, children and, more recently, even babies, we can now conclude without doubt that birth is not only experienced at an affective level, but that it is also a major transformative event in the transition from the prenatal to the postnatal sphere. Not only does the organism have to adapt in a fundamental way to the different conditions; the prenatal child also has to relate to the mother that it has only known up until then from the inside in an entirely different way after birth. A decisive factor in managing this transition in both biological and psychological terms is the simultaneous continuity of the organism's functions and of the affective relationship. If this continuity is impaired, it may endanger life at the organic level and may lead to serious risks and impairments at the psychological level. The affective relationship with the child and the emotional feeling of safety and security for the mother during birth are thus of crucial importance (Veldman 1994).

Changes in later life may repeatedly trigger the experience of birth and in some cases cause traumas to be re-enacted. At the same time, as the first experience of transformation and of coming through from one sphere of life to another, the experience of birth forms an elementary model for our later ability to find transformative and creative solutions to overcome conditions and situations in life in which there appears to be no way out.

Of importance in terms of cultural psychology is the fact that the experience of birth is a major factor in human rites of transition at all cultural levels. Against the backdrop of the transition from one sphere to another during birth, transitions in later life, particularly puberty, typically acquire dramatic and comprehensive importance for the individual as the basis of the relevant initiations. A particular feature of humans appears to be the "prematurity" of birth, in other words the fact that human babies are very immature when they are born and are highly dependent on parental help when they arrive in the world. The first year of life has also been referred to as an "extra-uterine early year". Parents attempt to some extent to replace the mother's womb, which has been lost too soon, by the social uterus of the family, and social institutions offer similar protection later in life.

Psychotraumatology

Extensive results are available showing that prenatal stress can considerably impair individuals at the physical and emotional level during their entire life. Not only diseases such as hypertension, diabetes, obesity etc. may be caused by prenatal deficiencies (Nathanielsz 1999); neurotic, psychosomatic and dissocial disorders may also be the result of prenatal deficiencies and impairments. In this context, it is significant that even a "normal" birth may constitute a stressful trauma if prenatal impairments or weaknesses exist. In recent years, our knowledge of the neuropsychology and psychology of traumas has grown considerably. We are now able to very precisely reconstruct the details of what happens when a trauma occurs and what the methods of dealing with it are. As we are never again at such risk during our lives as in the elementary state of dependency before and during birth, this trauma research is particularly important for prenatal and perinatal psychology. What used to be rather intuitive knowledge about the repercussions of traumas before and during birth can now be observed and categorised much more precisely (Hochauf 2000; Unfried 2000). The experience of being unwanted and of violence is of particular importance in this context (Levend and Janus 2000).

Social consequences

Our newly acquired knowledge in the field of prenatal and perinatal psychology is not only significant in connection with psychotherapy and antenatal care, it is also of fundamental importance due to the significance in terms of cultural psychology of our preverbal early experiences as the backdrop for the way in which we later view life and the world. The emotional climate of a society and its members' ability to form relationships and to deal with conflict are highly dependent on the degree of security, support and relatedness that is present during pregnancy, birth and the child's arrival in the world. A decisive factor in this context is a deeper understanding of parenthood and the parent-child relationship. An important consequence of this is that considerable time and effort needs to be devoted to teaching schoolchildren relationships, affect regulation and the roles of partners and parents in order to ensure and develop the future of the basic human qualities in our societies.

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1.4 Prenatal learning: building for the future

Peter G Hepper

Correspondence to: Professor Peter Hepper, Ph.D., Fetal Behaviour Research Centre, School of Psychology, The Queen's University of Belfast, Belfast BT7 1NN, Northern Ireland, Tel: 0044 1232 274230, Fax: 0044 1232 664144, e-mail: p.hepper@qub.ac.uk

Abstract: Studies reveal that far from being a by-product of development, the ability of the fetus to learn is crucial for its subsequent development and behaviour and reveal the importance of the prenatal period for the individual's development and forming their minds.

Prenatal learning: building for the future

One of the major problems for the study of development in general is that the prenatal period has often been overlooked. The custom in Western Society is to give individuals a birth date of zero when they are born, the implication being that birth is the start of life. I understand this is not the case in certain Eastern cultures where individuals are given an age of one when they are born. This seems to acknowledge the importance of the prenatal period for development. Moreover the importance attached to the prenatal period is perhaps reflected by the practices adopted, e.g. the development of relaxation clinics over 1000 years ago for pregnant women, that have arisen in these cultures.

Scientists have themselves contributed to this ignorance of the prenatal period. For many years studies of the new-born infant concluded that new-born infants could do very little other than a few rudimentary reflexes. Indeed, in 1930s there was debate over whether the new-born could hear, and even as late as the 1960s some concluded that new-borns did not respond to sound as they were unable to hear at birth. We now know that the new-born is not an unresponsive, passive organism but rather possesses a number of, albeit immature, abilities but essentially has every sense adults have; is able to learn, and; can exhibit quite complex modes of behaviour. This of course led to the question of when do these abilities start? Yes, it is logically possible that they start at the moment of birth: all of a sudden as the child is born its learning, memory and sensory abilities switch on, but this is somewhat unlikely. It is more likely these that abilities begin at some time during the prenatal period, before birth. Indeed many studies have now confirmed that the fetus moves and begins to sense its environment in utero. My concern here is with the ability of the fetus to learn.

Whether the fetus has the ability to learn has attracted interest for many thousands of years. Two questions need to be answered: can the fetus learn? and, if so, what function(s) does this serve? Evidence from paradigms of classical conditioning, habituation and simple exposure reveal that the fetus can learn. The fetus learns familiar music in its environment, it learns about the voice and smell of its mother, indeed the fetus seems programmed to begin learning, before birth.

But why should it engage in this expensive, in terms of energy, behaviour. The ability of the fetus to learn is important for recognition of and attachment to the mother, promotion of breast feeding, and language acquisition.

Fetal learning may be crucial for recognition and attachment. It is very difficult for us to imagine existing in a world where we recognise nothing and have no attachments. For the new-born infant, there is absolutely no familiarity with the world whatsoever. There is nothing that it recognises. It doesn't know what a chair is, a cot, what food is, etc. That all has to be learnt. It is virtually impossible for us to imagine being in an environment where we cannot recognise any aspect of it. Yet this is the very task the new-born is faced with and where I think prenatal learning is crucial to enable it to start and make sense of its world and begin its postnatal development.

By learning prenatally, at the moment of birth the new-born infant is provided with the ability to recognise a stimulus, something in its environment, that is, its mother. The baby doesn't recognise that this stimulus is its actual mother, as we would recognise her, that comes later, but the new-born recognises this highly familiar stimulus that is present in its environment, and it is something that the new-born may become attached to. Why should this be achieved by voice and smell? These are particularly good senses because they convey information without being in direct contact. New-borns have very poor vision. But they do, by comparison, have good sound and smell abilities. For a new-born infant visual information is pretty useless most of the time unless the visual stimulus is in the fixed focal zone of the baby, about 17 inches from its face. Auditory information, olfactory information, linger in the absence of direct contact. So the baby could well be in a cot somewhere away from the mother but it could still hear the mother's voice, which it recognises as familiar, it could still smell the mother, which it recognises as familiar. Thus using sound and smell provides the opportunity to recognise the individual's mother using senses that mean this information is available to the new-born in the absence of direct contact. It provides a secure foundation on which the baby may base its exploration of the world.

One of the important functions of prenatal learning is to acquaint the infant with its mother's breast milk. It is very easy, in today's society, where there is easy availability of bottled milk, to forget the importance of breast feeding. However, when the mother-infant dyad was evolving, the new-born baby had no option other than the mother's breast milk for its nutrition. If the baby didn't feed, it died. As simple as that, there were no other options. It had to take breast milk in order to survive. Therefore one would expect everything possible to be done to ensure that the baby actually ingests breast milk. One way of doing this is to reduce the unfamiliarity of the substance. If breast milk is made a very familiar substance, such as similar to the amniotic fluid which the baby has been happily swallowing for something in the order of 25 weeks, when the baby is put to the breast it may recognise this familiar substance and readily start to drink it. Given the importance of ensuring the baby feeds it makes some sense to prime the individual to start feeding.

It is concluded that the fetus can learn and evolution has designed a maternal-fetal environment to promote the learning of stimuli essential for the individual's survival after birth. A picture is emerging that much of the behaviour and abilities of the human fetus exist to promote its development and survival. As we continue our exploration of the abilities of the fetus we will move to a new understanding of the reasons the fetus

possesses these abilities. We shall see that these abilities are rather important, perhaps crucial, for subsequent development, rather than just being a by-product of some interesting scientific investigation. Moreover the course of evolution has established a maternal-fetal environment that promotes the ability of the fetus to learn and hence survive

Many factors however in today's environment interfere with this natural relationship, ranging from drugs of abuse through social drugs such as alcohol and cigarette smoking to stress. Whilst the effects of the first two factors have been clearly recognised it is only recently emerged that maternal emotions may also influence the development of the fetus. Whilst it is not possible to improve on the normal developmental processes of mother and fetus it is possible to remove factors which adversely affect this process. All future pregnancies should have the right to develop normally free of events and environments which adversely effect the fetus's ability to reach its potential.

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1.5 The effect of maternal stress and anxiety in prenatal life on fetus and child. An overview of research findings.

Bea Van den Bergh

Correspondence to: Bea Van den Bergh, Ph.D. Population and Family Study Centre (CBGS), Markiesstraat 1, B-1000 Brussels, Belgium
Phone: 0032 2553 4178, Fax: 0032 2553 3557,
e-mail: bea.vandenbergh@wvc.vlaanderen.be

Abstract: This review of the literature reveals that there is evidence from human studies that severe stress and anxiety during pregnancy can lead to pregnancy and birth complications causing babies to be born earlier and possibly smaller for gestational age. There is also some evidence for longer-term effects on neurobehavioral developmental including developmental delay, attentional/inhibitory, emotional and social problems in the child. Animal studies have shown convincingly that antenatal stress does have a long-term effect on the behaviour of the offspring, including a hyper-responsive HPA axis. The human fetus can mount an independent stress response from mid-gestation. Two possible mechanisms have been demonstrated by which maternal stress or anxiety may affect the human fetus, the transmission of maternal stress hormones across the placenta, and an impairment of blood flow through the maternal uterine arteries. Actual research topics include themes which in a previous period were only given consideration sporadically and a number of relatively new themes which are connected with alterations in the living environment and growing technological possibilities. More interdisciplinary research starting from a biopsychosocial model is needed to gain a more precise insight in underlying mechanisms and long-term consequences of maternal stress and anxiety during pregnancy.

Introduction

The general proposition that maternal anxiety or stress during pregnancy may effect the fetus and the delivered baby is part of the "folk wisdom" of many cultures. The scientific study of prenatal influences presents formidable methodological problems. Not only are there ethical and practical restraints on experimental research of this phenomenon in humans but one has to cope with maternal emotional, behavioural, biomedical and sociodemographic factors and with the complex psychofysiological interaction between mother and fetus. In this paper we review the literature relevant to prenatal emotional influences. Different mechanisms by which maternal emotions might exert their influence on the fetal and postnatal behaviour and development are discussed.

Animal studies

The fetal brain is in a constant state of development and is readily affected by influences such as drugs, (alterations in) hormones and neurotransmitters and specific

teratogens such alcohol, PCB's, X-rays. Research on primates and rats has shown convincingly that maternal stress during pregnancy can both reduce birth weight and permanently affect the neurobehavioural development of the offspring. The research of Schneider and her collegues showed that offspring of prenatally stressed Rhesus monkeys had heightened responses to stressful situations producing elevated levels of cortisol, indicative of enhanced HPA axis reactivity. They were also less adaptable to novel situations. Schneider & Moore (2000) concluded that the behaviour of these monkeys was similar to that of children classed as socially impaired and difficult. Male offspring of stressed rats have been reported to show feminised behaviour, and female offspring to show impaired maternal behaviour, together with changes in exploration and aggression. A sexual difference in response to prenatal insults is a common finding, with males generally being the more vulnerable. Another common finding is an increased HPA axis reactivity. Maternal stress has been shown to cause a permanent alteration in hippocampal corticosteroid receptor number and regulation. This 'prenatal programming' of the HPA-axis could explain the long-term increase in stress responses and alterations in adult behaviour. However, fundamental questions remain such as: (1) at which point in development are these receptor systems susceptible, (2) which changes in neurotransmitter systems are involved, (3) are there changes in other prenatally programmed systems involved, (4) what are the mechanism involved in the sex-specificity of the HPA-axis (Nathanielsz, 1999; Matthews, 2000).

Human research: evidence from three groups of studies

The literature concerning this topic is extensive, diverse and fragmented. Numerous studies in different research fields have examined the effects of maternal stress or anxiety in pregnancy, using a variety of measuring instruments (questionnaires, rating scales, interviews, observations) and conceptual and operational definitions of stress and anxiety. Stress and anxiety are both complex concepts and they involve different behavioural, biochemical and hormonal correlates under different conditions. Both can be associated with activation of the sympathetic-adrenal axis and with the hypothalamic-pituitary-adrenal (HPA) axis, although the biological response can change with many other factors, such as whether the stress is acute or chronic, predicted or unpredicted, escapable or inescapable (Crousos, 1998; Gunnar, 2000).

Evidence was sought in all kind of studies; they can be roughly divided in three groups (Van den Bergh, 1992). New conceptual and methodological insights and methods in the fields of research of stress, (psychoneuro)endocrinology, (psychoneuro)immunology, obstetrics, developmental neurology, developmental psychopathology, behavioural genetics, behavioural teratology radically altered the studies in these three groups on various points during the last decade (see Van den Bergh, 2000).

A *first group* of studies are those in which the relationship between maternal emotions during pregnancy and the occurrence of pregnancy and birth complications is studied. These studies have been critically reviewed by several authors (e.g. Lederman et al., 1995; Paarlberg et al., 1995). In general the measures of obstetric outcome are found to be inconsistently related to indices of stress and anxiety. This findings seems to result from a failure to use multivariate analysis to exclude confounders for association such as parity, age, smoking, social class, and social support. The more recent large-scale

studies have controlled for such factors and looked at more specific outcome variables. The best established finding with respect to pregnancy and birth complications is that antenatal distress (anxiety or stress) is linked with preterm delivery (Copper et al., 1996 (n= 2593); Hedegaard et al., 1996 (n=5872); Lou et al., 1994 (n=2382); Nordentoft et al 1996 (n=2432; Paarlberg, 1999 (n=396). It was found that both antenatal stress and smoking contributed independently to a lower gestational age at delivery and lower birthweight. The effect of stress on birthweight, a mean reduction of about 250g, was comparable to that of smoking. Other pregnancy and birth complications include intra uterine growth retardation, abortus and pre-ecclampsia.

As lower birthweight, across the full range appears to be a risk factor perinatal mortality and morbidity and for disease in later life, such as coronary heart disease (Barker, 1998, Nathanielsz, 1999) the findings of these studies have implications for the general health of the population. Low birthweight may be linked with later developmental delay, behavioural problems and mental health problems. A recent prospective study has shown that those mothers with a greater social support network had babies with increased birth weight for gestational age (Feldman et al 2000).The nature of the psychosocial support given is important. It can be concluded that future interventional studies and professional guidance during pregnancy should aim to lower psychological stress in pregnancy.

(2) In a *second group* of studies the relationship between maternal emotions during pregnancy and the occurrence of developmental irregularities in the child in the neonatal and postnatal period were studied. From the results of these studies inferences are made about prenatal emotional influences. The empirical efforts of this group are rather diverse and many studies show methodological shortcomings. Maternal emotional stress has been associated with major morphological anomalies such as Down's syndrome, cleft lip and cleft palate, with several minor physical anomalies such as infantile pyloric stenose, gastric ulceration, physical handicaps, and with an enhanced incidence of medical and psychiatric problems, and mental handicaps in childhood. Some of these findings were recently confirmed in large scale empirical studies and in longitudinal follow-up studies.

Two recent large scale studies have found that severe stress, as assessed by severe life events (such as the unexpected death of a child), in the first trimester of pregnancy, caused an increased risk of congenital abnormalities in neural crest derived organs (i.e. spina bifida and cleft palate) and in other organs (hart, liver, ..)(Hansen et al., 2000 (n=3560); Nimby et al., 1999 (n=590). In the study of Lou et al. (1994), prenatal stress was correlated with smaller head circumference corrected for birth weight and with reduced scores on a neonatal neurological examination, suggesting a specific effect of stress on brain growth. The authors suggested the existence of a Fetal Stress Syndrome, analogous to the Fetal Alcohol Syndrome. It was also confirmed that prenatal exposure toe maternal stress increases the risk of subsequently developing schizophrenia (Hultman et al., 1997, Van Os & Selten, 1998).

Van den Bergh (1990, 1992) studied the effects of maternal anxiety and stress during pregnancy in 71 mother-child pairs in a prospective longitudinal design. In the first wave data were gathered and analyzed at each trimester of pregnancy and in the 1st, 10th and 28th week after birth. Uni- and multivariate analysis of the data reveal that maternal anxiety has an effect on neonatal motor activity and on infant behaviour (cry-

ing, activity, irregularity of biological functions and temperament) but not on neonatal neurological state, infant feeding behaviour and motor and mental development. In the second wave the children were eight and nine years old. It was concluded that maternal anxiety during pregnancy seems to influence postnatal behaviours and temperamental dispositions of the child which imply self-regulatory mechanisms. In boys, prenatal anxiety had a clear effect on inhibitory control, hyperactivity, attentional disorder, and aggression. Girls showed more social problems and externalizing behaviour (Van den Bergh, 2001).

Huizink (2000), in a similar prospective longitudinal study with 170 mother-child pairs, found that prenatally stressed infants at 8 months had lower mental and motor developmental indices. Especially pregnancy-related fears were found to be related to adverse developmental outcome. High level of early morning cortisol in late pregnancy were likewise associated with a decrease in mental and motor development development. Pregnancy-related fears were also related to a decrease in attention regulation and to an increased unadaptability of the infant in the first 8 months of life.

In the study of Diego et al. (submitted) 80 pregnant women were assessed for depression during their third trimester and shortly after delivery. The infants of the chronically depressed mothers had more elevated cortisol and norepinephrine levels, lower dopamine levels, the greatest relative right frontal asymmetry, spent the most time in indiscriminate sleep, and had the least optimal Brazelton scores. The infants of prepartum depressed women also showed right frontal EEG asymmetry and higher norepinephrine levels. These data suggest that the timing and duration of maternal depression have differential effects.

One needs large well-controlled prospective studies in order to control for all the possible confounding variables, such as life style variables (cigarette smoking, alcohol drinking, drugs, heavy work load...) and postnatal parenting. O'Connor, Heron, Golding and Glover (submitted) analysed a cohort of 7477 women and preliminary evidence suggests that antenatal maternal anxiety is indeed a real and specific risk factor for behavioural problems in the child such as hyperactivity, inatttention and emotional problems in boys and conduct disorders in girls.

(3) *Thirdly,* there is the group of studies in which prenatal emotional influences are studied by observing the fetus in his intrauterine environment. A shortcoming that most of these studies share is that is their failure to study fetal behaviour is a standardized way and for a sufficiently long period. Studies in which these criteria were met and in which fetal behaviour states were controlled revealed that maternal anxiety is associated with alterations in fetal motor activity, heart rate variability and behavioural state pattern (DiPietro et al., 1999; Groome et al., 1995; Van den Bergh et al., 1989; Van den Bergh, 1990). Fetuses of depressed mothers are more active and their motor behaviour is less developed than that of fetuses of non-depressed mothers (Diego et al., submitted).

Mechanisms by which maternal stress may affect the fetus

Two mechanisms of transmission of stress from mother to fetus in humans have been suggested. One hypothesis is that maternal stress hormones, and in particular, gluco-

corticoids, are transmitted across the placenta. Prenatal exposure to abnormally high levels of maternal glucocorticoids is a plausible mechanism by which maternal stress may affect the fetus. It is known that excess glucocorticoids retard fetal growth in animals and humans. Exposure to synthetic glucocorticoids in laboratory animals can have neurotoxic effects on the brain development of the offspring, and elevate systolic blood pressure in adult life. The human fetus can mount an independent stress response from mid-gestation. It is shown that maternal cortisol plasma concentration is directly correlated with fetal levels (Gitau et al., 2001). A second possible mechanism is via an effect on uterine artery blood flow. Anxiety in pregnant women is associated with abnormal blood flow in the uterine arteries (Teixeira et al. 1999). A greater resistance to blood flow is known to be associated with adverse obstetric outcome, particularly intrauterine growth restriction and pre-eclampsia.

Overview of actual research topics (see Van den Bergh, 2000)

(1) *Research topics receiving a greater amount of attention.* Themes which in a previous period were only given consideration sporadically, now receive a greater amount of attention. To these belong the study of the influence of a number of factors on the course and the processes of pregnancy or the study of specific phenomena occurring during pregnancy such as:

1. the influence of work and circumstances of work;
2. the influence of stress experienced by women in carrying out household duties;
3. the occurrence and influence of violence during pregnancy;
4. the influence of travelling, sports (inter alia, aerobics, jogging, squash) and other recreational activities, on the one hand, and lack of leisure and movement, on the other;
5. fatigue during pregnancy;
6. memory during pregnancy;
7. research into short term effects of maternal anxiety and stress during pregnancy;
8. prospective longitudinal research into the effects of maternal anxiety and stress during pregnancy and delivery on the development and behaviour of the child in pre- and postnatal life (see above)
9. changes in the experience and meaning of pregnancy, motherhood (parenthood), (prenatal) mother-child relationship and the importance of cultural-historical and ethnical differences in these topics.

(2) *Relatively new research topics:* A number of relatively new fields of research which are connected with changes in life style and gender-related role patterns, with alterations in the living environment and with the growing technological possibilities in obstetrics, manifestly gained ground, such as:

1. research into the consequences (for mother and child): of medical assisted conception,

   of pregnancy in adolescence, at an advanced age, in obese women, after cancer...

2. research into the importance of: the partner during the whole process of pregnancy,

   "gender role orientation" during and after pregnancy;

3. research into stress and coping in the event of an "unusual" pregnancy or a termination of pregnancy: in the case of unplanned pregnancy, spontaneous abortion or early pregnancy loss, infertility, artificial insemination through in vitro fertilization, removal of fetuses at the occurrence of a multiple birth (after artificial insemination), dealing with miscarriage, foetal and perinatal mortality

4. perception of the emotional reactions on seeing ultrasound pictures of the foetus;

5. effect of stress upon sperm;

6. influence of factors of environment such as: microwaves, hard sounds, PCB's, lead and other factors having a potentially harmful effect upon the intrauterine environment

7. research into pain perception, stress and the consequences of stress in the human foetus;

8. research into hormones, neurotransmitters and maternal, foetal and placental systems which might mediate the influence of anxiety and stress during pregnancy;

9. research into the consequences of prenatal 'programming'. The concept that intrauterine conditions program the development of the cardiovascular system has been called the ' 'Barker hypothesis'(Barker, 1998). Other diseases in postnatal life, such as obesity and diabetes have been also been linked to early programming during intrauterine life. This research is related to earlier research into prenatal determinants of postnatal behaviour (for a review: see Maiwald, 1994).

Conclusion

Research findings clearly indicate that the fetus actively responds to his prenatal environment and that prenatal as well as postnatal behaviour might be influenced by maternal emotions and stress during pregnancy. However much remains to be clarified.

(1) We need to know more about factors that influence maternal emotions and stress and how they influence maternal homeostatis in the pregnant woman at different periods of gestation; (2) We also need to know the ways in which these biochemical correlates of anxiety and stress may affect brain and other organ formation, intrauterine growth and age at delivery; (3) The relationship between fetal neurobehavioral development and later behaviour need to be studied longitudinally; (4) Finally it is

important to study interventions during pregnancy that reduce antenatal stress and anxiety.

More interdisciplinary research starting from a biopsychosocial model is needed to gain a more precise insight in underlying mechanisms and long-term consequences of maternal stress and anxiety during pregnancy. This research holds the potential of having long-term benefits on the emotional and physical well being of the next generation.

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1.6 The influence of early affectional relationships on brain development and behavior: A neurobiological view on parental education programs for a culture of peace- and nonviolence

Gerald Hüther

Correspondence to: Professor Gerald Hüther, M.D., Psychiatrische Klinik der Universität Göttingen, Germany, Phone: 0049 551 39693, Fax: 00049 551 392620, e-mail: ghuether@gwdg.de

Much progress has been made in recent years in the assessment of the importance of secure affectional relationships between the newborn and its primary caregivers on the maturation of neuronal connectivity during early childhood. As shown by numerous studies in the field of developmental brain research, even in animals secure attachment experiences are a prerequisite for the optimal unfolding of the genetic potential for the elaboration of the highly complex neuronal networks in the higher, plastic regions of the developing brain. It is therefore not surprinzing that human brain development hinges to an even much greater extend on a constructive interplay between nature and nurture. In the past, our thinking about human brain development was dominanted by the assumption that the genes we are born will determine how our brains develop. Recent brain research challenges this assumption. Neuroscientists have found that throughout the entire process of development, beginning even before birth, the brain is affected by environmental conditions, including the kind of nourishment, care, surroundings, and stimulation the developing child receives. The impact of the environment is dramatic and specific, not merely influencing the general direction of development, but actually affecting how the intricate circuitry of the brain is wired.

It is during the first three years of life when the vast majority of synapses is produced. The number of synapses increases with astonishing rapidity until about the age three years and then holds steady throughout the first decade of life. A child's brain becomes super-dense, with twice as many synapses as it will eventually need. Brain development is, then, a process of pruning, i.e. use-dependent structuring. This is why early experience is so crucial: those neuronal networks and synaptic pathways that have been stabilized by virtue of repeated early experience tend to become permanent; the synapses that are not used often enough tend to be eliminated. In this way early experiences - positive or negative - have a decisive impact on how the brain is wired.

Compared to other primates, the maturation of the human brain, especially of the higher frontocortical brain regions is enormously prolonged in our species. It reaches a much higher degree of complexity and is much more affected by early experiences, by use- and disuse- dependent plasticity. The most delicate neuronal networks of the frontal cortex are the sites where the most complex, most sophisticated and the most human-specific brain functions will be generated: goal-oriented behavior and motivation, self-concept and self-efficacy, impulse-control, consciousness and the ability to transcend own thoughts and intentions into larger contexts. Also the ability to

feel what others feel, and to experience feelings of connectedness, peace and love are generated by the most inticate neuronal networks located in the frontal (frontoorbial) cortex. These networks and the abilities mediated by them are not preformed by an inherited genetic program. They all must be acquired, stabilized and facilitated by a process called "experience dependent plasticity".

Genetically driven are only the enormous offerings made in individual brain areas (including the frontal cortex) at certain periods in the form of an overproduction of neuronal dendritic and axonal processes and an overabundance of synaptic contacts (critical periods). How many and which of these offerings can be maintained and become integrated into larger functional networks is dependent on their stabilizing inputs, i.e. by the complexity of experiences made by a child during these early critical periods of brain development. But the most complex and most slowly developing neuronal networks in the frontal cortex are not only vulnerable to the lack of stabilizing inputs. They are at least as vulnerable to overstimulation and to the destabilizing influences mediated by ascending projections from subcortical (limbic, hypothalamic and brain stem) stress-sensitive systems. The enduring activation of these stress-responsive subcortical systems will seriously hamper and suppress the elaboration and stabilization of the complex neuronal and synaptic connections in the frontal cortex.

During very early periods of childhood, aversive or insecure attachment relationships are the most importend trigger for the activation of these stress-responsive systems. Therefore, insecurely attached children are unable to develop a highly complex neuronal and synaptic connectivity in their brain, especially in the frontal cortex. They have difficulties to acquire a broad spectrum of different coping strategies, to maintain a high level of creativity and curiosity, to constructively interact with others, and to develop feelings of connectedness, love and peace. Instead such affectionally labile children will tend to use and facilitate various less sophisticated, pseudo-autonomous, egocentric and even autistic behavioral strategies. They have difficulties to feel what others feel and to accept social rules. They are unable to control their impulses and they tend to various forms of violent destructive behavior. Because of their poorly developed self-concept and their lack of self-efficacy, such children can easily be manipulated by "strong others", e.g. a "Führer". Therefore all totalitarian regimes have always made special effords to systematically disrupt the formation of secure early attachment relationships between mothers and their children.

In order to prevent such negative effects of aversive early childhood experiences on later individual life and on the society, and to pave the way to a culture of peace and nonviolence, particular efforts must be made to strengsthen the relationship between mother and child as early as possible, i.e. already during pregnancy, and to protect children against insecurity, anxiety and stress anxiety early childhood. Since most parents are not aware of the sculpturing influences of their own relationships on the developing brains of their children, parental education programs may help and should be installed to overcome this deficit. These programs should aim to strenghthen the affectional relationship of the prospective mother (and the father) to the unborn child. They should inform pregnant women about the negative influence of psychosocial and other stressors on brain development in utero and during birth. Education should help to prevent early distortions of the initial attachment immediately after birth by aversive, traumatic birth experiences or by unnecessary Caesarian delivery under anertetics. And,

finally, parental education should instruct parents about their potential to strenghthen the formation of secure attachment relationships and the feeling of emotional stability in their children during early childhood.

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1.7 An Introduction To Interactive Psychoneurobiology (IPNB)

József Vas

Correspondence to: József Vas, MD, Szent Ferenc Hospital, Miskolc, Hungary, Dept. of Psychotherapy of Csanyik, Soltsz Nagy Klmn u. 1.1/5, H-3527 Miscolc, Hungary, e-Mail: Vas@axelero.hu

Statement 1

There is an imbalance between soul and body (somatic and psychic disorders), individuum and society, mankind and Earth. Survival of mankind is threatened by this type of imbalance due to globalisation and environment catastrophe.

Human interaction seems to be the most important focus of integration of soul and body, individuum and society, mankind and Earth.

Human interactive dimensions:

1. **Mother-Fetus**
2. **Mother-Infant**
3. **Reality-Self**
4. **Transcendence-Self**

Statement 2: Mother-Fetus Interaction

The essence of mother-fetus interaction is likely to build up specific human relationship due to a unique transfer of energy and information ("infoergic processes") between mother and fetus.

Cooperation

Mother builts up the embryo's body and organs according to an interaction of both of their genetic programs.

Competition

1. Immune war implantation struggle for life against annihilation (abortion).
2. Endocrine war competition for resources (sugar, vitamins, trace elements) embryo's struggle for possession of own body and space of existence development of fetal organs failed (organ defects).

3. Representational war struggle for possession of separate psychosomatic unit and independent individuality (lack of sense of self: schizophrenia?, autism?).

Statement 3: Mother-Infant Interaction

Direct energy and information transfer processes are continouosly functioning in some way after delivery. Energy and information transfer are fundamentally necessary for the infant's brain to be grown and renewed continuously. First vegetative and vestibular, later teleceptive (acoustic and visual) transfers are regarded as such mechanisms by which the infant learns to gain emotional, cognitive and adaptive resources from the maternal environment.

Statement 4: Reality-Self Interaction

There is a process, in which persons and inner-outer events gain symbolic representations. Symbolic value of certain inner or outer events determines what kind of response is given to that. There is a chance that significant structural and functional alterations of the brain could be caused by some "infoergic impact out of measure". This is called as trauma. It seems that an impact can be considered as trauma, either if our brain can be burdened with such amount of energy that could not be channelled due to be gone beyond its capacity; or if that impact contains of such type of information for treatment of which we don't have a neural network functioning in secure due to the deficites having evolved in mother-fetus or mother-infant interactions.

Statement 5: Transcendence-Self Interaction

1. Self-transcendence: concentration of infoergy
    - getting in touch with one's own personality's spiritual dimension (evolving inner standards & assets)
    - inner healing powers (physician-patient relationship, psychotherapy, self-healing)
    - cultural values (science, politics, religion, belief, tradition, rites, arts)
2. Transcendental existence: release of infoergy
    - mystic experience
    - disengagement from bodily existence.

We could see the series of specific human interactions as lasting from the conception till the detachment of body and spirit, and, as passing through the way from a biological existence via social sphere till spiritual dimension while these specific human interactions are fed by infoergic processes of charecteristic pattern in each dimension. The very origin of these sort of infoergic transfers is found in uterus.

2 Primary Prevention

2.1 Nurturing the mind and body of the preterm neonate through the 'glass house': the 21st century challenge for Neonatal Health Psychologists

Elvidina Nabuco Adamson-Macedo

Correspondence to: Elvidina Nabuco Adamson-Macedo, PhD., University of Wolverhampton, SHS Division of Psychology, Bankfield House, 45 Waterloo Rd., Wolverhampton WV1 4QL, United Kingdom, Tel.: 0044 1902 321328, Fax.: 0044 1902 321380, E-Mail: e.n.adamson-macedo@wlv.ac.uk

Introduction

Firstly, I would like to thank Prof. Fedor-Freybergh and Dr.Janus for inviting me to participate of this important Symposium and Workshop.

This contribution reflects my commitment to facilitate, maintain and promote health and optimum development of the preterm neonate and their parents through scientific investigations, since 1980.

This document presents the state of the art of neonatal psychology in theory and in practice, its consequences and my viewpoint regarding what is an important stand in Neonatal Health Psychology. It reiterates the formalisation of Neonatal Health Psychology and within this new sub-discipline the focus is in Neonatal Psychoneuroimmunology.

The state of the art of Neonatal Health Psychology (NNHP) in theory and in practice

Although the literature of the last 3 decades reports a great number of scientific studies being carried out with the preterm neonate, the formalisation of Neonatal Health Psychology is more recent. Prenatal Psychologists have been more pro-active in formalising the Psychology of the unborn baby. The origins of NNHP can be traced along five paths, although 3 and 4 are inevitably intermingled:-

1. Prenatal and perinatal Psychology and Medicine (Fedor-Freybergh and Vogel, 1988)
2. Neonatology (Gandy and Roberton, 1987)
3. Environmental Neonatology (Gottfried and Gaiter, 1985)

4. Environmental and Developmental Neonatology (Wolke, 1987)
5. Neonatal Psychology (Adamson-Macedo, 1996)

In 1996 at the XV European Congress of Perinatal Medicine, in Glasgow (Scotland) I advanced the name for a new sub-discipline of Psychology to be concerned with studying the preterm neonate, (usually hospitalised) during the first 4 weeks of postnatal life and its relationship with later outcome. Neonatal Psychology was defined as "the scientific study of mental life and the behaviour of the preterm neonate as an emergent, coactional and hierachical system" (Adamson-Macedo, 1997, p.292). This definition is based upon the 1890 William James classical definition of Psychology and G. Gottlieb's (1991) theory of experiential canalization and implies that the preterm neonate has a mind; consequently I defined MIND as the sensory ability of the neonate to interact with both internal and external stimuli. Touch, being the first sense to develop, I defend that the mind emerges at the moment that tactile sensibility is present, i.e. 7.5 weeks gestation, and continues to develop prenatally and postnatally into childhood and adult life. It is noteworthy that during approximately the same time, i.e. 8 to 9 weeks of gestation, the foetus begins to acquire biological individuality and at the same time the role of a "biological ego" resulting from the attainment by the immune system of the capacity to discriminate between self and non-self (Burgio 1987).

Preterm babies are unusual patients in so far as they are essentially healthy; many of them are indeed born free of organic and psychological pathology. Yet they are at risk and although 'mature' for their gestational age, they anatomically and functionally may demand special or intensive care. Some of these babies however, were malnourished in utero; such babies may be at risk of suffering later from severe protein deprivation described as kwashiorkor or from both protein and calories deprivation known as marasmus which put babies at risk of 'failure to thrive'. By loan analogy with kwashiorkor, in 1984, I coined the term "touchiorkor" to describe the conditions of deprivation of appropriate tactile nurturing of babies born too early and/or too small; the latter implies that the baby was malnourished in utero. The first syllable of the new word 'touchwiorkor' etymologically indicates touch, a gentle and benign action, and the second the deprivation of it with deleterious consequences for the body and mind of this vulnerable yet resilient and unique human being, usually separated from his/her Mum and Daddy immediately after birth. This separation may have in many cases longstanding negative effects as the literature for the past 3 decades demonstrates, at different degrees.

The collaboration of Psychology and Medicine, specifically developmental psychology and paediatrics, has long been recognised for the purpose of providing for greater care of preterms and other high-risk infants, as well as encouraging the symbiosis essential for advancement of both disciplines. By 1994, Health Psychology had been established in Britain as a discipline, and defined by Johnston as the study of the psychological processes and behaviour in health, illness and health care. Nevertheless it has been mainly related to the adult population. Increasing attention, however, has been paid to both paediatric and broadly-based child health psychology (Eiser et al. 1994; Collier and MacKinley, 1997). A book edited by Johnson and Johnson (1991) contains presentations from the Florida Conference on Child Health Psychology, in April 1988. Whilst an important contribution to the area it does not have any chapter

on the preterm neonate. Review carried out in MEDLINE and PsyLit today do not produce any more contributions in this area.

In 1998, at the British Psychological Society, Division of Health Psychology Annual Conference, in Bangor, Wales, I presented the formalisation of Neonatal Health Psychology for the first time. Based upon Johnston definition above and my definition of Neonatal Psychology, I defined Neonatal Health Psychology (NNHP) as the scientific study of psycho-biological and behavioural processes in health, illness and health care of the preterm neonate during his/her first 28 days of life, and the relationship of such processes with later outcome Adamson-Macedo, 2000). NNHP has profound interdisciplinary connotations not least because of the diverse ways in which information has to be derived from non-verbal neonates and their physical and social environment. NNHP theoretical underpinning is based upon practical but scientific work carried out with these babies and their parents, in the form of early sensory nurturing interventions, early assessments and proposition of new paradigm(s).

The consequences

A recent review by Anand and Scalzo (2000) provides evidence that perinatal brain plasticity increase vulnerability to early adverse experiences, thus leading to abnormal development and behaviour. The Neonatal Health Psychologist has an important role to play in the Neonatal Units and this is a challenge for the next decade of the 21st century.

Clear from our own scientific studies and by other colleagues working with the unborn baby and the preterm neonate, is that the baby born too early and or too small has a mind and thus, in our view, is a cognitive, social, emotional and sensitive being. The coactions between the cells themselves and the cells and environment should be seen as examples of social 'encounters' between the organic and psychological being of the resilient, competent, preterm neonate who is able to demonstrate self-regulatory efficacy. The skin of the neonates is the prime way of relating to the environment provided by caregivers, and provides means of communication for mutual relationships between genetic activity in the sense of DNA (RNA (Protein, structural, maturational, functional and experiential development to occur both horizontally and vertically. The main example is the mediating role of cutaneous sensitivity within neonatal psychoneuroimmunology (NN-PNI) which has not been hitherto investigated.

This emergent discipline was firstly formalised by this author in 13th September 1997 for the Derek Gupta Memorial Symposium- Neurosciences in the 21st Century held at the RSM, in London. NN-PNI is uncharted waters; like Psychoneuroimmunology (PNI) it is interdisciplinary and can be described as the relationship between behavioural, neuroendocrine and immune functions (Solomon and Moos, 1964). It investigates coactions between psychological and physiological factors, seeking to understand pathways between the various systems. Recent review on MEDLINE and PsycLit has not produced any material besides our own studies in the subject. Our studies remain unique and they have shown that caregivers can contribute to alleviate the distress or pain of the ventilated preterm neonate with developmental appropriate intervention known as TAC-TIC (Touching And Caressing-Tender In Caring). The result being an increase in the secretion of secretory immunoglobulin A (SIgA) after the therapy thus

strengthening the immune system of those distressed babies. Our hypothesis that if the intervention is to be beneficial for the baby, Equilibrium amongst the physiological, behavioural and immunological systems of the baby should occur. The majority of the babies recruited to this particular study have interpreted the communication of the caregiver through the skin (TAC-TIC) as being comforting and not distressing (Hayes, Adamson-Macedo and Perera 2000). Results such these ones, suggest that touchwiorkor and its deleterious effects can be avoided. These results are encouraging BUT should not be generalised to all babies or to any other type of communication through the skin, e.g. baby massage.

What is an important stand in Neonatal Health Psychology

NNHP is applied Psychology and it is based on system development psychology theory. It is interdisciplinary in nature and the Health Psychologist does have a role to play in the Neonatal Units, for example:-

- in providing developmental appropriate interventions,
- in early diagnosis and prognosis by using a variety of early assessments i.e. psychometric and qualitative/gestalt and holistic measurements, including measurements which could increase quality of life of the preterm neonate(QoLoPNN).

Furthermore, the Health psychologist is also concerned with identifying ways to promote early successful parenting; maternal perceived parenting mastery during the neonatal period (first 28 days of postnatal life) has been investigated (Barnes and Adamson-Macedo, 2000) with views to provide valuable information to parents themselves and relevant medical/paramedical staff for positive action. Early successful parenting will encourage quality of early attachment. Proposing and testing new paradigms such as the redefinition of the meaning of tools, toys and play, in relation to the preterm neonate, is another important area which we have been working with colleagues for the past 3 years. We expect to provide scientific information which will challenge the assumption of the past 30 years of research in infancy, e.g. that babies from 0-3 months do not play (Adamson-Macedo, Henley, Myers and Walker, 2000).

The circumstances impinging on the foetal state and during early infancy and childhood, have been shown to affect predisposition to disease (Marmot 1997; Barker 1997; Nathanielsz 1999), minor illness (Bellingham-Young & Adamson-Macedo, 2000) and other consequences in adulthood (Gupta, 1992). It would be immoral to ignore the vast cumulative evidence that prenatal, perinatal and early infancy experiences have short term and long term deleterious effects on the child, the family and in consequence in society as a whole. The time has come for professionals to join efforts to promote health and happiness for babies an their parents. Successful teamwork has never been so essential. As Fedor-Freybergh (2000) pointed out at his presentation at the Forum on Maternity and the Newborn, RSM in London, the integrative and transdisciplinary aspects of sciences and their harmony and entre into the XXI century is the true vision for our common efforts.

Since the first efforts by Tarnier and Budin in France and the development of incubators in Paris in the 1880s, many advances have occurred; nevertheless in the UK alone approximately 40,000 babies are born prematurely each year and amounts to 60% of all neonatal deaths, and an outcome with profound financial, sociological and psychological implications. Preterm labour is increasing. Mortality is decreasing due to e.g. advances in Obstetrics and Monitoring systems, as well medical laboratory technology but morbidity is increasing. From an epidemiological point of view, the incidence of preterm labour is higher in lower socio-economic groups, which suggests a link with poverty. Overall, as Carson (1998) pointed out the phenomena is a major public health problem. There are many and various approaches towards amelioration of this situation, and the role of Health Psychologists within groups of multidisciplinary Neonatologists is needed to contribute knowledge and understanding of the problem at source, at the same time practically providing a base for the psychological well-being of the preterm neonates and their parents during their exceptionally sensitive first week of life. Undoubtedly, the Neonatal Health Psychologist can and should be actively involved with the baby and their parents in the Neonatal Units and continuing their psychological care at home thereby providing 'continuity of care' from the hospital to the community. A combination of molar and micro-genetic measurement strategies in Neonatal Health Psychology is strongly recommended. Together for children and looking back and beyond, we may be able to comfort the pain and avoid the violence (and the consequences) that may come with it.

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2.2 Opportunities for primary prevention in prenatal and perinatal psychology and medicine

Thomas Müller-Staffelstein

Correspondence to: Thomas Müller-Staffelstein, Dipl.-Psych., Alte Landstraße 1, D-89160 Dornstadt, Germany, Phone: 0049 7348 22922, Fax: 0049 7349 928770, e-mail: muestaffelstein@t-online.de

History

The growing dissatisfaction of women (and men) with the traditional support structures for pregnancy and childbirth (limited to gynecological exams, exercise classes for pregnant women, and/or basic baby-care courses) led in Western Europe about 20 years ago to development of ideas for "integrative" childbirth preparation. Increasingly, there was criticism of the impersonal, standardized, technically oriented medical care in hospital delivery rooms. "Humanizing" of hospital procedures, more respect for individual needs, increased influence and autonomy, choice of positions for labor and delivery, presence of the father, rooming-in, and professional support for breast-feeding of newborns have been some of the responses of the medical community.

In Germany, this movement found expression in the establishment of the "Gesellschaft für Geburtsvorbereitung e.V." (GfG) in 1980. Typical for newer concepts for birth preparation was an expansion of course curriculums to include emotional, cognitive / informative and social aspects of pregnancy and birth, integrated into the setting of a closed group. The body work centered more on offering physical aspects of the possibility of deeper experiencing of one's own body, to the purpose of building trust in one's own capabilities and strength. Individual coping strategies for facing the coming unique birth experience were encouraged, while fathers were explicitly and continuously included in courses for couples. An essential structural characteristic is the closed group with a permanent primary instructor. Only so can a trusting, open atmosphere arise in which the supportive, sharing, and creative potential of the group can be awakened.

The prenatal development of the child and its relationship to mother and father and its potential for communication were new themes that were included in the content of the curriculum, by, for example, giving information about the increasing sensory development of the baby and its ability to adapt , or offering to accompany the parents on an imaginary trip to visit their baby in the mother's body.

These new "integrative" courses, were still centered around the birth, but sought not only a positive birth result; they focussed on achieving a satisfying birthing experience for the mother (and her partner), and included responding to the needs of the child in the perinatal situation.

This orientation around the birth event was supported by the publication of numerous new and impressive results of prenatal research concerning the abilities and needs of the newborn baby, and about the far-reaching meaning of the birth experience for the child's further physical, psychological and social development.

The potential for primary prevention during pregnancy

Numerous prenatal and perinatal research results demonstrate the continuous, multi-level, and to some degree formative processes of interaction that take place between mother and unborn child during pregnancy, during which the mother is also in a constant exchange with her specific environment. I assume that everything that happens to a pregnant woman, and how she experiences what happens, is conveyed directly or in a modified form to her unborn child. At the same time, the quality of these interactions, in dependency with the genetic framework, builds the foundation for the child's entire further development. Chronologically, there are some phases which have a high specific sensibility and vulnerability. This is not only true for the development of the central nervous system, internal organs, and the sensory organs, but also for the endocrine system with its regulatory and signal functions and hypothalamus - hypophysis coordinate system, for the immune system and for the structures that make psycho-social adaptation processes such as perinatal bonding possible. The sum of these prenatal influences and experiences is one of the factors that affects the timing, process and experience of the birth itself.

For the above reasons, every time I meet a pregnant woman I am also in contact with the child; in a way, alpha and omega are present at the same time, while the unborn child in continual interaction with his mother-environment builds the foundation for its own further development . This has convinced me that the period of pregnancy offers the best chances for actual primary prevention.

This approach has especially fortuitous circumstances in that, in my experience, the group parents-to-be (as compared to the average adult) shows an above-average openness and are easily motivated to learn and to reflect on old roles and habits; for example, their relationship to their own bodies, to pleasure and pain, to body signals, to their use of medications and other drugs, or to their eating habits.

This (by no means complete) description demonstrates how the preventive approach not only affects the child, but also the adults, the mothers and fathers-to-be, and can be used as an opportunity for holistic health education, with effects far beyond the point of the birth itself.

Inclusion of the father, for example, isn't only directed at his supportive function during the birth: by opening doors during the prenatal period, among others new paths to a non-competitively oriented experience with his body, he can learn ways to strengthen his closeness to his child (and his partner!) through experiencing different possibilities of non-verbal body language. He not only builds the foundation for a strong father-child relationship, he also experiences ways to enrich his forms of sexual interaction. This can help in coping with the changes, pressures or crisis's that affect couples relationships (also their sexual relationships) towards the end of pregnancy and especially during the baby's first year.

Against this background and complementary to the main thoughts developed here, there are numerous tasks that pregnancy supporting and childbirth preparation curriculums should take into consideration:

Supporting, developing or nurturing.

- recognizing and articulating one's own needs
- the right to individual experiences and feelings
- expressing one's own feelings, even if they are confusing, ambivalent, negative or seem to be inappropriate
- coping with necessary adjustment processes
- more confidence in handling fear and pain, holding on and letting go, self control and devotion.
- broadening or differentiating the body's paradigm, for example increasing the physical body's sensitivity, especially its deep sensitivity.
- trusting in one's own abilities and strengths.
- prenatal communication between mother, father and unborn child in all different forms: kinetic, tactile, auditory, verbal, mental or spiritual
- confidence in coping with stress situations, including recognizing when professional help is needed, for example for trauma or shock.
- perinatal bonding
- conditions for satisfactory breast-feeding
- realistic expectations and own ideals for the rolls of a "good mother" and a "good father"

Especially in light of the trend toward the "one-child-family", I find it especially important to help the mother-to-be (and the father-to-be) to overcome unrealistic, overdemanding requirements and expectations about themselves, and to overcome the common fear that the child won't have the best start in life if pregnancy and birth are not a perfect "performance". These ideas and the pressure of being responsible for everything that affects the child, plus the often resulting readiness to give the responsibility to the specialists, should to be met with a more differentiated perspective: in addition to recognizing their own strengths and possibilities for influence, information about the resiliency of the child, his independence, his ability to learn and adjust, his cooperation during preparation for birth, and his active help during birth, are equally as important as references to the mother's relationship to her specific social and ecological environment, which influence the well-being of her and her child, although she has little control or influence on them (for example, the Chernobyl catastrophe).

A fundamental change of meaning

Recognizing the preventive potential of working with pregnant women and the dynamic continuity of prenatal, perinatal and postnatal development leads to fundamental changes in the perspective and goals of what was originally preparation for childbirth.

- Pregnancy support and childbirth preparation no longer receive their justification solely by the act of birth, but an additional independent justification. The support of the mother-to-be and her child influences the future development of the child in the sense of best possible primary prevention and gives further far-reaching health-encouraging impulses.

- Supportive courses should begin in early pregnancy, not only the last trimester, and should continue during the first critical weeks and months after birth, supporting the sensitive and critical phase of young parenthood.

The changes of perspective described here also place the birth itself in perspective for the further development of the child, preventing the overburdening of the birth event with numerous narrow expectations and fears. They emphasize that the birth is one integrated part of a whole continuum of prenatal, perinatal and postnatal development. Only in this context is it possible to estimate the individual meaning of the birth appropriately.

Courses which go beyond the framework of "preparation for childbirth" to include pregnancy-support and parenting preparation must also be titled appropriately, for example:

Pregnancy-Birth-Parenthood

Preparation for birth and parenthood

We're having a baby

Becoming a parent-Being a parent

The curriculum concept should include:

- the integrative approach already described under 1.

- Using the possibilities of primary prevention inherent in the developmental phases of the fetus/baby.

- teaching parents-to-be about health influences and good health practices.

- the periods of early and middle pregnancy (because lack of information at this time can have grave consequences).

- the period after the birth, with subjects like "The birth of the family", "Breast-feeding and the nursing relationship", "Time Management", "Communication and stress reduction".

- Continuing education courses to support the young family.

Practical examples, projects, perspectives

There are a number of practical examples of courses that go beyond the "childbirth preparation " framework. GfG course leaders and midwives who have turned more toward pregnancy support have initiated a number of subjects, based more on need than on a systematic concept. These have included themes from "Whole food nutrition" to "Allergy prevention", "Sexuality","Baby massage" or "Living with handicaps, death, and mourning". Further offers include baby playgroups, breast-feeding support groups, post-birth exercise groups, father groups, post-caesarian groups, premature groups, or groups for parents that have lost a child.

For the past four years, a project supported by public resources has been working on a systematic concept for parental education from pregnancy to early parenthood, as well as implementing and evaluating ideas (see GfG literature by Ines Albrecht-Engel and others).

Dr. Reichle at the University of Trier has done complementing research on stabilizing couples' relationships during the transition to parenthood. Publications are listed in the bibliography.

Beyond the curriculum content, the following aspects are worthy of discussion:

- Training the trainers: what qualifications are necessary?
- Inclusion of expanded parental education concepts in the present country-specific health systems and adult education systems.
- Supervision and quality management
- Financing

2.3 Domestic violence to pregnant women

Shoichi Sakomoto

Correspondence to: Professor Shoichi Sakomoto, M.D., Aiiku Maternal and Child Health Center, 5-6-8, Minamizatsa, Minato-ku, Tokyo 106, Japan,
e-mail: terao@hama-med.ac.jp

On the occasion of United Nations the Women 2000 conferences, negotiators have agreed on strong plans calling for prosecution of all forms of domestic violence, now including marital rape, traditional practices of forced marriage and so called honour killing are addressed.

This time I happened to be requested to talk about domestic violence, especially violence to the pregnant women. These are not in my speciality and the number of research reports on this topic is very few except U.S.A. which has started active works since 1960s. In most of other countries, women have become active and many NGO groups and shelters were established after the landmark 1995 U.N. women's Conference in Beijing. Almost all reports from over the world are case reports, small statistics and different due to cultural, economical, religious so and so differences.

Domestic violence rate is 20-50% in the world. Only Japan was reported as 59%. I called the government officials and knew that this 59% was based on private NGO's data in 1993 which is not official data.

Our government started official research work since 1997 to promote women's rights in broad meaning. According to the report by the government, statistics of Japanese women older than 20 years, graduated business college or university are described.

In 1998, number of rape is 1873 (arrested 1652). Classification is as the following violence felt to die (4.6%), needed medical assistance (4.0%), need not medical assistance (14.1%), unwanted sexual behaviour (17.7%), showing pornography (5.3%) neglection (17.3%) meet the sexmaniac (48.7%), shouted (45.3%), consulted some (54.7%) and never consulted (37.8%).

The attitude of Japanese women after such experience are explained. (1) She is ashamed of embarrassing (2) Afraid of revenge (3) It will be injurious to her reputation (4) May be for her penalty. Our government has really started to renew Japan under the philosophy, that is, "women's rights are human's rights."

Now I pick up report from India in 1999 as they say no literature is available on abuse during pregnancy. Analysis was done at the secondary and tertiary care public hospital in Central India.

Of the 600 pregnant women (28-40 weeks gestation) interviewed by using abuse assessment screen (AAS):

152 (25.3%) women reported abuse during non-pregnant state.

132 (22.0%) women reported abuse during index pregnancy.

10 (8.3%) women reported increase in abuse during pregnancy.

In majority the abuse site was head and neck. 20% reported being hit in the abdomen. Abuse was recurrent in 92% of women.

6 (4.5%) were hospitalised.

5 (3.8%) needed medical assistance.

26 (19.7%) women were afraid of partner (husband).

Abused women were twice as likely to begin antenatal care after 32 weeks of gestation as compare to non-abused women.

Abused women were more likely to be Buddhist (p=0.005), of greater parity with unwanted pregnancy.

For them, wide spread participation of the medical profession, changes to the current penal code and legal system, police training to ensure safety of women, use of hot lines, creation of shelters and behaviour modification for violent men are necessary.

Then I'd like step into medical result obtained violated pregnant women using clinical data of Johns Hopkins Univ. Baltimore 1999.

Violence to the pregnant women is also violence to the fetuses because mother is the direct environment and very happy feeling of the mother gives very good influence to nurture the fetus through bonding like umbilical cord.

The stress and anxiety of an abusive relationship may lead to increasing levels of circulating catecholamine and ACTH which are undesirable stimulation for fetus and placenta. Nervous mother may get nervous baby.

Firstly brain central nervous system starts in the very beginning of fetal life. Fifty billion brain cells developed during the pregnancy. Before 3 years of age the network of nervous system will be completed. The base of total mind is made from 14 weeks gestation. Cerebral limbic system which contains important nucleus and cerebral new cortex which shows emotional feeling modify the connection between nucleuses.

Heartbeat is caught after 5-6 weeks of gestation. ECG & EEG will be observed after 12 weeks. And from the second trimester, especially after 36 weeks, heartbeat shows active phase and resting phase and furthermore reflex against undesirable stimulation for instance, loud noise, strong light, strong compression etc. Development of the brain is also disturbed its differentiation.

Tactile sensation starts at 8 weeks. Lips and fingertip are most sensible and suckling of fingertip starts at 12 week. Fetal movement felt by mother stimulates the cerebral development through skin feeling.

With concern to hearing, the fetus becomes able to hear particularly well from around 25 weeks of gestation. I have investigated what kinds of external sounds can be heard within the uterus by placing a small microphone inside the womb. Music, the voices of people, as well as who said what and how they said it, can all be heard clearly, and quarrels between the parents are easily heard by the baby. Sounds of frequencies between 200 and 1500 Hz, that is to say, those equivalent to the range of the soft kind words of a mother, can be heard particularly well. From about the 5th month

on, the fetus begins to remember these voices, and after birth, the newborn responds immediately only to the sound of the mother's voice.

Sense of taste and olfactory sensation developed after 24 weeks and the latter after 28 weeks.

While not able to focus properly near the end of the pregnancy, the baby gazes at the face of the mother carrying him/her, at a point about 40 cm away. It is said that completion of the development of true visual perception does not occur until around eight years of age, but the fetus is well able to tell the difference between light and dark. It appears that the fetus is able to distinguish between light and dark. It appears that the fetus is able to distinguish between light and dark mainly because the release of melatonin, a hormone produced by the pituitary gland in the brain of the mother, is reduced in the presence of light, and is increased when it is dark. The eyelids of the fetus do not open until the 7th month of pregnancy, but the retina has already developed by this time.

You can easily imagine how important the change of the direct environment affect the fetus.

Johns Hopkins group approached 401 participant and third prenatal interviews successfully completed during the course of their prenatal care. The majority of the patients were young, poor, and single. The violence were likely those to women with low social class, unmarried status and poor education.

When stratified by level of violence, women who experienced moderate or severe violence had incidence of PTL (preterm labor) of 15.4 and 17.2%, respectively. The difference was significant.

In their cohort of women, serious acts of verbal abuse and physical violence occurred with significant frequency. PTL was strongly correlated with increasing acts of violence with 4.1 times greater risk of PTL in women who experienced severe violence as compared to those who experiences no maternal abuse. For your information, the prevalence of PTL in prenatal population has been estimated to be from 6.9% to 10.0%.

This study was performed among a sample of low income women, a group at increased risk for both violence during pregnancy, as well as poor outcomes.

Battering and injury are common with prevalence of 3.9 to 20.4% among prenatal populations. Variation in such rates influenced by socio-economic status (SES) is observed.

Prevalence of 15% for pregnant women receiving prenatal care in private clinics and 28% for lower income public patients have been reported.

Increased rates of physical violence have also been reported from women who have complete fewer than 12 years of education, aged 19 years.

Unmarried, living in crowded conditions, had had delayed or no prenatal care and had had an unintended pregnancy.

So far as account for over mentioned violence:

1. increased dependency by the women

2. decreased sexual availability
3. jealousy or ambivalence about the pregnancy
4. jealousy or anger toward the unborn child
5. glowing financial pressures

These factors may help to explain abuse during pregnancy.

Verbal, as well as, physical abuse was associated with a high risk of PTL. The stress and anxiety of an abusive relationship may lead to increasing levels of circulating catecholamine, ACTH.

Trauma to the abdomen can cause release of arachidonic acid which can lead to uterine contractions. This fact means increase of inducing prostaglandin.

One study of trauma to the uterus can cause abruption of placenta, of which rate secondary to domestic violence was to be 3.9%. This rate was higher than the rate of abruption from motor vehicle accidents. The abruption in such cases are more likely with anteriorly placed placenta locations.

The most common direct fetal injuries described are those to the fetal skull and brain occurring during simultaneous fracture of the maternal pelvis when the vertex is engaged.

Suicide and homicide are notable more common in physically abusive relationships.

Fetal maternal bleeding has not been well studied but over 90% of the hemorrhages are less than 30ml.

A trend of increasing PROM (preterm rupture of the membrane) with greater violence is noted, which lead to labour and infection. The two-fold increase in PROM in the severe violence cohort adds to the clinical wisdom of prolonged observation at modified bed rest after abdominal trauma.

Babies born to abused women in Johns Hopkins did not have lower birth weights due to the careful treatment in the hospital. Good prenatal care may have resulted in a higher average gestational age at birth in association with maternal abuse has been reported in the literature.

I hope my presentation may be acceptable as some useful information concerning domestic violence to pregnant women to you all.

Thank you very much for your long attention.

2.4 The Significance of Prenatal Psychology in Dealing with Pregnancy and Birth

Ludwig Janus

Correspondence to: Ludwig Janus, M.D., Köpfelweg 52, D-69118 Heidelberg, Germany, Phone: 0049 6221 889926, Fax.: 0049 6221 801525, e-mail: LuJanus@AOL.com

Summary: Over the past few years, as a result of the investigation of prenatal behaviour, research into learning and observations made in the field of perinatal medicine and the study of premature birth, we have gained a much more complete picture of prenatal development. At the same time, individual case studies in the psychotherapy of babies, children and adults have been able to show that stress and traumatic experiences before and during birth may have considerable long-lasting effects. On the basis of these observations, important conclusions can be drawn for a new way of dealing with pregnancy and birth. It is of primary importance that the relationship between parents and their child begins before birth and that there is a sense of continuity in this relationship during and after birth in order for the child to develop a positive sense of self-esteem and security.

Introduction

In the first half of the twentieth century, it was primarily psychoanalytical authors such as Rank (1924), Graber (1924) and Fodor (1949) who concluded from the symptoms, dreams and fantasies of their patients that psychological and emotional experiences are had before birth and that birth itself is experienced at an affective level, as is the child's arrival in the world. Empirical research showed that the period in the mother's womb entails much more risks and is much more stressful and that birth involves more stress and carries a greater risk of injuries than was previously assumed. The relevant literature is presented in my book "Enduring Effects of Prenatal Life" (Mattes, Heidelberg 2001).

Psychotherapeutic observations in children from unwanted pregnancies have shown that the conditions for emotional and psychological development at the beginning of life are of great importance for the way in which an individual later experiences life. An unwanted child lacks the conditions required to really become rooted in the primary prenatal relationship with the mother. This weakens the individual's capacity for interpersonal relationships and co-operative action and may already become apparent in the form of a difficult birth and, after birth, in difficulties with breast-feeding and adaptation. Long-term sequelae form a backdrop of neurotic and psychosomatic illnesses (Hsing and Janus 1994; Levend and Janus 2000). The interplay between the experience of being unwanted and of violence during pregnancy forms a significant background for later dissociality and a tendency towards committing violent crimes (Verny 1997). Support for the idea that there is a reciprocal effect over such long periods of time between the conditions that prevail during pregnancy on the one hand and illnesses that appear during adulthood on the other is provided by recent medical research, which

has shown that prenatal malnutrition and prenatal deficiencies can lead to diabetes, high blood pressure and obesity in adulthood (Nathanielsz 1999).

On the basis of observations in the field of psychotherapy, I would like to illustrate the significance of the observations in prenatal psychology for antenatal care, perinatal support and the way in which we deal with premature birth. I conclude by mentioning the new forms of baby therapy and the need to enshrine the development of responsible parenthood more deeply in our education system.

Observations from Psychotherapy

During my many years of experience in the field of psychotherapy, it has become apparent that neurotic and psychosomatic symptoms are very often due to feelings of insecurity before and during birth and infancy. Thus claustrophobia and a fear of tunnels may be due to a state of emergency during birth, and a tendency towards having panic attacks, feelings of depersonalisation and self-destructive tendencies may be caused by having survived an attempted abortion. If a child is unwanted, this will impair his or her development of a basic positive sense of self-esteem and security, which may cause over-sensitivity to later stress. This does not negate previous assumptions about the causes of neurotic and psychosomatic symptoms, but taking prenatal and perinatal stress and trauma into account does relativise them and put them into a more comprehensive context. How important the individual factors are can obviously only be decided on a case-by-case basis.

However, the conditions that prevail at the beginning of life thus acquire a particular importance in that this is what essentially shapes our feeling of self-esteem and the way we experience life and forms the basis for our later attitude towards ourselves and towards life. It is in this context that the psychological significance of the so-called "prematurity" of human birth should be seen. We are only "half-finished" at birth and find ourselves in our dependence as a baby on other people in the first 12 months of life and in the social uterus of the family. This early experience appears to be a necessary condition for our ability to be integrated into large and very large communities such as a church or a state. The collective conditions at the beginning of life significantly determine the atmosphere in the large social groups (Janus and Kurth 2000; Kurth and Rheinheimer 2001).

Antenatal care: There is now increasing consensus that human relationships and ties begin before birth and are based on this period. As far as the way in which we deal with pregnancy is concerned, this means that establishing a relationship between parents and their child before birth is very important. Parents can be given crucial tips and support as part of antenatal care (Veldman 1991; Verny and Weintraub 1994).

Perinatal support: Establishing a prenatal relationship between parents and their child is the best basis for mother and child co-operating during birth, with the father closely involved as a protective figure, if possible. Emotional ties promote the natural course of birth. M. Klaus, Kennel and P. Klaus were able to impressively show that the continual presence of someone mother and child relate to reduces the need for medical interventions and medication by up to 50%. These results are of great medico-economic and psychosocial importance, because, however much medical interventions may save

lives in individual cases, at the same time they may put a great deal of strain on the integrity of the early parent-child relationship and on the individual's primary sense of self-assurance (Emerson 1997; Verny 1992).

Dealing with premature birth: Tendencies towards premature birth are largely a psychosocial call for help. Linder (1997) clearly showed that talking to a doctor that the woman trusts and receiving targeted social support can considerably reduce tendencies towards premature birth. In the way in which we deal with premature birth, the continuity of the relationship is important for the individual to emotionally work through the experience at a later stage, which is made possible by a more relationship-based way of interacting with the premature child, as introduced by Marcovich (1995).

Early parenthood: In earlier times, people relied on parents being adequately prepared for the task of parenthood on the basis of their natural instincts and of family and social traditions. However, an obstacle to this is the fact that suffering and misery have always particularly affected mothers, children and families in the course of history and early relationships have been disastrously disrupted by these traumas. The American psychohistorian DeMause (1979) poignantly summed this up by saying that the history of childhood is a nightmare that we are only just waking up from. Our family and social traditions concerning the way in which we treat children are impaired by a great deal of deficiency, deprivation and violence. Conversely, there is now a scientific basis for the claim that a self-confident personality able to endure conflicts and to experience empathy can only develop in a setting characterised by relationships, acknowledgement and support. As a result, this well-founded knowledge now constitutes a starting-point for supporting parents-to-be to enable them to provide their children with better and more supportive room for development from conception onwards than they themselves received.

The important aspect here is thus a new culture of parenthood and of embedding emotional and relational learning in our education system right from the start. There is currently a very one-sided "emphasis" on scientific and technical teaching on the one hand and very abstract cultural content on the other. However, developing responsibility and the ability to establish relationships also requires basic support and assistance if we want our societies to make the transition from the earlier societies of war to future peaceful societies capable of enduring conflict.

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2.5 Prenatal Mother - Baby Bonding Analysis

Jenö Raffai

Correspondence to: Jenö Raffai, Ph.D., Szchenyi u.4., H-1191 Budapest, Hungary, Phone: 0036 1377 6692, Fax.: 0036 1377 6692, e-mail: raffaij@mail.datanet.hu

Abstract: Several results of researches on the later effects of prenatal situations of deficiency of mother and child are presented and connected to the findings that the intrauterine surrounding determines the niveau of intelligence with 66% while the genes determine it with 34% only [Mc.Gue l997]. This stresses the necessity for prevention before birth to balance early lacks and to bind the non utilized emotional and cognitive capacities. The mother-child bonding analysis as a very sensible and facilitating instrument for diverse aspects of bonding practizes this prevention. There are three different levels of unconscious proceedings: The internalisation of the fight for implantation against the maternal representative of selfreproduction of immune origin: mothers's own pre-and perinatal experiences , mainly remembered physically: mother's own intrauterine maternal representative. Generally the child internalizes his mother's repressed instincts, traumata, and representations and the reciprocal effects of the actual relation, too. This makes it desirable to try an integration ot the maternal unconscious events which are actualized in the relation to her child, so that they do not fill the self of the child. Some examples from mother-child bonding-analyses illustrate this apparently complicated system.

Prenatal mother-baby bonding analysis

Let me one question before the presentation: why transfer the beginning of contact from the time of birth to the prenatal time?

The general conscience as well as science cling to the conception that the psychic development of the child only starts with birth. Many aspects contributed to the development and conservation of this conception. In the historical and cultural context the idealized image of the mother who creates a paradise-world is still efficient. Unfortunately, natural sciences reinforce this by reducing pregnancy and the intrauterine development of the child to biomedical proceedings [Janus 1994]. On the individual level we have the denial of the birth-trauma, unavoidable from evolution-biological reasons. The baby- investigators rather fostered the preservations of the blind spots as they equalized the beginning of psychic life with the start of the possibility to observe the baby. These facts work on the socialization of man cumulative-constellatively and rob him of the aspect of bonding and the prenatal time of its psychological space. We shall see which price is to be paid in return.

From comparative explorations of wanted and unwanted children resulted that latter showed a significantly higher number of baby death, brain injury, mental retardation, and problems of socialization [Blomberg 1980], [Matejcek 1994] and [Dytrych 1988]. Compared to wanted children the unwanted children show a two times higher rate of death during the first two months [Bustan 1994] and [Coker 1994]. Babies

whose parents separated during pregnancy are born with lower weight than babies whose parents live in harmony or whose mothers are singles. The context is significant [McIntosh 1995].

Finnish investigators did some prospective explorations on the loss of the object during pregnancy. They investigated one group of children whose mothers lost their husband during pregnancy, and a second group with death of the husband after childbirth. Later on the first group with object loss during pregnancy showed psychotic problems in a significantly higher number [Huttunen 1978].

Investigations from Austria inform us about twenty-seven woman who only got aware of their pregnancy when labour started. In four cases there was fetal death, in one case fetal retardation, in three cases preterm births and in one case death of the newborn baby [Brezinka 1994].

Let us look at two investigations now which present a central connection between the mother's personality and the behaviour of the child. 1312 mothers with depression during pregnancy were observed together with their newborn babies. The babies cried during the first days incessantly and disconsolately and reached the same points on the depression scale as their mothers [Zuckerman 1990].

Another investigation showed that babies whose mothers had rejected them consciously or unconsciously reacted with the Kipp-syndrome in the first 48 hours after birth: apathic behaviour interchanged with hiperactive crying [Rottmann 1974]. This group had the most complicated births and the number of preterm birth was the highest. Other investigations testifiy as well that an extremely negative attitude of the mothers result in a high number of abortion or preterm births or in longer and more complicated births.

Comparative investigations with the groups of three months old children procreated by chance or planned pointed out that the planned babies showed better results in cognitive capacity and in bonding [Roe 1993]. There is an interesting investigation from Pittsburgh in connection with the nature-nurture debate. The debate is centered around the question how much our level of intelligence is determined genetically or by the surrounding. Reffering to a renewed analysis of all available data the investigators have come to the conclusion that the level of intelligence is determined genetically with 34% and by the intrauterine surrounding with 66% [McGee 1977] The intrauterine surrounding and bonding do determine life.

The results of investigations show that there exists a permeable intrauterine space filled with negative and positive events. The more it is neglected, the more tragic the result, the more it is used , the better the results for the postnatal mother-child bonding and the individuation of the child. The prenatal mother-child bonding analysis puts bonding itself under the microscope. We work on two levels at least: On the one hand we discover the unsconcious proceedings which are activated by the mother-child bonding. On the other hand we try to create an emotional-cognitive space of bonding between the mother and her child which is permeable and understandable for both of them. Emotions become communicable and interchangeable, and by that bonding itself can be regulated, differentiated and made harmonic. To discover the unsconcious proceedings is of great importance because the mother is related to her child especially via her unsconcious until the development of the intrauterine bondingspace. That

means, the psychopathology of the mother is reflected in the child and in the later development it appears as his own. Under normal circumstances the internalization of repressed drives, wishes, conflicts, traumata and representations of the mother to the child cannot be avoided. When we add that the interchanges of the actual bonding are internalized, too, not only the derivatives of past bonding of the mother, we feel enough need to try an integration of the unsconcious proceedings in the mother which become active in the here and now of the bonding with the child, not to let them enter the self of the child.

When we regard the unsconcious level of the mother-child bonding like with a monitor we are able to differentiate the following levels:

1.The internalization of the interchanges of bonding.

2. On a second level appear the mother's own pre-and perinatal experiences. These are especially physical experiences, somatic feelings of uncomfort, tortures and pains.

3. On a third level the mother's own intrauterine mother-representative becomes effective. Let us see some examples for illustration.

A young woman in bonding- analysis could not contact her child. There was a dark spot between both of them which gave her a vital fear. The spot changed during one dramatical session into a mother with demonic traits who had not wanted her child. This was the intrauterine mother-representative of the young woman which had hindered her to contact her child for a long time. The dark spot together with the fear disappeared and she could contact her child for the first time [Hidas 1999]. Another woman sometimes panicked with the idea that she could not hold her child inside and he would be a priterm birth. From her anamnesis we learned that her mother only impatiently had endured pregnancy with her as the child hindered her scientific career. It was not difficult to combine both statements. From the young mother spoke her own mother when she became afraid not to be able to keep the child.

After having illustrated the way of the mother's unsconcious to the child we now leave this way and regard the direction of the development of the bonding-analysis. Let us accentuate the most important elements.

The method is for three persons: The mother, the child and the analyst are present. The aim is the immediate contact with the child via fusion with the uterus.

Coming into contact with the uterus as well as with the baby goes via somatic sensation and their personification. The somatic sensation is the language of intrauterine communication. The informations to the mother from the baby via feelings appear on the same inner screen of dreams and phantasies [Hidas 1999]. While in relation with her baby the mother creates a psychic space for the baby to collect emotional and cognitive experiences. As the mother-child bonding analysis works with the unsconcious level of feelings which are not to be reached under normal circumstancies by this a harmonious mother-child relationship after birth is built up here. Investigations into the affective and interactive behaviour of normal babies show that mothers feeling with their senses take care of the stimulation. So they help their babies to organize behavioural and physiological paterns. Mothers who are sensible to the rhythm of affectivity and attention of their babies are capable to connect their own behaviour to it and thus allow their babies to reach an organized level [Field 1981], [Field 1987].

In the first period of bonding-analysis we had worked with mothers to whom the contact to their babies did not mean a special difficulty. We learned from them that the inner voice and the power of love meant a big power of relation, and this was confirmed by experiments, too. The radiation of love is an active energy and makes the babies dynamic and mire vivid. Later on more and more mothers came who could melt with their uterus but when they met their child could not do anything with him. So a mother when reaching her child became uncertain. After a bit of insecurity she began to tell him what she had done during the day. The baby did not move and did not react. The mother became afraid that her baby might be ill. I told her that the baby would react to all messages concerning him. So we could create a cognitive frame of their cooperation. She then could tell him that she was very happy with him and indeed lucky to meet. Then the baby moved and their relation started. This small episod shows that a mother who cannot think about the cognitive and emotional capacities of her child cannot move the baby into a relationship. Rather she robs him of the structure and stability of his self which are needed to develope an equal image of himself via the mirror of the other one. Later on, it occured often that the emphatic way stopped and the mother could not undertsand the message of her baby. When that occurs we ask the mother to tell her baby that she has difficulties to undertsand, she should ask him to allow to melt him. This idea always fostered the relationship. In the background there are thoughts concerning emphaty. In the context of the emphatic willingness of the mother we can ask: What from the privat world of inner experiences can be transferred to the other to lead to a human psychic community, and what -of some reasons- cannot and thus leads to psychic isolation[Stern 1985]. When the mother does not understand a communication of her baby this means for the baby that his experience is not to communicate. So it does not combine but separates and isolates.

When the intersubjective emotional-cognitive space of bonding between the mother and her child is completed all events connected with bonding can be discussed. The earlier mentionned mother told her baby each time when she had a problem with his feelings and asked him if he liked to come nearer to her heart to understand him better. The baby did so. Another time she could not feel his head well and asked him to show his head more clearly. The baby nodded. After that she easily could touch it.

When we ask the mothers to communicate together with their babies their difficulties in biulding up bonding and become concious about it during understanding and the joint relation we built up the space of bonding in a way which does not only make the feelings of the child communicable but the state of mind of the mother can be reflected in the consciousness of the child, too; so both can relate and realize the reactions wished for.

I like to add an interesting detail to the last case: In the end of pregnancy the baby settled in buttocks-position. The mother was afraid that she would have difficult labour. Then a forgotten fact from her first interview emerged: the mother herself and her mother, too, were born in buttocks-position. I asked her to tell the baby: "probably unsconciously I told you that I have been born in this position, and you felt it should be good for you, too. But it does not mean that you should do what formerly I did." This explanation was based on the idea of a possible identification with the unsconcious information of the mother. At night the baby turned and repeatedly changed his position. This is a fine example for the unsconcious proceedings which

repeatedly influence the space of bonding.

It is a long way from starting communication to bonding. The relation which is not represented by the mother mentally does not change into bonding as the feeling does not separate from the body and so does not become a differenciating item of the other person. No baby from bonding-analysis reacts to the caressing of unknown hands but only to that from the persons represented in bonding.

We learned much from the mothers who only with difficulties could establish a contact to their babies. They forced us to become creative in difficult situations and lead them to the way to create a space of bonding. We can learn from the mothers, too, who are able to create bondige. I give one examples here: The episode is from the material of second sessions. The mother is 22 weeks pregnant. She is able to reach the baby in the beginning of the session, and the baby affectively and rapidly comes up aiming at his mother's heart. When coming to a stillstand it knocks three times. The mother feels as if the baby would like to play with her. But she reamins passive. The small one waits some seconds and goes back to his starting point, he retreats into a corner of the uterus and becomes motionless. I tell the mother that her baby might be angry because she did not play with him. She can identify with my saying and the baby again goes up, and they start do play together. What could have happened during these few seconds in the space of bonding? Helped by me the mother understood the feelings of the baby and reflected them. On the other hand the baby felt that his feelings are communicative and there is someone to understand them. So it was freed from his feelings and instead of a psychic isolation a psychic community with his mother is built up. On the cognitive level the baby found an image in the conscience of his mother due to his psychic state. When he can experience that someone else, another individual, which can be separated from his self, has a cognitive perception similar to his own, then the communication on subjective experiences is posible. This means an affective distribution and an acception from both sides as basic elements of the space of bonding. To accept the world of experiences of the other means that we enter it and take part in it and give strength to the other, as if one

would leave his place and go to that of another one [Borstad 1988].

The babies born from bonding-analysis sleep less in daytime. They are born with their whole self and do not sleep and dream themselves back into the body of their mothers. Their whole capacity is directed to the outside world. They look around, they explore the world, they think a lot.They never come to the world earlier. They feel, attach, think, behave in a quite different way as the so called normal babies. They know where they come from and where they go.

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2.6 Children who are victims of violent conflicts often forget the principles of stable attachment and confidence

Helmut Niederhofer

Correspondence to: Helmut Niederhofer, M.D., Schneeburgstraße 27, A-6020 Innsbruck, Austria, Phone: 0043 512 274331, Fax.: 0043 512 274331, e-mail: Helmut.Niederhofer@nibk.ac.at

Preparing children for "responsible life" should also include the prenatal period. Education as well as transferring ethic norms to the children should start very early. A secure base and attachment are necessary milestones, because education needs stable parent-child attachment with plenty of confidence from both parts to each other. Giving a secure base means enabling children to explore the environment as well as giving them the possibility to "return home again" in case of fears etc. Giving a secure base reduces the risk of violence, drug abuse etc, because there is no need for the children to find anybody who listens to their problems and helps to solve them.

Parent-child attachment is determined very early (Bowlby, 1995; Grossmann, 1993), even in the prenatal period (Benoit & Parker, 1994). Actual child examinations are mainly organically based, but nobody checks the family environment and the parent-child attachment.

Because of its proven long-term stability, mother-child attachment should be checked very early and some training programs (which do not exist with exception of the U.S. STEEP program (Egeland & Erickson, 1990), which offers specific interventions to parents and families, where problemtic attachment was diagnosed, should be offered.

There is almost no research dealing with the prenatal period of attachment. Focussing this period may help to avoid violence.

My contribution to this topic is doing research about long-term stability of attachment focussing the prenatal period. Recent research projects dealt with the effect of prenatal attachment on the postnatal period (measured by Zero to Three (1994)) up to the children's age of 10 years (measured by the Parent Child Reunion Inventory (Marcus, 1997)). Attachment classification was based on the mother's estimation (assessed by the Maternal-Fetal Attachment scale (Cranley, 1981)). This proceeding seems to be the best compromise of reliable attachment classification and practicability: completion of the Maternal-Fetal Attachment Scale only takes about ten minutes and does not need the investigator's presence. This way, the Maternal-Fetal attachment Scale could be easily included in the prenatal mother-child screening program. I hope this to be an easy-to-perform possibility to detect problematic attachment, which should give parents the possibility to participate attachment-stabilizing programs.

A current research project deals with an attempt to identify the trimenon of pregnancy, where attachment is first established.

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2.7 Towards a Culture of Peace for the Children of this World

As seen through the Eyes of a Midwife.

Eva-Maria Müller-Markfort

Correspondence to: Eva-Maria Müller-Markfort, Grad. Midwife European Workgroup of Independent Midwives, Wallstr.17, D - 59227 Ahlen, Germany, Phone: 0049 2382 84508, Fax: 0049 2382 82821, e-mail: webmistress@hausgeburtshebamme.de

Introduction

Longtime before a child sets foot into a school for the first time, it has been handled, taught, cared for by a number of people, of which the **mother** is the most important one, either in a positive or negative way.

Indeed, she is the first one the child gets into contact with, and thus all attempts should be made to enable every woman to create an atmosphere of love, tenderness and understanding as a basis for mental and physical well-being of the child, so that love for others, respect and caring may develop in the child over the years.

Over the past decades more and more information has been gathered about the ability of the unborn, hidden away in his mother's womb, to feel, understand and react to messages from the outside. This sheds a new light on the inadequate ways pregnant women have been cared for in the past - if "caring" is the right word.

There is enough evidence today to show that unborn children are defencelessly exposed to whatever **aggression** is suffered by the mother. This comes in many various ways during pregnancy and birth and often is not recognised as such.

For instance, modern technology hides under a cloak of "caring" and "wanting the best for the baby", **a control system that is dehumanising, selective, frightening and driving a wedge between the mother and her unborn child,** to name but a few.

During Pregnancy

Dehumanising the child is not seen as a little human being in its early stages who needs the darkness of the womb and an undisturbed environment to develop at its own pace into a baby with all its potentials - no, it is an object which is taken out of the body of its mother and projected onto a screen; it is being measured and weighed, judged, controlled for possible malformations, congenital diseases or any other abnormality.

Selective is sad to say that we have brought about a selection system of a different kind. The mother who is supposed to protect and defend her child is forced surreptitiously into accepting a machinery which may kill her child at the demand of society with gynaecologists as willing executors.

Frightening

The most damaging attitude towards pregnant women is that of instilling fear into their hearts and minds. Expecting mothers are very open and sensitive to all kinds of messages - supportive ones as well as destructive ones. The screening system and methods leave a feeling of not being a good enough mother, not being able to nurture a baby. Any time any catastrophe may occur, so it is of paramount importance to continue with all those regular check-ups she is subjected to, in a frame of willingness and anxiety.

"Let's have a look whether everything is still normal", is the most devastating sentence the gynaecologist can utter as he proceeds to do yet another ultrasound - it implicates that anytime something can go wrong with the baby, and therefore mothers need the reassurance at each antenatal check-up.

This is why **mother is in a continuous state of fear.** Now fear, we know, has serious repercussions onto the physical as well as emotional health of a person.

Physically the function of the immune system decreases (higher risk of infections and of preterm labour). The speed of the blood circulation is slowed down, which has a direct influence on the baby (growth retardation; small for date baby; possible mental and sensual retardation).

Emotionally fear produces a decrease in self-confidence of the mother; she will doubt her mothering abilities; nervous tension may become chronic with again repercussions onto body and mind. Evidence suggests that undermining a woman's self-confidence will lead to post-natal depression, which is on the increase and has a devastating effect on the whole family.

The child will perceive mother's fear and may find it unbearable; it will react with early contractions as a first warning, and in many cases unfortunately, will find no other solution but to flee from this dreadful place - just to end up in an incubator which is even a worse place to be.

The rising numbers of prenate babies should really stir us out of our lethargy.

Driving a wedge between mother and child

Ideally, the expecting mother is at ease with her body and at peace with her mind. She perceives the unborn child as an integral part of herself. She communicates with her baby on a spiritual, emotional and physical level. From the moment she decides to have that baby, whether planned, expected or not, she has said "Yes" to this child and will accept it just as it is.

Today, mothers are not allowed any more to say simply "Yes" to that little being growing within themselves.

In the light of what has been said before, uncertainty and ambivalence are being instilled into mothers and act like a slow poison. While they wait for the results of early tests, women "put their feeling on ice" - they dissociate emotionally from the baby. They are taught to think that an abortion is a solution in case of a bad result and that

they will suffer less if bonding has not taken place yet, or they may feel less guilty if the baby is not yet perceived as a real human being.

What does the baby feel?

There is enough evidence now that babies know a lot before they are born:

- They feel whether they are wanted or not,
- whether mother thought of having an abortion, or may be attempted to abort (abortion survivor).
- They panic during amniocentesis.
- They perceive the ambivalent feelings of the mother awaiting the test results.
- They seem to know that their life may be disposed of should the tests be unfavourable.
- They react on anything being injected into the amniotic fluid.
- They react in anger to the electronic monitoring.
- They know whether mother thinks about them, plays with them, sings or speaks to them.
- They feel depression and joy in mother.
- They know about the quarrels in the family.

They know, therefore, whether the world they will be born into is a good place to be or not, and whether it is worthwhile to fight for it.

Birth

Birth, in spite of beautiful curtains in all labour wards by now, is still a dramatic experience in most cases for mothers and babies.

To give but a short survey:

- 2 - 3 antenatal check ups per week around term without indication
- induction of labour with prostaglandine, oxitocin drip, often simultaneously
- epidural anaesthesia without indication
- epidural to hurry up the birth process, disregarding the baby's stress and fear
- pethidine and other noxious substances as a routine medication

- rupture of membranes disregarding the higher pressure on baby's head
- scalp electrode without respect for the pain and the higher risk of infection for the unborn
- dilatation of the cervix despite of extreme sensation of pain
- lithotomy position despite its proven negative influence on the birth process
- routine episiotomy
- forceps and vacuum delivery in order to save time or brought about by bad "management" of labour
- unnecessary caesarean sections although the maternal mortality is four times higher
- early clamping of the umbilical cord despite of the negative effects on the lungs of the newborn
- unnecessary sucking of amniotic fluid, which may stress heavily and injure the baby
- early separation of baby and mother
- rooming-in impaired
- inadequate support for breastfeeding
- early discharge from hospital without follow-up by a midwife
- various pain causing measures of surveillance, injections and tests without informing mother
- fear inducing informations about theoretical risks to the child

Bonding

After such experiences the mothers often feel "empty", disillusioned, disimpowered. Episiotomy sutures prevent them from sitting comfortably, so breastfeeding is difficult. Nursery nurses try to "help" by taking care of the baby, giving tea and formula milk in between. The bonding process has little chance of getting off to a good start under these circumstances. Furthermore, bad habits can develop: whenever the baby cries, it will get a bottle of tea, milk, or a dummy, as mothers have not learned to respond adequately to their babies needs.

Later on we can see babies of 2 - 3 - 4 years old running around with a teabottle in their hands so as to be able to comfort themselves whenever in need of consolation, instead of looking for comfort in mother's or anyone else's arms.

Thus a life-long addiction may be triggered off: if you are sad, lonely, in need of consolation - no need to look for a human being, take a bottle! From milk, tea and juices (very bad for the teeth) to beer, whisky and gin.

Who knows!

Suggestions for a change

"If the mother is fine, the baby will be fine", is an old midwives saying. If we want to do something for the children of this world, we must start with the mothers.

I would very much wish for the following:

- adequate, accessible family planning possibilities
- during pregnancy and birth, special caring for woman, which is best done by skilled midwives
- re-considering pregnancy and birth as an emotional and spiritual event which expresses itself through the physical body
- medical attention only in case of pathology
- more psycho-prophylactic help instead of medico-technical surveillance
- no interference with the onset of labour, no induction
- no interference with the physiological process of birth
- no separation of mother and child which begins already with ultrasound
- no harmful handling of the child
- intensive support of homebirths, birthhouses or domino births under surveillance of midwives
- hospital births only for medical reasons
- support of breastfeeding
- household help for the first weeks
- midwifery care for as long as mothers breastfeed
- psychological counselling, psycho-therapeutical help in cases of i. e. postnatal depression or other family problems of a similar kind.

WHO and other organisations have again and again advocated that the best suited help for pregnant women, labouring women and young mothers are well trained, motivated midwives. Overall costs could be reduced enormously, the general health of mothers and children would greatly improve, while long term health hazards could be cut down if the birth of a child were to be put back into the hands of those who, over the ages, have helped all of us into this world - **the midwives.**

Children would have a gentle loving start into life, which would enable them to love others - that is all that's needed!

2.8 Areas of Effect of Prenatal Life Experience

Heiner Alberti

Correspondence to: Heiner Alberti, Dipl.- Psych., Meesenring 2, D-23566 Lübeck, Germany, Phone: 0049 451 622608, Fax.: 0049 4102 896829

Introduction

The quality of the prenatal life experience is of fundamental and marking importance to every individual's life and thus also to the culture and society human beings live in.

The quality of this experience can in a positive sense form the foundation of feeling welcome to be, of feeling safe, of feeling loved and free to love and of feeling attached and integrated as part of a whole.

In the negative sense the quality of this experience can lead to a feeling of worthlessness, of being nothing, of being exposed, rejected and unwanted. The world is then perceived as alien, repulsive, life-threatening and violent.

If these negative experiences go beyond the normal measure of stress the individual is capable of coping with, they take on a traumatising character with all the consequences named in the various concepts of trauma theory (e.g. RIEDESSER and FISCHER, HOCHAUF and UNFRIED, SACHSSE) and with lasting effects on later life phases.

When it comes to fulfilling the individual's right to happiness, it is imperative to make the prenatal period one that forms a positive foundation for later life.

It is only on this basis that the different world experiences - here the underwater world, there the earth, joint by the birth process - can be perceived as a continuum and integrated into an inner whole.

Prerequisite to happiness is the ability to attach oneself, to feel connected and at the same to be free within this attachment.

Prenatal Traumatisation

Traumatic experiences are encapsulated and split off to protect the organism and can under certain circumstances cause a traumatic reaction. They can, if the trauma is not dealt with, continuously recur and emerge with different symptoms such as nightmares, panic attacks, emotional paralysis or dissociative disorders.

They can be triggered by memory stimuli of varying intensity.

People with unresolved traumatic experiences consequently avoid life situations which these stimuli occur, to the extreme of emotional withdrawal from the world and other people. They detach themselves: from other people, from society, from the world, and, as children, from parents and school.

Prenatal traumatisation can thus be reactivated by trigger stimuli later in life. These trigger stimuli place the organism in a state of stress leading to organismic symptoms which tend to be misunderstood or misattributed when viewed without inclusion of the prenatal life period.

The intensity of the feelings experienced by individuals traumatised in the uterus best becomes visible in their descriptions: They often perceive them as hell or torture.

HOCHAUF and UNFRIED describe how the organism at times attempts to protect itself from these extremely threatening feelings that are associated with the traumatic situation by inverting the perpetrator-victim relation, i.e. the individual becomes a perpetrator to the same degree to which he was a victim before. Only thus can he control the inner stress he is exposed to from his own traumatisation. In other words: by looking at the prenatal trauma there is possibly a chance of relating to individuals previously demonised as non-human because of their social behaviour.

Understanding the prenatal traumatisation thus discloses, possibly to a degree that may scare us, an explanation for the violent potential of our society, especially against children.

Traumatising Experiences during the Prenatal Life Period

The unborn child may perceive a threat to or temporary dissolution of the attachment to the mother / womb as life-threatening and beyond escape: If these situations go beyond a certain degree and occur so frequently that the child's self-regulation ability can no longer cope with them, they may leave the deep marks described above.

This threat to and dissolution of the attachment is to be seen as a holistic phenomenon; i.e. it can be triggered by physiological, mechanical and psychological processes.

Thus far the following causal factors have been determined:

- malnutrition
- scarcity of amniotic fluid
- toxic substances (alcohol, drugs medication)
- survived abortion attempts
- excessive stress on the mother
- chronic sense of being unwanted

As pointed out above, the psychological dimension of grave prenatal traumatisation is comparable to that of victims of rape or torture who are known to completely surrender themselves, subject themselves internally and begin to love the perpetrator if the trauma surpasses a certain level. The same analogy can be drawn upon to explain why in the inner psychological dynamics of prenatally traumatised individuals the loyalty towards the destructive aspects of the mother often persists lifelong if it isn't dealt with.

Here, the concept of the "dead mother" offers a good background. It was developed by the French psychoanalyst GREEN, adapted to the social situation of Germany in the time of the 3rd Reich by CHAMBERLAIN and broadened into a body-psychotherapeutic treatment setting by KRENS, H.

Healing with Psychotherapy

The therapeutic setting on the one hand refers to the original traumatic situation in order to enable the individual to get in touch with it and on the other hand offers a solution within the therapeutic attachment experience. This attachment experience is between the client and the therapist in individual therapy and between the client, the other group members and the therapist in group therapy.

2 case descriptions may illustrate this:

1.) The mother of 7-year old Anna is during her pregnancy exposed to strong psychological stress due to violent confrontations with and ultimately the separation from the child's father. In addition, contact with her own mother is broken off. She receives little outside support, often lives in fear and before Anna's birth quits her employment. Anna develops into a baby of frail health and often cries and later becomes a fearful, withdrawn child and eventually becomes mutistic, i.e. loses speech due to psychological blockage. This is noticed for the first time in elementary school.

In child therapeutic treatment Anna begins to paint after a long time of retreat and hour after hour without exception paints herself as an embryo inside her mother's body. Following this phase of painting - and on the basis of the positive attachment established in the background during the painting - she begins to speak. She has found a way of dealing with the strenuous experiences from her prenatal life period.

2.) The 45-year old Thomas once again falls into a grave suicidal crisis after a separation. Before his inner eye he sees himself as an embryo that sits above an abyss and must die; he feels the urge to follow this image. The anamnesis determines that as the 6th child he was not wanted or welcome by the mother and that an unsuccessful abortion attempt was performed. In therapy, Thomas learns to understand and place these inner images and feelings and to take away their influence on his adult life.

To **psychodynamic psychotherapy** the inclusion of the prenatal life period means a broadening of the image of the inner child. The needs of the real and of the inner child for protection and comfort as a constant background of its life process are thus given a deeper reason. One can only understand the primal human conflict of "being or not being" in the entirety of its impact on human by including this period in which dependency is perceived as absolute.

For **object relation theory** the inclusion of the prenatal attachment space yields conceptual expansions as well. The unborn child experiences real outer objects to which it forms a relationship. Among these are the placenta, umbilical chord and amniotic fluid. Their cultural symbolisation as tree of life, snake and water of life show their meaning for the human psyche and thus for adult life very clearly.

KRENS, I. describes the particularities of the mother-child attachment during this period.

The quality of the attachment creates a specific and unique environment consisting of countless factors which are all special in their composition and characteristics.

Prevention

When children are born, they have already gathered many experiences, strengthening ones as well as fear-inducing and restricting ones. Some babies then have problems arriving in their new home world, they cry a lot for no conceivable reason, have nutrition problems, and often hardly sleep - a situation that frequently goes beyond parents' resources and leaves them insecure.

Perhaps the stress situation continues, the child may be unwanted and receive too little attention or care or is again exposed to traumatic experiences. The parents may be forced into a vicious circle of not knowing, not understanding, not feeling wanted by their child, wanting to do things better than their own parents did - and yet they experience failure.

External life factors such as poverty, unemployment, bad life perspective, lacking support from society play a role that shouldn't be underestimated either.

Depending on how the postnatal world behaves toward the newborn, it will either succeed to resolve its prenatal stress or experience a continuation of the stress. The less of a hold the parents have inside and outside - and this may become clear in the course of an unwanted or even wanted pregnancy - the more vulnerable they will be in critical situations with their baby.

According to a study, 15% of German parents do not want their child, perceive it as a disturbance of their lives, as a load, and blame their life problems on it. The study also indicates that 60% of parents want their child and love it but are often insecure, need to talk and wish they had more support.

The prevention of psychological disorders is certainly an important task in this context. It is important that prevention begins by accompanying the pregnancy and the expecting parents.

From the (retrospective) experiences with our clients, some principles can be described that might form a part of new models for prenatal care and pregnancy accompaniment:

1. Teaching about the unborn child as a living being
    - The competent foetus. What does it know? What does it feel? (using movies, slides, photographs and books).
2. Teaching of ways to establish contact with the unborn child
    - Goal: "You are wanted"
3. Teaching the importance of prenatal attachment

- Preconceptional attachment
- Nidation and arrival
- The uteral space
- Continuum of prenatal life, birth and postnatal life

4. Dealing with changing parental roles

   - Themes between man and woman
   - Triangulation: The room that parents create for their children
   - Changes in working life (e.g. career changes or new motivation, incentive)
   - The "single culture" and children

5. Archetypal parental conflict situations

   - Mother: no room for distance (feeling of total exposure: "I always must...")
   - Father: energetically in the 2nd place ("I am not important")

6. Memories of own life history

   - Feel and explore your own life history
     (e.g. "am I wanted?", "what were my parents' motives for having me?", own traumatisations)

7. Alter Ego themes

   - "I must be a good mother / good father"
   - * "I must not do anything wrong"
   - * "I have already done this wrong"
   - * "Feelings of guilt"

8. Energetic support

   - Nurturing the mother
   - Strengthening the father in his attachment and sense of importance

9. The Doula concept for pregnancy

Author:

Heiner Alberti holds a diploma of Psychology and works as a Psychological Psychotherapist in his own practice in individual and group therapy, and as trainer and supervisor of the "International Academy for Bodytherapy" (Netherlands; Director: Hans Krens).

He is the head of the "Luebeck Institute for Psychodynamic Bodytherapy" and founder of the "Forum of Prenatal Psychology".

Together with Inge Krens he is head of the Congress Committee of the "International Congress for Embryology, Therapy and Society 2002".

2.9 The Ecopsychological Mother Exercise

Gerda Verden-Zöller

Correspondence to: Gerda Verden-Zöller, PH.D., Am Guggenbühl 1, D-78351 Bodmann-Ludwigshafen, Germany, Phone: 0049 7773 7127, Fax: 0049 7773 7127

1. The Ecopsychological Mother Exercise from Dr. Verden-Zöller - a part of the fundamental knowledge for developmental social preventive medicine

2. The scientific way to the creation of the Ecopsychological Mother-Exercise

What to do?

What to do ? Let me consider this question by listening to what to say about body awareness as body knowledge in the process of constitution of the human self and social consciousness in the growing child, in my description of what to do with the women that take my Ecopsychological Mother Seminars, as well as of what I say to them while guiding their actions:

Body rhythms

"Body rhythms, flowing forms of sensory motoric co-ordinations, in close body contact between a human mother and a child, are the foundation of human consciousness."

"Time patterns as recurrent rhythmic forms of body movements are lived by the child in the womb. Protected and safe in a pulsating, polyrhythmic happening, the embryo that will become a human child grows developing its own body rhythms of the mother that holds and nourishes it in the uterus: heartbeat, breathing, movements and vibrations of the voice of the mother."

"After the immediate relationship in the womb between the growing foetus and the mother, the most important early epigenic process in the development of human consciousness takes place in the elementary musical, closely vibrating, sucking, stroking, carrying, singing-speaking-cradling, relationship between mother and child."

"To be able to create for the child the tuneful elementary musical environment at the beginning of his or her life, to be able to have optimal resonance with the basic rhythmic competence of the child in the space in which this meets the world that he or she begins to live, we exercise rhythmic divisions of space and time through counting, rhythmicizing and chanting sound names. Thus we listen to the rhythm of our hearts and feel the throb of our pulses, in a find network of sounds that create space. We

sing to the beat of our hearts and play singing following the elementary intervals of our pulses. We recover the good old tradition of lullabies, that is becoming forgotten, as we discover that they evoke our fundamental rhythms. We collect lullabies of our country and of the whole world and sing them together."

"I ask the women to note spontaneous elementary musical expressions of their children. The women record what their children sing when they think that they are unobserved as well as the circumstances and situations in which they have sang. Furthermore, the women sing themselves the songs that their children sang. I ask the women to remember the first play sounds of their children. We play rhythmic dialoges and make sounds at the elementary intervals to be able to feel the rhythmic sound-play of the children."

"I ask the women which rhymes and roundelays their children like. Rhythmically lapping we say and play these rhymes and roundelays. I ask the women about songs that their children always sing and like to hear. We sing these songs. We practice singing stories and fairy tales. Finally, we talk with the children by singing."

"All these activities are enjoyed by the women who perform them willingly, have no meaning outside themselves, and are performed without any reference to use or purpose: They open our awareness to our being in a present."

Body Balance

"There are simple processes and patterns of movements that are needed by the child in constructing the relational social spaces in which he or she will exist through the development of his or her body awareness. They are so simple that adults usually do not perceive them, yet attentive mothers normally can remember them when they are asked. Therefore, I talk with the women about the way in which the development of the basic rhythmic competence, of balancing, of symmetry production in movement, of swinging around central point, ... arise as processes of handling and orientation of the child in his or her own body that he or she practices spontaneously in free play."

"Thus, a woman may say: 'That is right, it is not possible to pass a curb stone, a little wall, or a fallen trunk, without the children wanting to balance on them. They rock on doors and chairs, they jump on beds exercise their balancing powers on bicycles.' Another woman may say: 'And when they draw, children often design beautiful patterns, only from lines with which they divide the sheet of paper proportionally."

"We recognise that children occupy themselves in creating balance in all areas of their senses, not only in body movement. That is, they create order spontaneously searching for the middle point between extremes, for example, between loud and soft and high and low, in the area of sound, or between light and dark and bright and dull, in the area of light."

"The women and I play games searching for balance in the area of colour, for example, ordering them from very light to very dark, and distinguishing some middle one. Or, we search for balance in the area of sound, trying to find a middle point between two extremes of loudness. While doing this a woman may suddenly say: 'My daughter Verena (who is 4 1/2 years old) had a period in which she only painted ladders of

colours. At the very top she filled the space with yellow, at the very bottom she filled it with violet, and she put green in the middle.' Thus Verena created a middle point in a particular area of chromatic distinctions. But children have the greatest fun when they search for balance in body contact with their mothers."

"We play many games in which children have to regulate their own balance in a variety of positions on their mothers's bodies, sitting, laying or standing. Children are in their element in these games with their mothers in which as they play they differentiate their balance competence. Animated in this way they invent a variety of bold and gentle games with their mothers and on their mother's bodies."

"The women tell me that their children remember all the balancing exercises that we played together in the little regional mother/child play groups, and that they also want to play 'horse' and 'ridder' and 'flying' at home with them and their fathers. The women become animated and reflective by seeing how happily their children play the balancing games, and ask me to do balancing and body sensitive exercises in the mothers groups too. They also ask me what is the reason for their children wanting to play balancing games with them. In answer I say to them that children have the innate competence and the biological need to learn to balance, and to hold and maintain it under many different circumstances, by fine vibrating and adjusting movements, and that the normal physiological manner through which they do so in their development is in their playful body interactions with their mothers. Furthermore, I also say to the women that a child feels in the moment of balancing in interaction with his or her mother, and that this is essential for his or her healthy development, that his or her mother is completely concentrated on him or on her, in total acceptance of body and mind, and that he or she is just for him or her, distracted by nothing and attending to nothing else but his or her 'act', as children often say. Moreover, in the course of these balancing exercises the women swing with their children, and the children experience a deep sense of security in their mother's body vibration. At the same time the children feel that their abilities are friendly challenged because they must regulate their balance in a rather unusual position on their mothers bodies. This make the children very happy."

"Some women complain of back ache. When this happens we carefully do the individual concentration balance exercises. These are exercises that are mainly oriented to relax the back by stretching the spine in a manner that relaxes the muscular tonus of the back muscles and permits regaining the original flexibility. The women want to highline their appreciation for the situations in which their children spontaneously exercise their balance, and by working on their own body sensitivity they awaken their awareness of them through their awareness of their own bodies, and in the process they become perceptive as well of many other simple ordinary happenings usually ignored. Normally in these circumstances the women want to empathise with the significance of body balance invention as a fundamental feature of the process of development of individual and social consciousness in the child. That the women should want to do so is significant for their proper completion of this process in their children because it is only through this empathy that they can protect and encourage in them the necessary free play and closeness of body contact in total trust. Indeed, when they become aware of this relation between body awareness and individual and social consciousness, they want to experience their own bodies again as sensitive and precious instruments of awareness,

just like their children do, and succeed in going beyond the disappointments, pains, and tensions, that modern life has brought. Furthermore, they become aware of the beauty and dignity of their own bodies, the human body, through their loving and patient encounter with it as they meet with loving care and patience the body of another human being in the body of their children."

Motion

"I talk with the women about the long process in the history of living beings through which the human upright position as well as all other human body capacities arose as part of the continuos transformation of the manner of living of many successive kinds of animals, so that they become aware of their own constitutive body capacities and of their possibilities for expanding them. As a result the women see themselves as part of a more fundamental history than that of their particular circumstances, and dare to try new adventures in body experience after the balancing and rhythmic games."

"In preparation for the recognition that uninhibited movements have a fundamental significance for the construction of self and social consciousness of the growing child, I encourage the women to remember with their own bodies the different forms of motion with which their children have experimented in their development from their foetal condition in the womb to the fully upright position. Moreover, I call the attention of the women to the different forms and skills of motion that normally appear in succession along the development of a child, as well as to the different ways in which children construct their territories and shape their domains of existence through the development of their motion competencies in an expanding differentiation of their body movements."

"I ask the women: 'Can you show me what does a child see, smell, hear, touch or feel, when he or she crawls?, or, how far does a child move away from his or her mother when crawling?, or, how does the world of a child look like when he or she takes the first steps?' The women say: 'We cannot'. I answer: 'Try it, your bodies can remember; try to dance the motion development of your children. Forget the world around you; begin inside your selves; forget one another, forget where you are, just begin by acting the motions of your children.' And, suddenly, in a manner hardly believable, it really happens, the wriggling and crawling begins. Unselfconsciously the women create in their movements the forms and rhythms that they have seen in their children and which they themselves also lived as such."

"After some time of wriggling and crawling on the floor, in the continuous transformation of or movements, the women eventually achieve the upright position and ask themselves what happens after this in the development of the child's motion. As they ask this question in this moment, they become aware of the enormous expansion of consciousness of the differentiation of motion that emerges in the child with the upright position. And they also become aware that in his or her supreme dancing and graceful playing with the rhythms of the elementary movements in the upright position, a child weaves his or her world as his or her domain of existence as he or she connects one form of motion with another: walking, running, hopping, fairystepping, galopping, ... With this new awareness, and through our empathy and our own senso-motoric activities, we try to understand better situations like the following: 'Little Gaby jumped with her

mother's high heels shoes. The mother asked the child to take off the shoes because it was too dangerous to jump with them on, but the child, without interrupting her jumping rhythm, cried pleadingly: No, no, let me, it is better with these on, it sounds so nice'. Jumping is music!"

"In short, by experientially becoming aware of how a child brings forth the world or domain of existence that he or she lives through the transformation of his or her capacity to move, we become open to understand that we must allow children just to be, while creating for them free space and time for the spontaneously organised playing out of their innate motion competence in a domain of mutual acceptance and respect. Through the freely played forms and rhythms of their movements children experience themselves, their territories, their domains of existence, and create their surroundings."

"Only when we allow the natural spontaneously organised motion activity of the child to happen in a free play, can the child become operationally fully aware of his or her body and of its possibilities. Indeed, it is only hen a child knows operationally his or her head, feet, arms, belly and back, as his or her own body as he or she moves, that he or she can know top, bottom, sides, front and behind, as features of the world that he or she lives, and can know that there is something above, below, in front, behind or by his or her side."

"It is only through his or her body motions that a child can become operationally aware of the dynamic forms of his or her bodyhood, and it is only when a child is operationally fully aware of his or her bodyhood that he or she can live it as the orientation scheme (the human body scheme) with which he or she constitutes and organises his or her surroundings, and orient him or herself in them. That is, it is only through my own body motions that I become operationally aware of my human body form as a common scheme of order, and it is only when I am operationally fully aware of it that I can create a world, ordering it as a space in which I live constituting it as a surrounding that is adequate to my movements because it is operationally an expansion of my body."

"The configuration of his or her surrounding space by a child has a domain of movements, is reinforced by playing ritual games such as hopscotch and 'Gummihupf', common with different names in the whole world. In these ritual games the body scheme is drawn on the ground or marked with bands on the floor, and is jumped or dances upon while numbers and syllables are chanted."

"Finally, the women realise that when they sing and dance the motions and rhythms of their childhood they become again like children, and by immersing in what they do they rediscover how they as children generated the world in which they live."

Elementary signs

"In the first month and years of his or her life, a child by playing, that is, through his or her operation in sensomotoric co-ordinations in play, gradually construct his or her operational body awareness. Furthermore, through his or her operational body awareness as his or her senso-motoric co-ordinations involve his or her 'touching skin' in what we as observers see as his or her 'living in touch and in being touched', or

involve his or her 'listening skin' in what we see as his or her living his or her ears in hearing, or involve his or her 'seeing' in what we see as living his or her eyes in vision, or involve his or her 'equilibrium skin' in what we see as his or her living his or her motions in balance, the child gradually creates his or her surrounding space of senso-motoric co-ordinations that we see as a space of behaviours and actions. In other words, as a child grows her or she transforms his or her operational knowledge of the moving form of his or her body into a surrounding space with dimensions like above and below, front and back, and alternative sides, each constituted as a different configuration of sensory motor co-ordinations that involve his or her muscles and sensory skins in different manners."

"children, when not too restricted, often run circular and elliptical paths spontaneously, or hop and jump the lines of their bodies and movements into their immediate surroundings going in vertical and horizontal lines, right angles, crosses, squares, zig-zags, spirals and snakes, and they do so in an astonishingly systematic way. Thus we can see in the streets of towns and cities that children organise their motions around rectangular paving stones, or they draw spiral snails and their body schema while they hop, and chant to their motions. For example, a favourite game that children dance in the streets where it is possible is:

and one	a hat	forwards
and two	a stick	backwards
and three	an um-bre-la	sidewards.

"Also children begin to draw vertical lines, horizontal lines, crosses, circles, diagonal lines (staring from the bottom right hand corner to the top left hand corner, and from the bottom left hand corner to the top right corner), triangles, squares and spirals, on any surface, after they begin to move independently from their mothers and have had opportunity to run the lines of their bodies into the house, the garden or the street. And they do these drawings for a long time without distracting from what they do. Children love to do this especially on large surfaces like the floor of rooms, walls, street pavement, sandy beaches, or the long sheets of white paper that I provide for them in the mother-child-play-groups. In this way the child extends the axis of his or her body and the directions of his or her motions in what we see as his or her immediate environment."

"Drawing in this way is for a child like dancing the knowledge of his or her body, as well as of his or her main possibilities of directions of motion, with the hands. In this manner the children connect the forms which they have experienced with their body motions in one domain of senso-motoric co-ordinations in other forms or ornamental patterns that they experience in a different domain of senso-motoric co-ordinations. At this time children say: 'Making lines is so beautiful'; or, 'Mom, I have made a pattern, a beautiful pattern.'."

"During this period it is important for the confidence of the child in his or her innate competences, and for the development of his or her self-acceptance and respect, that the mother shows pleasure at the colourful dots, circles, balls, lines, crosses, triangles, squares and spirals that he or she makes. It is also important in this period for the

acceptance by the mothers of what happens in the child, that now and then they also take time to draw these elementary signs on large sheets of paper while sitting on the floor. In doing this the mothers play with the elementary signs in the manner in which their children give form and significance to their growing perceptual spaces, and may recognise that the perceived object is created in the combination of very simple operational dimensions.

Together with children and artists they can 'descend into the prehistory of the visible', as Paul Klee says, and can experience what Paul Cszanne meant when he said that 'everything in nature is formed like balls, cones, cubes and cylinders'."

Space

"The women try to understand what their children do in their 'play space', which is for them their 'existence space'."

"the children set for themselves reference points, imaginary (we call them imaginary because we do not see them as they do) starting and finishing points. They run, hop, jump, imaginary connections and ways that unit these points. They divide these imaginary routes with marks. They jump from one mark to another. They repeat their motions from one point to another again and again in a ritualistic manner. They sing or say syllables or rhymes to the rhythm of their motions. Sometimes they simply count the steps on their routes. They do all this in a very absorbed manner, as though they wanted to imprint what they do in their minds. After some time they vary their motions, and run faster from one point to another in their routes or they suddenly begin to jump on their imaginary route after having hopped along it for a while."

"Everything is done by the children as if they wanted to imprint in their minds what they do by saying to themselves: 'I must sind, dm d dm d so many times, then I must jump my way once, my route is that may hops long. My route takes so many hops from its starting to its finishing points.' The children do not say it but they act it: Through rhythm they make time. The extension of the route that the children follow in time is an idea, an abstraction of their body motions in the domain of rhythms. The route, the path, does not exist in the touchable, is not concrete, we may say. The route is constructed in the innermost self of the child as a process of memory in behaviour. The route is constructed in re-membering (re-making) it in the many steps that are necessary to move from the starting to the finishing point. In the innermost self of the child, that is, in his or her body operational awareness, the many steps that constitute the route are integrated as a particular operationality that, as it is used as such, it makes the Gestalt route. It is through this manner of senso-motoric body synthesis in which spatial dimensions such as forwards and backwards, and time dimensions such as before and afterwards, arise as Gestalts of senso-motoric co-ordinations, that the child creates the worlds that he or she lives and will live as different domains of senso-motoric co-ordinations. Without these Gestalts of body operational awareness there is no path, there is only that which happens when the foot touches the ground, no world or worlds, only isolated sensations."

3 New Parenting

3.1 Pre-concept: Prenatal Prevention

Sigrun Haibach

Correspondence to: Sigrun Haibach, Lersnerstraße 40, D-60322 Frankfurt, Germany, Phone: 0049 69 554592, Fax: 0049 69 5962451, e-mail: haibach@t-online.de

Preliminary remarks

By global standards, the children in the highly developed countries of Europe and America are in many ways privileged. This does not alter the fact, however, that the children in this hemisphere are also confronted with conditions which in the medium term can have contra-productive effects on the development of a "Culture of Peace and Non-Violence".

With our "New Parenting" initiative we aim to address the problems of the psychological development of children in Germany. We are aware of the fact that in other European Union countries, the United States and Canada similar family and psychological constellations could in the long-term threaten the successful, peaceful and non-violent future development of society. Nevertheless, the cultural differences between our countries are still so large that the solutions which we have conceived for Germany will not automatically function elsewhere. The problems are similar, but the solutions must be developed with respect to the specific country.

In principle, this also applies beyond the boundaries of the so-called First World. All children have a fundamental need for emotional security, attention, and love, and this, regardless of cultural, geographical and social borderlines. Children all over the world have a right to this. It is a human right which we adults have to take into account in keeping with the social, political, economic and cultural circumstances that prevail at local level.

Thus the "New Parenting" initiative also sees itself as part of a worldwide campaign for a life of peace and non-violence which people all over the world strive for in the interests of their children.

Social background

There are many pointers to the fact that society in the highly developed countries of Europe and America are currently confronted with a fundamental psycho-biological and socio-cultural dilemma.

On the one hand, the process of individualisation continues; people should be free, mobile, flexible and unconstrained because the economy and society demand this. For this they require an identity that is as stable as it is capable of adaptation.

On the other hand, this very lifestyle can exert great pressure on our psychological and emotional stability. Orientation around authorities and protective conformity are no longer binding expectations. Family ties are weakening. The robust Ego (Ich) is being replaced by excessive egotism.

This is particularly dramatic in the case of the psychological development of children. Many of them have behavioural and learning difficulties at a very early age. Irrespective of the differences in the symptoms, recent studies and interpretations point to a psychological instability which has its roots in insecurity with regard to relationships at an early stage in life. In their early years, these children have not experienced sufficient physical and psychological attention from the people close to them. Their psychological bonds with primary relations are insufficiently developed. They are forced to compensate for the resulting lack of psychological stability with increased selfishness, for example.

The problems this gives rise to have an impact not only on the respective child, but on society, politics, the economy, and culture as a whole.

New forms of prevention

What can parents, educationists, the state and its educational institutions, the health system and ultimately we all do to promote the psychological health and stability of our children and counteract negative tendencies? One promising possibility is to avail ourselves of the latest insights of pre-and perinatal psychology and integrate this into primary prevention programmes.

Pre- and perinatal psychology: Research findings worldwide over the past years have shown that it is both right and important to support the psychological development of children as early as possible. Pre- and perinatal medicine and psychology have made great advances in the past decades and shown to what extent a child's emotional life and personality develop even before birth.

Primary prevention: The emotional foundations for a strong identity are laid in childhood. International long-term studies show that emotional stability and psychological health are the basis for those "protective factors" which later shield people from psychological illness, addiction or aggressive behaviour. The objective of primary prevention is to promote the development and consolidation of these protective factors as early as possible.

Against this background, we are appealing for an active psycho-social dialogue between parents and their unborn child. By beginning psychological primary prevention in the period before the birth, it could be possible in the future to broaden medical care at this important phase in life to include decisive emotional components.

This insight gives rise to a new responsibility on the part of society for parents and their unborn children.

First consequences

A first essential point is the basic emotional attitude of parents towards their unborn child. For this reason it is important to prepare young couples not only for the conventional medical, but also for the psychological dimensions of pregnancy and birth and their life with a child.

Practically, this involves preparing young couples to consciously assume an appropriate parental role. Parenting has to be learnt. It is also high time that state involvement was demanded in this area, meaning the training of specialist doctors, educators and counsellors. Another field of state activity is the preparation of adolescents at school for conscious parenthood; this goes far beyond mere biological information.

The general public must also be made aware of the fact that the future of our society is dependent on how today's children master the ever more complicated demands of life tomorrow. Concepts of efficiency and achievement are as inadequate for this as are purely technical approaches.

If we do not succeed in giving our children the necessary scope and the emotional support to develop a psychologically stable personality, they will not be able to face the challenges of a responsible life in the world of tomorrow.

New Parenting Foundation

The task of the foundation is to inform people about "New Parenting" and promote its practical implementation.

Its main objective is to initiate a "New Parenting Movement" with informally linked self-help groups.

Objectives

- Creation of better psychological and material conditions for the positive emotional development of children
- Compilation of relevant practical information for all the respective target groups (parents, educators, teachers, experts (specialist doctors), institutions, media)
- Sensitisation of the target groups / PR work on the themes of prenatal / perinatal psychology and primary prevention
- Informing the target groups about research findings and their practical application
- Practical support for expectant / young parents
- Practical support for educators, teachers, counsellors
- Optimisation of the training of doctors, educators, teachers.

Target groups

- Expectant parents / mothers (before pregnancy)
- Expectant parents / mothers (during pregnancy)
- Young parents / single parents (with infants and small children)
- Young parents / single parents (with primary school children)
- Self-help groups (expectant mothers groups, breastfeeding groups)
- Midwives
- Educators (kindergarten)
- Primary school teachers (pre-school, 1st - 4th class)
- Educational counsellors (advisory centres, schools' psychological services)
- Paediatricians
- Gynaecologists (pregnancy, birth)
- Child therapists
- Psychologists and therapists
- Educational scientists

4 Prenatal Education

4.1 Prenatal Bonding and Psychotactile Communication between Mother and Child in the Various Months of Pregnancy

Gabriella Ferrari

Correspondence to: Gabriella Ferrari, President of the Italian Society for Prenatal Education (ANEP), Via Guiseppe Rossi 9, I-43100 Parma, Italy,
Phone: 0039 05214 93900, Fax: 0039 05214 93900, e-mail: gabriellaferrari@interfree.it

The theme of this brief paper deals with a synthesis of the methodological approach to prenatal psychotactile communication, which, dating from 1973, arose from my personal experience with expectant mothers in courses for prenatal education and childbirth preparation organized by the Parma branch of ANEP (National Association for Prenatal Education). The teaching staff is composed by a female gynaecologist, a female psychologist, a midwife, an expert in breast feeding and myself. My functions were, and still are, those of organiser of the course and of prenatal educator, with particular emphasis on the fostering of the parent-child relationship. The psychologist intervenes indirectly in my work by helping pregnant women to overcome conflictual situations in the relationship with their own mothers, so as to avoid negative projections on their babies. The continual contact with pregnant women has enabled me through time to focus on a methodological approach to psychotactile communication between mother and child that I shall try to schematize.

The dynamics of conception is illustrated to parents by audio-visual media during the **first two meetings,** the expectant mothers are amazed to discover that a hormonal communication occurred when they had not yet realised they were pregnant. It is the child who first communicates with the mother by announcing his presence to her hypophysis. Then the child in embryo begins to make a niche for himself inside her by delving into the endometrium, and the mother reacts positively by producing cortisol which weakens the immune defence system and allows the child to set up his niche. For the expectant mother, both for her self-esteem and for her present and future relationship with her child, it is very important to know that, aside from any ambivalent feelings, deep inside her she said yes to the baby and welcomed him warmly. All of us who are here present received a resounding yes from our mothers immediately after conception.

In subsequent meeetings there is an exposition of what is relevant to the formation of the child's body with particular reference to the functioning of the sensory organs in the various months of pregnancy. Aspects relating to the intelligence, sensitivity,

capabilities and cognitive skills of the foetus provoke reactions of astonishment as they could never have imagined such precociousness.

In subsequent sessions notions of child psychology and pedagogy are also propounded by the psychologist in order to help parents adopt, right from the start, a proper educative and communicative attitude towards the prenatal child : active listening, a propositional and not intrusive attitude, respect for the answers and preferences of the child, support in helping him to express all his potentiality, and so on.

At this moment the experimental work to reactivate psychic and tactile sensitivity begins.

Once their skill in communicating has been honed, during a deep relaxation, the expectant mothers are guided towards the first psycho-emotional contact with their child. The mothers are invited to speak inwardly to their baby, to explain to him any problem they may have had with him, to let him know they are happy that he exists inside them. In practical terms, and thanks also to the work carried out in the previous sessions, the mothers are helped to come gradually and tangibly into contact with their child, to accept him and welcome him lovingly. The children move and react to the first caresses. Many mothers weep for joy. Others even before the third month of pregnancy say they feel movements of the embryo.

In the course of further meetings there is a gradual shift of attention in the pregnant woman from her own self to the child : as the emotional bond with the child is strengthened and the affection consolidated, so her physical malaise and sensation of nausea diminish. Sometimes these symptoms disappear at the very first attempt at communication with the child.

Mothers up to the fourth month work on psychic communication and on the perception of the first reactions. The first cradling is taught towards the third/fourth month. **From the fifth and up to the end of the sixth/seventh month,** work on psychotactile communication is enhanced by new games and experiences during which the mothers begin to interpret the responses and recognize some aspects of the child's nature, such as his musical tastes and preferences for varying kinds of experience. The children react to habitual signals, which may or may not be accompanied by repetitive monosyllabic sounds. Those children accustomed to this kind of signal respond with identical ones. For example, two sounds (TOC TOC ? or PUM PUM ?), even if unaccompanied by two corresponding pats, provoke a reaction represented by two small kicks of the child, and the kicks become three if the initial sounds are three.

The child follows the mother's hand. When she invites him up towards her heart, he moves upwards.The child often shifts upwards to the heart even at the mother's unexpressed mental request. One particular mother, who had serious problems of acceptance of her child, as the pregnancy occurred at the wrong moment in her life (she had to finish her studies and she had known the father of the child only for a short time), suddenly began to love her little one with immense feeling only after incredulously requesting him to come up to her heart in a trial run. The child, in the fifth month of pregnancy, immediately moved and the mother broke down in sobs. Then she spoke directly for the first time to her child and said : "but you really do understand me !". Feeling herself to be so intimately understood by her child, she was finally able to come out of the sense of frustration that had depressed her and found a

right reason to accept her pregnancy.

In the course of these months, fathers, too, are invited to do cradlings. Husband and wife lie down on the same side, her body in his arms. The father passes one arm around her abdomen and lays it at the bottom of the abdomen itself. After tapping the conventional signals, the child settles down gently at the spot corresponding to the father's hand, which then begins to cradle him. This represents a highly emotional moment for both of them. While they rock the child together I often hear them begin to sing a lullaby in a soft voice.

Many are the games and experiences that may enhance the relationship between parents and child. It is possible also in water to carry out really extraordinary experiments. But the time allotted for this paper is short and only a very slight part of this theme can be addressed. Among my many experiences, I would like to recount a very interesting one which has to do with psychic communication. The mothers are set out in a circle, kneeling with their bodies closely touching each other (sometimes in an embrace or holding hands). In absolute silence a circle of energy between mothers and children comes into being : the children begin to move and gently kick, as if expressing joy at this novelty. Each mother informs the others with a nod the moment the child starts to move. Very often all the babies start moving simultaneously. Then a group cradling begins and a lullaby is sung in an undertone. When the cradling is over, some children, three or four out of ten, set in motion a sort of self- rocking, a behaviour which is characteristic of perinatal life.

From the seventh to the ninth month prenatal baby massage is taught and the dialogue becomes more extensive. At this point the triad has long been established to the greater advantage of the couple who will not experience trauma in seeing their relationship unhinged by the sudden presence of the child after birth, whereas this does occur with parents who have had little communicative contact with their baby during pregnancy.

Between the seventh and the eighth month, work with mothers who have a **breech child** can begin. Whatever the decision (Caesarian section or dialogue and communication to persuade the child to turn), it must be taken by mutual consent. In addition to talking properly to the child, gentle tactile stimulations and luminous stimuli are used to indicate to him the path of rotation. In our courses, the number of children who remain breech is very small.

In the latter part of the course, the theme of the necessity for **separation** is dealt with. By means of exercises of dramatization, delivery, birth, embrace and the first breast feeding are mimed. Then the mother explains to the baby the absolute necessity for a change in their relationship and in his living habitat. By this process the mother persuades not only the child of the need for this change, but also and above all she is making that persuasion her own. A well conducted work on separation diminishes the ambivalence towards letting the child come out of the womb and creates in these mothers a strong desire to see and hug their child. This work is very important because if the process of separation is accurately carried out it will lead to deliveries with less complications and to a puerperium characterized by an almost total lack of symptoms of depression.

In the last fourteen months, out of 100 women who attended our courses 63 gave birth

in our main city hospital (in which 33% of births are by Caesarian section). Only 12 gave birth by Caesarian section.

Out of 100 puerperae who had established a good relationship with their child and who had affirmed that they were ready for the separation from him, 48 found no sign of depression, 46 tinges of sadness for 2 or 3 days, and 6 were depressed for a few days with occasional bursts of weeping. All these 6 women gave birth by Caesarian section.

I would like to end this paper by wishing that this marvellous prenatal child who dwells in all of us and who is the foundation of life itself may become better known and soon receive the attention, dignity and love that every child needs for healthy growth of mind and body. We are not alone in thinking that if more psychologically stable children are born then the main beneficiary will be society itself.

4.2 Application of the prenatal education

Gino Soldera

Correspondence to: Gino Soldera, Ph.D., President of the Italian Society for Prenatal Education and Psychology (ANPEP), Via Contic Agosti 161, I-31010 Mareno di Piave (Tv), Italy, Phone: 0039 0438 30269, Fax: 0039 0438 30269, e-mail: Gino.Soldera@libero.it

"The history of every human being after his birth depends certainly on the physical and medical cures that he receives. Serenity, strength and wealth of the emotions felt during the prenatal life have not a small influence on him. This line of the prenatal research is therefore to be considered of great importance." (GIOVANNI PAUL II)

In the course of history and several cultures we have many references to the Prenatal Education:

- In INDIA since the first day of pregnancy the woman had to try to have a serene mind and a cleaned up body, to play pleasant pastimes and to do propitious rituals in favour of her ancestors; she had moreover to avoid to come in contact with disagreeable feelings of whichever type

- PLATONE asserted that it is necessary to take care of future mother so that she can live her pregnancy considering only the serenity, the good will and the calm. In ancient GREECE there was the habit to reserve to pregnant women gardens and special apartments full of works of art.

- CLAPPIER has found that in the XIII sec. in EUROPE trade corporations were interested in the argument and did not allow women to work during their gestation

- Some decades ago, in Iceland, during pregnancy, women respected the habits to lead a calm life, to moderate drinking and eating, or to assume alcool, to avoid any kind of choc, to deal with care and patience, relatives and friends had to be patient and give their help and support and aid

- English philosopher Sir Thomas Browne wrote" Sure we are all making a mistake in calculating our age, everyone is some months older; because we live, we move, we have a being, and we are victims of the actions of the elements, and of the diseases, in that other world, the authentic microcosm, that is the uterus of our mother.

- SIGMUND FREUD wrote: there is a great continuity between the intrauterine life and first infancy, much greater than we think after the impressive censorship of the action of the birth.

Prenatal Education

The Prenatal Education was born in France at the beginning of the '80; it has tried to collect and to introduce all the meaningful experiences that have been developed in this field in order to help the parents to take conscience of their possibilities and to operate in harmony with life. This because during the nine months of the gestation it is the first true education of every child because this period determines for the formation of each human being and of his personality. The experiences that the fetus lives in this phase will remain in his unconscious for his all life, excluded some rare exceptions.

The first prevention in favour of every human being is in his maternal womb, that is what Michel Odent defines the relationship of directed dependency of the son from the mother. During this period the bases for the future development of the child are based together with his state of health or disease, of well-being or malaise, satisfaction or suffering; the bases of the development of the latent potentialities, that will influence the individual in being himself and believing in himself.

The suggestions, the rules, the indications and contraindications that are given in the field of the prenatal education have the aim to let parents find, in free and not costrictive way, the way to concretely show their love to the child. The education is different from the instruction, which is the transmission of knowlege, the education is the ability of the parents of taking care of their child, getting in contact with his plan of life and let it come true.

The etymological meaning of the word education comes from the Latin word "educere", which means to take out the potentiality and resources that are within everyone who follow a methodology and a closely personalized path. Taking care of a child means to accept him the way he is and not the he should be, without reserve and conditions, from the moment he was born so to have a strong and deep relationship. If we consider that our child is present in the maternal womb as a human being, as person, even if in shape of zygote, embryo and fetus, then we can:

- have empty spaces within us, take care of him, listen to him and know him, love him and rispect him,
- start a relationship with psychical and emotional exchanges not only hormonal,
- live his own experiences next to him and to grow with him; that is worth for the parents, the relatives, and also for operating sanitary workers .

Mr Milani Comparetti introduces the relationship between parent and son in the globality of the relationship between person and person, where the proposal of the one finds answer in the proposal of the other, starting with the exchange between the parts towards a creative process in continuous evolution, which will not possible if one of the two is missing.

In fact, we know that the idea that we have of the child will interfere in the type of relationship and in the behavior that we have towards him.

In the past the child was not considered for his needs, it was believed that the child was only a body without a mind, had a disorganized mouvement system, incapable to feel and to perceive, lacking in relational and comunicative possibilities.

The numerous collected data have demonstrated, on the contrary, that the child, since the moment of the conception is:

1. a complete, alive and present human being with his own individuality, that it has all that that he needs in order to his prenatal life. He explores and participates to the uterus life and is the craftsman and the protagonist of the own existence.

2. an intelligent, sociable and comunicative human being, with a movement and perceptive system that is developed according to individual rhythms that allow him to interact with the parents and the milieu. The ecographic observation in the mother womb has shown that the child actively looks for new stimuli, needs emotional experiences and interacts actively with the parents and in particular with the twin siblings using innate comunicative faculties. The twins, since the beginning of the pregnancy, show differences in their behavior and characters, develop a specific way of interaction which will be maintained.

3. a being in formation is able to learn from his mother and from the external milieu. During the nine months of gestation the children live dipped in the uterus where they meet and multiple sensorial stimuli are interlaced, in particular the sonorous ones. In fact, the fetus he learns to know new sounds, to pick up the speeches, to recognize the difference between similar syllables and to remember musical songs.. Moreover children recognize fables and musics and, once they were born, they suck with the same speed necessary to listen to the story of the fairy-tales, histories and the poetries, previously known; they distinguish a male voice from a feminine one and when the mother directly addresses to him or to one third person. Therefore, all the experiences of a child, during the prenatal phase, are integrating part of his personal patrimony.

The Application of Prenatal Education

The application of the Prenatal Education begins quite before the conception, exactly when, we are waiting for an illustrious host, we begin to embellish and to render the house more pleasant. Because the way we receive him in our house depends the relationship that we will have with him in the future.

From medicine we know how important is to verify the state of general health and the one the genital apparatus, to cure probable pathologies and to live in a way which must be compatible life with the one of the future host.

It is necessary a style of life with no unhealthy habits such as irregular feeding, alcoholic drinks, smoking, dangerous drugs or a particularly stressful life. On the contrary it is suggested to have good habits, adequate and corrected feeding, that contains an appropriated folico acid amount and all that can be useful to the development and the formation of the child, an adequate rhythm of life with enough activity and rest, in an

atmosphere where the mother can live satisfactory experiences, can cultivated relations and stay with her own family.

In fact, during the gestation, the child receives the nutriment, the prints and the information, and, thanks to an autoprocess given by the Ego he models, organizes his own defensive abilities and is able to adapt to the structure of his own future psycophisical life. It is not indifferent if the food that the child receives is healthy, pure, rich and of high nourishing value, or polluted, degraded and poor. The result will be however substantially various, the children will be various, the humanity will be various. In fact, a highly anxious mother who must face many stresses during her pregnancy can have an aggressive, irritable and anxious son; while a relaxed mother who waits for her child with love and happiness creates a positive tie between the child and the family.

The studies lead in this field point out that there is a tie between the emotional perturbations lived from the mother and the psychological and physical state of the child. The objective elements of stresses determine in the children a number of difficulty meaningfully elevated compared to the ones who have not lived a situation of particularly serious and continuous stress. The optimism and the love that the mother has for her child has a determining role in the formation and organization of the life of the child. In the popular conscience there is the idea, and probably is right, that the children of the love are the most beautiful. The researches carried out in the P.E. have shown that children, whose parents that during the pregnancy have tried to enter in relation and to communicate with the own sons and to help them in living some interesting experiences, they will be alive, available, manifest one good emergency of base and ability to adaptation; they astonish for their calm of behavior, they are observers, they don't cry a lot.

One Proposal of Prenatal Education

This proposal has been studied considering the needs of the parents and of the child trying to help at most the relation parent-child and the stimulation in their relation with an eye to the phases of development of the fetus during the 38 weeks of gestation.

I TRIMESTER the first trimester regards the existential area, the welcome, the total aspect of the child. What counts more is the phase of the interaction. The mother needs of love, respect, attention and above all understanding from part of her partner. The parents would have to try to spend together as more time as possible this increases the familiar tie and stimulates the endorfine release. Many studies have demonstrated that the primary relation mother-child begins before the birth and that a premature involvement of the father during the pregnancy favors the relation father-son: tie that involves meaningful emotional advantages for the child. Moreover in this phase it is necessary to try to become more aware of the own existence: the mother will have to get a notebook or a per diem one in order to write all her ideas, impressions and dreams, but also the questions and the worries that cross her mind. This practical gives the mother the exact documentation of the her experiences and to open a moment of dialogue, discharge of the tensions and reflection. All this helps to develop a greater knowledge of himself and to take note of the changes happened in the course of the gestation, moreover this helps to know the characteristics and the tendencies of the child

and in particular his life plan. In 700 the theologian and Swiss writer J.K. Lavater (1741-1801) stated: " If a woman could describe in the detail all the imaginative states that cross her spirit in the course of her pregnancy, it could in part perhaps preview which philosophical, moral, intellectual and fisiognomical destiny will have her child". This stresses the importance during the gestation to have an acceptance attitude, of listen and respect towards the child waiting for living one responsible and aware experience. Many useful experiences exist in so far as, like the abdominal massage, the respiration, the relaxation, the visualization and the positive stimulation of the senses of the mother.

II TRIMESTER the second trimester refers to the relation and communication of the child in formation with his parents and external world, and more in a generalized manner to the affective and emotional life. And this through moments so to develop the intimate relation with the child. Important are the practical of the oral and psycotactile communication, the one of the caresses and the one of the cuddles.

III TRIMESTER the third trimester regards the perceptive area, the contact with the external world and the ability of the child to begin to pick the particular, but also to improve the activity and relation ability. Interesting to propose are the pleasant and creative experiences of game and this through nice proposals of interaction that involve the tact, rythm and movement activities, beyond to that visual one.

The Result

We can see the results that be achieved through the Prenatal Education also thanks to the result achieved from the ostetrician Chairat Panthuraamphorn of the Hua Chiew Hospital di Bangkok in Thailand, who used a similar program to the one above on a small number of people: 12 cases (12 from an experimental group and 12 from the control group of equal conditions) who participated to a course of 2 hours for four times to the month.

The results of the Apgar scores don't show meaningful differences between the two groups.

As far as the development of the children of the two groups four fields are to be mentioned:

1. Staff-social field
2. Fine movement field
3. Language field
4. Movement field

From the collected data turns out that there have been meaningful advantages referred to the the following variables:

- length and circumference of the head,

- fine and rough movement ability
- acquisition of the language

This means that it is possible to follow in a meaningful way the physical, affective and social development of the child if exact indications of Prenatal Education are used.

The Conclusions

We hope that also in Europe the Administrations, the Units Hospitals worker, the territorial Services and those people that operate in these fields will have a greater interest and attention for the prenatal period and of how much can be made in this field with advantages for future generations and the whole world.

Thanks to all this it would be good that the Education Prenatal would be proposed in society as an effective and little expensive way of make prevention, in order to quicken the development of the well-being of the child from the physicist, psychical and social point of view. Beyond that we must not forget that thanks to all this we could carry out the potentiality latent in an individual, too often forget in the man.

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5 Cultural Significance of Early Childhood

5.1 The cultural significance of early childhood

Klaus Evertz

Correspondence to: Klaus Evertz, Takustraße 39, D-50825 Köln, Germany
Phone: 0049 221 5509156, Fax: 0049 221 5509156

The function of art in society, its necessity and significance is self- evident. Productive and receptive aesthetic experiences offer a perspective about the human condition which complements those of the sciences, of philosophy and of religion. The aesthetic-ontological, the aesthetic-epistemological and the aesthetic-psychological authority of art is vital for survival and the future development of society. Pre-and sur-verbal possibilities frame cognition. They demonstrate continuity of consciousness out of which aesthetic experience and reflective thought - forms of cognition that are contingent on each other - evolve, differentiate and finally merge again as unified perception in aesthetic thought.

But what is the actual fascination with art? Philosophical aesthetics since pre-Socration times, psychological aesthetics and art historical investigations since the enlightenment (Allesch 1987, Belting 1994, Schneider 1996) continue to seek for explanations. Yet artists themselves provide answers in their work.

Psychoanalytical art theory since Freud (Kraft 1984) has contributed significantly to the discussion on aesthetics. Freud suggested that art does not solely arise out of contemporary, formal-aesthetic considerations, philosophical and religious ideas, free-floating perception and imagination, but also and particularly through childhood memory: memories of happy and of traumatic moments which - unconsciously - find aesthetical expression in a work of art. His contribution offers contemporary art theory which, at present, has reached a stage of stasis, a future-orientated topicality (Evertz u. Janus 2001).

Scientific knowledge gained during the last thirty years, be it through psychological research into bonding, empirical research into infancy, prenatal psychology and prenatal medicine or psycho-neuro-endocrinology of pregnancy and birth emphatically confirms Freud's fundamental thesis and expands on it. The main outcome of these types of research is the evidence that the embryo is capable of a unified, a-modal experience(Freybergh u. Janus 1989ff). This affective (self)-consciousness articulates itself in synaesthetic perception, in body and pictorial thought, which form the basis of the subsequent reflective I-consciousness that begins in the second year of life (Janus u. Haibach 1997).

The (self-)consciousness of man which grows as a unity from the moment of conception, cannot be split by any other means than a concrete trauma. Likewise, in perceiving

a work of art, the dichotomy between the aesthetics of objective form and subjective content cannot be maintained convincingly, unless through very reductionist aesthetic models.

The starting point of all aesthetics is the individual, as artist, as observer, as theoretician. Only when the individual, the subject, can be retraced in his entire ontogeny do we reach the couple, the triad, the group, the collective. Psychodynamic and cultural-psychological conditions (Bosch 1980) of productive and receptive aesthetic experience can only be thought in terms of reciprocal development. Proceeding from a modern, psycho-analytical perspective, man and woman live exclusively through their relationship to objects, that is in aesthetic dimensions.

The old, metaphysical function of art as a starting point for an aesthetic experience that potentially ends in transcendence is psychologically understood as a crossing of the ego-boundary, a depth-regressive opening into a pre-verbal, a-modal continuity of consciousness of the self. The basis of all forms of art and their reception is formed by the pre-verbal experiences of man, both in their entire synaesthetic complexity and as the foundation for an identity that defines itself in interaction with objects (Evertz 1998).

'Art-Beautiful' as the paradigm of truth for art is therefore 'true contact' to one's individual cosmogeny and individuation in its particular transparent consciousness. At best the artist transforms this sensation of 'getting in touch' into an exemplary, aesthetic conciseness offering the potential of emancipation, of autonomy. The observer can approach this progression-regression through projected empathy.

Aesthetic experience within the creative process and in the reception of a work of art offers the possibility to encounter interdependent stages of individual life which, however, are not external to normal abilities of perception. The old concept of genius no longer applies.

Art, therefore, draws its substantial emancipatorary-cultural function from the bond it procures between pre-verbal experience and adult consciousness, without which society cannot survive.

Future art and aesthetic will no longer subjugate this correlation for the benefit of an existing, implicit agreement of desire between artist and audience (Kofman 1993) which proceeds from a culturally necessary - yet illusionary function - of art that transforms real pain and real suffering. Instead the art and aesthetics of the future will renegotiate on a higher level. (Evertz u. Janus 2001).

Fiction is the last sanctuary of memory.

Art contains information about the pre-verbal life of man. This explains the enduring emotion set off by aesthetic experience. In a specific transparency of consciousness the artist can give happy as well as traumatic experiences of his or her own child being an aesthetic form. He or she can remind the audience, who are not required to perform a conscious remembering. Cultural development for the future can, however, only take place if we become more conscious of the indissoluble links between early development and later adulthood and are less intimidated by the pain barrier.

Art contains encoded, synaesthetic messages about fear and distress of the child as embryo, as fetus, as infant, as toddler, as pupil facing overwhelming threats (Evertz

1997), art gives a direct insight into the colourful world of escapist fantasies and the balancing acts of the soul under traumatic stress, it also gives tidings of the successful moments in human relationships, which we call love. This is not the only form of art, it is the basic psychological function.

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6 Additional Statements

6.1 The Importace of Prenatal and Perinatal Psychology to the Health of Future Generations

Thomas R. Verny

Correspondence to: Professor Thomas R. Verny, MD, 36 Madison Avenue, Toronto, Ontario M5R 2S1, Canada, Phone 001 416 929 505, e-mail: trverny@idirect.com

Over the past decade, revolutionary discoveries in brain science and birth psychology have shattered long-held theories of early development, toppling our most vaunted traditions of parenting. The news, from world class laboratories at Yale, Princeton, Rockefeller University, and elsewhere, is breathtaking in scope. Starting from the moment of conception, it turns out, a child's brain is wired by his environment, which at this point, is of course, his mother. Interaction with the environment is not merely one aspect of brain development, as had been thought; it is an absolute requirement, built into the process from our earliest days in the womb.

Scientists who teach at universities and influence public opinion hold on to traditional views about early human development that unfortunately no longer apply. I want to give you some important examples here of old Vs new science thinking. Firstly, most geneticists and their colleagues still think that genes overwhelmingly determine the way the brain develop. We now know that this is not the case. Instead, the environment sculpts the brain in an intricate, interactive process that takes place throughout prenatal development and the first three years of life. Our brains and consequently, our personalities, emerge from complex interplay between the genes we are born with and the experiences we have.

We now know what has always seemed intuitively true - that separating the mind from the body or nature from nurture - is impossible. Every biological process leaves a psychological imprint, and every psychological event changes the architecture of the brain.

In the past psychologists have believed, and some alas still do, that experiences prior to age three have just limited influence over intelligence and behavior; the new paradigm says they largely determine the architecture of the brain and the nature and extent of adult capacities. The new paradigm holds that a secure relationship with a primary caregiver leads to more rapid acquisition of emotional and cognitive skills. Such interactions confer not just temporary advantages, but permanent ones, because they are evolution's number one tool for constructing the brain. Naturally, what I say here about the brain applies equally to the rest of the body. We now know that many weaknesses, fault lines so to speak, in our bodies for such serious diseases as heart disease, high blood pressure, diabetes and perhaps cancer start in the womb.

Most experts who study child development either explore it from a genetic-biological perspective or from a psychological-social one. The former see human beings as essentially mindless automatons driven mercilessly by their genes to propagate their kind. They ascribe all higher human functions such as humor, art, play, love and altruism as merely tools in the service of Darwinian evolution, the survival of the fittest. On the other hand, those that fall in the latter group, concern themselves almost exclusively with either abstract concepts such as stages of ego development or material factors such as the effects of poverty or unemployment on mothering. . They pay little heed to biological factors including genetics or to recent research on child development. They are interested in human beings as minds trapped in bodies relating to other minds.

What those of us working in the field of Prenatal and Perinatal Psychology hope to accomplish is to bridge these polarities and to explore the interface between psychology, for example how a father holds his baby, and biology, what happens in the that baby's brain at that very moment.

By taking concepts of psychology and translating them into concrete, measurable and observable phenomena, neuroscientists have uncovered the inner human timetable for acquisition of many capacities including those for social relations, empathy, and love. When and how can parents sculpt the growing brain for something as seemingly elusive as basic goodness? When is it too late? Where do depression and violence start, and can parents ever extinguish the predispositions to these before they become truly self harming and self perpetuating? I believe that Prenatal and Perinatal Psychology can and does offer some meaningful answers to these questions.

The new brain science has mounted a staggering assault on the notion that learning is more or less constant through the first three years of life. Instead, brain scans tell us, learning is actually explosive, occurring as different regions of the brain fire up, on schedule, for acquisition of specific skills, from language to music to math. Teach something to your child when the learning window for that skill is open and he will learn it well; miss it, and the skill will be hard if not impossible to acquire later.

Every age has defined the brain in terms of its leading technologies. Thus only recently we have witnessed the shift from the old analogy of brain as telephone exchange/electrical circuitry to the brain as computer. Though the brain has certain things in common with computers, it is much more than a computer. For one thing it is a living organism capable of growing, multiplying and dying. For another, and this is really crucial, it is bathed in a soup of hormones, neuro-transmitters and polypeptides that actually transmit messages from other parts of body. It is these messenger molecules that are also the primary means by which the unborn child and his or her mother communicate. Computers do not feel pain or joy, they lack consciousness, and they do not desire to make this world a better place for their children.

Where does a person first experience feelings of love, rejection, anxiety, and sadness, the nascent emotions of I'm Okay, You're Okay? In the first school we ever attend, our mother's womb. t makes a difference whether we are conceived in love, haste, or hate; whether a mother desires to be pregnant and yearns for a child, or whether that child is unwanted. It makes a difference whether parents feel supported by family and friends, are free of addictions, live in a stable, stress-free environment, and receive good prenatal care. In the past ten years, dozens of lines of evidence and thousands of research studies

have validated this position, particularly with respect to the overwhelming role that prenatal and early postnatal experiences play in the development of personality.

The realization that genetics is not destiny and that environment is paramount to development carries a new opportunity for parents: For we now know that every early experience, from conception on, materially affects the architecture of the brain.

The intensive process of brain-building continues, unabated, during birth and beyond. From her journey down the birth canal to her afternoons at the park, a child will register every experience in the circuitry of her brain. Whenever a mother strokes her baby, whenever a father plays with his daughter or son, those physiological acts will be instantly converted to neurohormonal processes that transform the body and wire the brain of the child. Every time a child is traumatized or abused, the integrity of the circuitry is threatened; if the trauma is powerful enough, the architecture of the brain will be damaged for good.

The latest research shows a baby's brain is literally tuned by her caregiver's brain to produce the correct neurotransmitters and hormones in the appropriate sequence; this entrainment determines, to a large degree, the brain architecture the child will have throughout life. If the tuning process is incomplete or inappropriate, it may damage the circuits of the prefrontal cortex, the seat of our most advanced human functions, producing an enduring vulnerability to psychological problems. But if the entrainment is appropriate, the child will be wired for health.

It is essential that we illuminate and thus make more accessible to parents as well as fellow researchers the complex, hitherto largely unexplored and hidden web of influences that comprise the building blocks from which our bodies and minds are constructed. The constant, often unconscious or unthought flow of both, verbal and non-verbal messages sent by parents and caretakers interact with biology to regulate the growth of the brain. Everything the pregnant mother feels and thinks is communicated through neurohormones to her unborn child, just as surely as alcohol and nicotine. Like a computer virus that gradually corrupts the hardware and the software of any system it infects, so, too, negative thoughts, anxiety, depression, or undue stress can permanently affect the construction of the brain and the development of intelligence and personality.

6.2 Preventing Premature Births by Involving Psychosomatic Interventions

Or: How women can carry their unborns till the right period of time

Rupert Linder

Correspondence to: Rupert Linder MD, Goethestraße 9, D-75217 Birkenfeld, Germany, Phone: 0049 7231 482 223, Fax: 0049 7231 472 240, e-mail post@dr-linder.de

Notwithstanding many efforts it has so far not been possible to reduce the number of premature births in Germany over the past 20 years. It still stands at about 7 per cent. Might this be due to a considerable influence of psychosomatic factors on impending premature births and that this has so far not been sufficiently considered?

More than fifteen years of practising a combination of gynaecology, obstetrics and psychotherapy has sharpened a diagnostic understanding for interlinkages between physical and emotional aspects and helped to spot chances for an early and effective psychosomatic intervention. A high level of individual consistency throughout and for entire pregnancies as well as the readiness to find time for going over subjective factors as well have contributed to this clearer perspective.

I have to apologise because this paper imposes a number of difficulties on you.

1. It is always difficult to involve subjective factors in medical work.
2. Events on the borderline between the emotional and physical, as well as between the conscious and the non-conscious worlds cannot be put into a cause-and-effect relationship as in the exact sciences. The pathway here may be rather more associative.
3. This relationship will be even more complex, once several people are involved (carers and persons cared for).
4. Very often the inner readiness of those involved is of equal importance as the information exchanged. I still do hope that you shall take with you a number of suggestions or questions regarding the topic of impending premature births.

A few figures first:
In some 1200 pregnant women looked after over the past thirteen years, the rate of premature births was below 2 per cent (n=17). In addition, leaving out a few serious somatic complications (eg. serious chromosomal anomaly) only six children were born before the 36th week. Three of those were children of foreign refugees. Here, my concept could not work because of serious social complications and language difficulties.

Over to the concept:
It was found out that the appropriate frame of mind plays a major role. Any impending premature birth should therefore be placed into an entirety of physical and emotional

processes. The child will normally be held in a state of equilibrium between forces supporting it and others pushing it downwards. Additional stress, internal tensions and suppressed aggression in a situation of an impending premature birth may obviously reinforce downward forces, the fetus will be pushed down. Conversely, however, physical pressure may also be converted back into emotional pressure which caused it in the first instance. This will quite frequently give rise to considerable emotional suffering, which may then be worked through and put aside. At the end of this process, one may find a new and more favourable balance.

Where do tension and stress originate?

Any pregnant mother does not live in a vacuum. She is involved in various external **relationships**

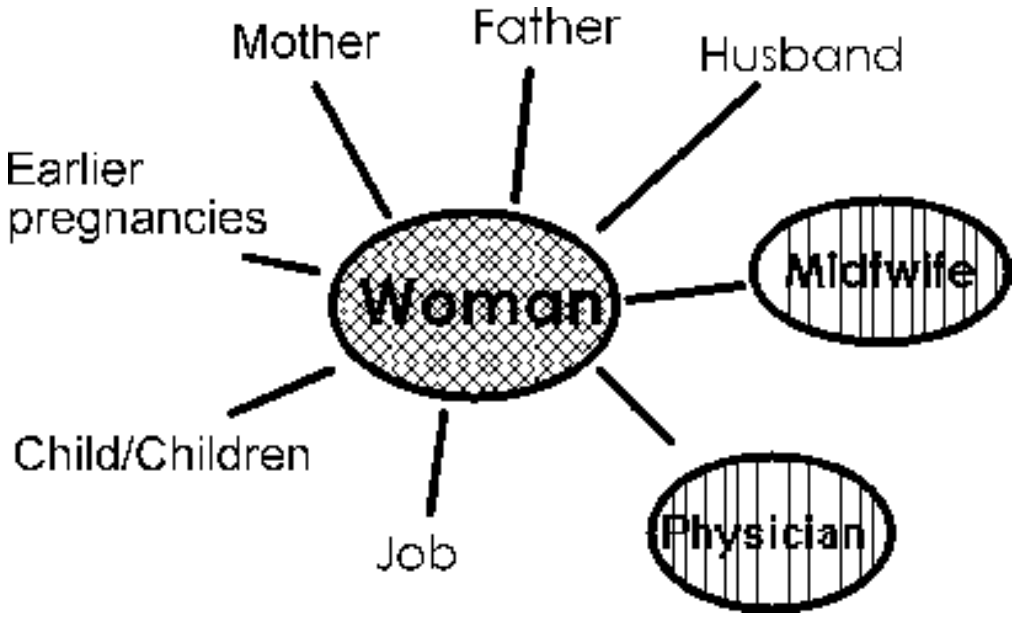

Figure 1: External strains

as well as **emotions**

External and internal strains may also be overcome where they come about.

Such psychosomatic efforts require various types of support. This may come in the shape of a sickness certificate, a longer than normal lunch break - at best in bed, and sending a home help. The latter is especially valid for multiparous women. Phased reintegration into work also helps.

A sickness certificate is not just a measure of relief. Women are then allowed more time to listen to themselves, to look more closely after emotional and physical processes unfolding. It is also my permission (or even instruction) to go about everything more slowly and indulge. This paper also suggests to accept all sorts of help from the family and to rearrange family duties.

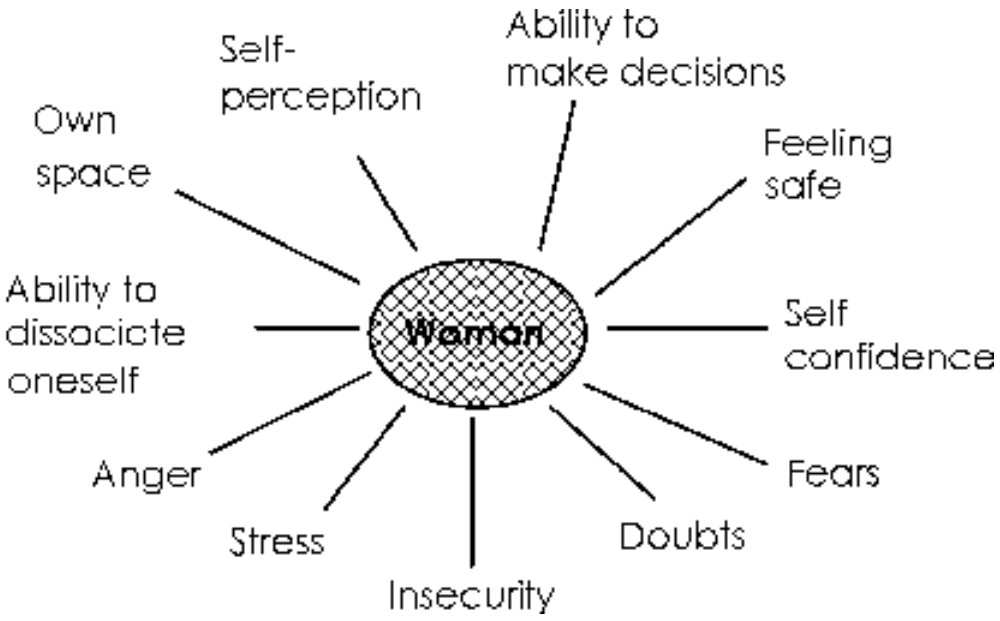

Figure 2: Internal strains

In addition, homeopathic agents or aroma therapy will often be prescribed. I have latterly come to prefer a special tocolytic oil. It smells nice and softly rubbing it into the abdomen is a pleasant sensation which also favours the involvement with the unborn and/or the partner. Fenoterol was never be used.

Contrary to the traditional approach, complaints will not be seen as problems to be overcome. They will rather be interpreted as important signposts and signals leading to more appropriate behaviour. A reference shall be made to the specific situation in individual conversations. Moods laid bare will be harnessed (genutzt) to understand the more deep-seated emotions. Possible solutions will then be developed and be talked over to tap (mobilisieren) emotional resources.

Usually several weeks elapse between the first signs of a visible shortening of the ekto-cervix and the impending opening of the mouth of the uterus, leaving sufficient time for our intervention. It has been possible to observe again and again that complaints levelled off and that obstetric findings improved in parallel with emotional adjustments.

Let me quote an **example:**

A 37-year-old professionally highly committed midwife reported groin pains during the 13th week. In her sleep and when dreaming her first pregnancy came back to haunt her. Eight years ago, her then partner had left her shortly before giving birth to her first child.

Throughout the 18th week contractions clearly intensified, the ektocervix had visibly shortened to one centimetre, it was soft and the uterine cervical canal opened widely. During a lengthy conversation we covered her situation, her present partnership, which was good, and also touched on her past which had obviously imposed a greater burden on her than she previously realised. She was given a sickness certificate for almost two weeks, a prescription for Viburnum opulus D2 and was asked to come again four

days later. She had left in tears and it was obvious that she lived through exceptional emotions and had reached a decisive point. Next day I called to find out and was told that she was much better.

Appointments are always based on the proviso (Voraussetzung) that there is no adverse development. In case of complaints or changes for the worse it is agreed that pregnant mothers phone or come early. Findings had significantly improved four days later. Her sickness certificate was prolonged for three weeks and she was given a home help for 12 hours a week. Sometimes it is just those highly energetic women who need a clear break in their working lives, so that internal adjustments may come about.

After that obstetrical findings and her general situation had clearly continued improving. She was gradually allowed back to work, starting with three hours a day.

She called in the afternoon of the first day relating that work just had not been possible, as labour pains had set in after ninety minutes. She was clearly struck by a remark of her senior doctor that things could not have been so bad as she had not been hospitalised. The rhythm of work ('do this and do that, quickly') had also proved too much.

Next day she told me in person that she had been down and out last night. Things that had never touched her had suddenly caused pain.

Findings were slightly worse. Gradual reintegration into work was stopped, she received another sickness certificate, took a few days off and all her overtime. After that she went a little further in her story: Rest had done her and her family good. For the first time she had had enjoyed being looked after by her partner, originally she had felt awkward. She had gained a feeling of new security, of not being left again which had dampened her fear and panic. There had always been stress in the family of her parents, where she was the fourth out of six children. Her father was a priest, her mother was always very busy. Her father had died twelve years earlier, while at work. He had started working too early after a serious illness. Afterwards there were no more obstetric problems. She gave birth to a son without any complications, nine days after the calculated date.

In about one third of the women concerned aspects of serious episodes of their past lives are involved, in about two thirds it is enough to intervene and strengthen their self-awareness. This will lead to an improved temporal rhythm and more balanced emotions. Sometimes additional therapy shall be required (Arabin cerclage pessaries or rare hospitalisations). This applies particularly if talks on more deep-seated individual troubles or social concerns have not been possible yet.

GRAPH 3:
Medical intervention

Strain reduction
(sickness certificate, home-help, more bed rest)
Medication (homeopathy, aroma therapy)
Arabin cerclage pessary (rarely)
Hospitalisation (only very rarely)

GRAPH 4:
Psychotherapy

Relief from internal and external demands
Helping overcome/remove fears
Detecting internal or external tension
Re-orientation
Improvement of socio-psychosomatic balance

Psychosomatic involvement with impending premature births also involving subjective aspects of pregnant mothers may appear to be something very unusual at first. But those who plunge for it will be rewarded in many ways: there will be more efficiency and a variety of learning instances showing the ever more obvious relationships between the emotional and physical aspects.

6.3 Complexity in Maternity

Lucio Zichella

Correspondence to: Lucio Zichella, M.D., 1st Clinic of Ostetric and Gynecology, University "La Sapienza", Viale del Policlinico, 155, I-00161 Roma, Italy,
Phone: 0039 8440 368, Fax.: 0039 8440 368, e-mail: zichella@flashnet.it

In response to the UN report on the decision of the General Assembly to declare an "International Decade for a Culture of Peace and Non-Violence for the Children of the World" this Scientific Symposium and Mother Workshop aims at collecting scientific, traditional and ethnic knowledge from around the world about prenatal and early childhood development and its links to the later life of the person.

Maternity in humans, seen as pregnancy and as the relationship mother newborn-child, appears more and more as a complex phenomenon, integrating, in the biological and psychobiological spheres, delicate natural homeostatic and regulating mechanisms and significant psychodynamic mother-foetus-newborn and environmental correlations in the psychological and social spheres, where environment is mainly the couple, the family and society.

The cultural aspect, as a sum of knowledge and expectations, completes the complex nature of this unrepeatable human experience. Today there a growing interest for the main characters of this experience: the mother, the foetus - later, the baby - and, last but not least, the father. The father, although irreplaceable, is, however, secondary in biology, whilst in psychology, in sociology and in human culture in general he may acquire importance (for the mother and maybe for the foetus, but, certainly for the child and for tomorrow's adult); Doctors, midwives and neonatal paediatricians are testimonials. The prenatal period is considered crucial far those primal psycho-behavioural characterizations of each individual (Laing, Janus, Chamberlain, Relier), which will be brought to completion through birth, during the first phases of life after birth and through nursing.

The approach to the study of these problems is rather difficult. Bergson has already pointed out that the positivistic mathematical experimental method cannot be applied to the human world because, for example, the life of consciousness cannot be described in mathematical terms. On epistemology's tormented path as a theory of consciousness neither neo-positivism nor logical empiricism have been capable of offering suitable tools for a methodological investigation of complex situations, such as those deriving from maternity, where the sciences of the soul and the sciences of matter appear, even beyond any possible theorizations on the actuality of dualism between the soul and the body, or between the mind and the brain. as equally indispensable both for "comprehension" and for "explanation".

Anthropology, as a study of otherness among remote populations in Levi Strauss's conceptualisation of **structural anthropology** seems to identify elements common to human beings belonging to cultures which are distinct and distant both geographically and in their evolution. These elements are a pre-requisites for the later inclusion of

components and answers to cultural instances of individuals, as determinants and as effects of specific behaviours and experiences. All this appears as compatible with the phenomenon of maternity, where personal components of the mother and of the foetus appear in a characterising way in the biological and behavioural foundation common to all humans.

In a recent book Good defines medical anthropology as an ossimore* for an improbable matching of positive epistemology and explanatory epistemology I do not agree with this negative judgment. To my mind medical anthropology can, thanks to its specific competence, assemble and interpret the different aspects of maternity. In a modern perspective of health, such as is the current approach to the existential problems of mankind, which, especially in medicine and chiefly in conditions which are, although physiological, highly involving, such as pregnancy or birth can no longer rely only on a positivistic point of view, based on objective control data.

Medical anthropology, Fabietti asserts, polarizes its attention on the relationship between biology and culture and, therefore, on the study of human experience and of the roots of culture. It is in such a highly integrated dimension that we can find an organic space where to study and discuss the existential problems which the experience of pregnancy and childbirth entail for the mother and, especially, for the foetus.

Owing to its complex components, the problem of maternity, in the current cultural reality seems to stress the need for a holistic approach, and anthropology appears as the most suitable of sciences to deal with it. The idea of an approach based on true consideration of the characteristics, of the needs, of the problems and of the potentials of individuals needs to keep in mind above all the individuality of each person in all of its complexity. This means being aware of having to do with a human being whose psycho-physical peculiarities have a sense not only within the limits of his individuality but also, and above all, as refered to his place in a social context and in the world. Any disquisition on the human being related to his physical, emotional or cognitive role, to his existence in a historical time-space dimension, to his well-being or pathologies cannot leave aside considerations of his role; a concept which implies being, existing, having a meaning in and for the outer environment.

My ward has a Clinical Psychology Unit, directed far many years by Dr. Mario Scardino. Organising a service based on a non-stereotype theory and, therefore, difficult to accept in a normal hospital environment, even if university based, was not an easy feat. It was necessary to reform the environment by forming medical and paramedical staff with a global view and capable of a multidisciplinary approach.

Based on the premise that the most important affective bond in the biological, psychological and anthropological history of an individual is the "umbilical bond" in assisting the expectant mother we applied the techniques of group analysis and self-hypnosis, where attention is focalised on the relationship between the mother and the foetus: through group dynamics the foetus becomes the dynamic space of identification-projection circularity between the mother and the foetus, which is evoked through the memory of the personal intrauterine and birth experience of the mother-to-be and, especially, of her relationship with her own mother. It is through self-hypnosis and group analysis that the mother can regress to her own foetal life and to her own birth, in order to recover and re-elaborate a language which is archaic but still in use in the communication between the mother and her child. All this enables the mother to

perceive and translate adequately the messages sent by the foetus. The process of encountering and recognition between the mother and the foetus, which is indispensable for the style of attachment between the mother and her child represents a guaranty for the well-being of the future newborn.

A six year follow up on children born to mothers who had followed our program showed, in respect to a control group, that these children had greater objective stability, a superior quality of attachment and better capacity of adaptation, the latter being fundamental in adaptive responses to environmental demands in general. The complex records of the analysis of these problems indicate that we can, of course, strive to bind more and more elements for the acquisition of greater knowledge and comprehension only through an improved methodology of work.

Centuries ago our ancestors believed that the world was the centre of the universe, in the same way the modern man believed himself to be the centre of society; our experience has led us to reverse this point of view: it is of fundamental importance to keep in mind that each individual is subject to the influence of his social environment just as much as he influences it. Just as no tree can grow without roots and no tree can be a healthy tree without healthy roots, we cannot imagine having happy, healthy, loving children and a happy, healthy, caring and peaceful society without concentrating on all those who are involved in bringing these children, corner stones of the future, to this world.

UNESCO suggests searching for "educational methods best suited to prepare the children of the world for the responsibilities of freedom". I believe that what I have described ad a long standing practice on my ward may be considered as a very precautious but very effective educational method.

* rhetorical figure which matches themes that are openly contrasting: for example, hot ice, lucid follie, parallel conversions.

6.4 Symbiosis, Attachment and Human Rights for Prenatal Children and Babies

Gaby Stroecken and Rien Verdult

Correspondence to: Rien Verdult, M.D., Platte-Lostraat 418, B-3010 Leuven, Belgium, Phone: 0032 16 350546, Fax: 0032 16 350546

Introduction

In Western society a growing number of childeren are increasingly at risk. These risks include social, pedagogical and psychological factors. Although we claim that Western society is childfriendly we can observe a growing number of signals from children and youngsters, indicating that their general wellbeing is not increasing, on the contrary. Such signals are f.e., the growing numbers of ever younger children committing suicide, the growing number of drugaddicts; the increase of juvenile crime, also among girls; the increase of psychiatric problems among very young children, even up to babies. More children are abused, not only sexually and physically, but also psychologicaly; more children are neglected not only in unpriveliged families, but also in middle-class families. More children have health problems due to factors such as stress and polution, but also due to neglect in early childhood, or due to too much medical interventions at the beginning of life.

We have established a pedagogical system that is 'poisonous' to children, as the Swiss psychoanalytical therapist Alice Miller has described convincingly. The triad of the 'poisonous' pedagogy, as she described it, includes: parents must be spared at any costs, feelings and emotions must be controlled or suppressed, and traumatisation must be conceiled. Children must undergo the childrearing of their parents wether it is benifical to their wellbeing or not. The 'poisonous' pedagogy has became the norm and alienation the result.

The psychological riskfactors come from the fact that children's emotional needs are underestimated or even neglected, especially the needs of prenatal, newborn and small children. They are denied a consciousness by which they can experience and registrate environmental influences. Environmental influences include the parents attitude towards the child and this attitude is supposed to have no lasting influence on the child's functioning. Birth memories, which have been proven to exist in a most detailed manner, are denied. Also the basic emotional needs of small childeren for a secure attachment relation with the mother are minimized.

We need to protect the very small children more seriously. This should not only be a concern to psychotherapists, child psychologists or other mental health workers, but also to the general public and to policymakers. Giving children opportunities to develop according to their own abilities means to stop violating their emotional rights and to create a peaceful, nonthreatening famial and social environment for the children of the world.

Human development

John Bowlby started his research on maternal deprivation in the fifties of the last century. He did his research by the WHO order. He became convinced that a safe attachment to the mother is of vital importance for the development of a healthy personality. He developed his attachment theory. His findings are not obtained in the treatment of clients, but are obtained in real life situaties. This makes them even more liable. Bowlby called attachment behaviour instinctive behaviour, meaning a recognisably similar and predictable pattern in almost all members of a species. In other words, attachment behaviour is evolutionarily rooted in the biological programming of the human being. By this, attachment behaviour is an essential part of the survival system of human kind and of an individual. Every child needs a secure attachment relation not only to survive, but also to selfactualize his potentions. Bowlby's findings were limited to small children. He presumed a sensitive period in the development of the child in which it is more vulnerable for the loss or for separation of his attachment figures. This sensitive period was thought to start at 6 to 8 months after birth.

Psychological research on the development of the baby has shown that the baby is more responsive to or more influenced by his environment. Prenatal psychologists are showing that the behavior of the prenatal child is meaningful and purposeful. A new paradigm is arising on the developing fetus and baby: they are more sensitive, more communicative and more responsive to their environment than ever thought before. At the same time these findings show that the fetus and baby are very vulnerable to environmental influences. Verny stated that the fetus is bombarded by internal and external toxins, indicating the massive influences that internal toxins from within the pregnant women (f.e. her attiutude, stress or anxiety) and external toxins (f.e. radiation, drugs or obstetrical tests) can have on the growing fetus.

Bowlby thought that attachment behaviour only starts after birth, but more recent findings indicate that this was wrong. Attachment behaviour, starting prenatally, is called bonding. As research of Klaus and Klaus has shown, the fetus is developping attachment behaviour. The prenatal child is communicating with his mother on several levels and this communications are aimed at establishing a emotional confirming contact.

On the basis of recent scientific findings we can conclude that:

- attachment behavior is part of the genetically based biological programs
- attachment behaviour develops prenatally and continues to develop postnatally
- attachment behaviour is a fundamental adaptationprocess to environmental influences
- safe attachment leads to healthy personality development; insecure or ambivalent attachment patterns lead to unhealthy or even pathological personality development
- attachment behaviour is important throughout the lifespan, even into adulthood and aging, but is essential to the development of the prenatal and newborn child

- attachment behaviour patterns are reproduced across the generations

The purpose of attachment behaviour in the prenatal child and in the baby is to establish and maintain a symbiosis with the mother and her body. As Margaret Mahler has stated, symbiosis can be referred to as an intrapsychic condition, wherein the differentation between self and the mother has not taken place, or where regression to that self-object undifferentiated state has occured. The symbiotic relation between mother and child must meet the symbiotic needs of the (prenatal) child, that is to say must provide a protecting, containing and confirming contact wherein basic needs are fulfilled directly without any delay or frustration. As the embryo, the fetus and the baby are all developing in a physiological and psychological environment, they all need to adapt to the environmental influences. As long as the adaptation mechanism of the fetus and baby are underdeveloped, they need to stay in direct contact to the mothers body to protect them from overstimulating or threatning stimuli. The symbiotic child (from conception untill the psychological birthprocess which at about 8 - 10 months old) needs the reassurance of his existence by experiencing a secure contact with his mother's body.

Symbiosis is a necessary and sufficient condition to individuation. Separation from the attachment figure is only possible for the child if it has experienced 'good-enough' security. Separation and individuation are two complementary developments: separation consists of the child s emergence from a symbiotic fusion with the mother and individuation consists of those achievements marking the child's assumption of his own individual characteristics. The separation-individuation process is the psychodynamic force behind Maslow's selfactualisationtendency. In order to develop in a healthy manner, both physiologically and psychologically, the child must be offered a safe attachment relation, in which his symbiotic needs are fulfilled. Only after these needs are met sufficiently, it becomes possible for the child to leave the symbiosis and to develop his identity

Human rights for children

The UN Convention on the Rights of the Child, proclaimed by the UN in 1989, was a historic step forwards in human rights for children. Not only were human rights ascribed to the child, the child is also seen a fully valued human being. The child was no longer the not-yet-adult, but a human being on its own, with a dignity and freedom of its own, and with rights of his own. The human rights for children can be classified into three groups: provison, protection and participation. The goals of the convention are to increase the provision of services for children such as education, health care and social security; to increase the protection of children against abuse, neglect or exploitation, and to increase the participation of children in the democratic institutions of society. All members of the UN, except Somalia and the United States of America (!) have confirmed the Convention on Rights of the Child.

From a psychological viewpoint the convention can be criticized, because it fails to formulate condition for a healthy childrearing. The freedom and privacy of parents to raise their children according to their own convictions sets against the scientific findings on violence against the child within the families. In Western societies, where provision

of services such as health care and education are mostly self evident and the participation of children, especially adolescents is increasing, the main emphasize should be on the protection of the wellbeing of the (small) children. As said in the introduction the wellbeing of small children is under threat, due to several social, pedagocical and psychological conditions. Based on prenatal findings and on recent research in child development we propose a 'Charter on the emotional rights of the prenatal and newborn child'.

The 'Charter on the emotional rights of the prenatal and newborn child'.

Our nonprofit foundation has formulated a tenpoint charter on the emotional rights of the prenatal and newborn child. The charter is based on scientific research on bonding and attachment. A short summary shall be given. The goal of this charter is to make (future) parents aware of the importance of a symbiotic relation to their fetus and baby, to make them aware of the importance of a secure prenatal bonding and postnatal attachment for a healthy personality development.

1). Every child has the right to have a father and a mother of its own.
From a legal viewpoint parents don't have the right to claim a child. On the other side, when a child is conceived it has the right to have, or at least to know, his father and mother. For its future development a child needs a stable relation to his mother and father. He must be able to identificate with both of them. Not knowing the parent cuts the child off from his roots and leaves him in despair. Reproductive techniques, that make it impossible for the child to know his biological roots, should be avoided.

2). Every child has the right to be conceived naturally.
Although the psychological findings on the first trimester of life are still preparadigmatic, there are indications that some sort of consciousness and some sort of bodily memory start a the very beginning of life. The fertilisation of the egg by the sperm takes place not only in a biochemical surrounding, but also in a psychological atmosphere, which leaves early imprints on the psyche of the embryo. Therefor we should be very cautious with intervention in this area. The reproductive medicine has developed artificial reproductive techniques, without overseeing the psychodynamic consequences.

3). Every child has the right on secure prenatal bonding.
The fetus is very sensitive to his mother's attitude toward her pregnancy. His security is based on her emotional involvement to his life. The relationship with her is of vital importance to him. He feels what she feels; her stress and anxiety can become his strees and anxiety. Symbiosis can only be fully established if the mother is accepting her child with all her love and without any reservation. Also the mothers stess and anxiety can disturb the forming of a symbiotic relationship, leaving the fetus in despair as his survival in a psychological sense as well, is under threat.

4). Every child has the right to be born naturally.
The child being born plays the leading role in a subtle communicationprocess with the mother and her body. In Western society birth has become a medical problem, and is no longer a natural process. Medical intervention during birth disturb the birthing relationship and can lead to psychological trauma in the child. As Emerson has shown,

medical intervention such as cesarean birth, give rise to bondingproblems during and after birth, to a shocksyndrom and to invation/controle complex problems. Birth traumas can have lifelong effects. Emergency interventions must be judged from a holistic viewpoint on wellbeing of the perinatal child, and routine intervention without any sufficient medical indication should be avoided.

5). Every child has the right to be in his mothers arms.
Restoring bodily contact immediately after birth is most important for the baby, in order to restore the symbiotic relationship with the mother and her body. Birth is a transition not a rupture of this symbiotic relation. The sooner the contact with the body is regained the sooner the child can feel safe, can come to rest and can recover from the physical and psychological tensions he has experienced during the birthprocess. This early imprint of attachment has lifelong effects and gives rise to a basic sense of trust, as the ego-psychologist Erik Erikson called it.

6). Every child has the right to be breast-fed.
The WHO has promoted breastfeeding because breastmilk is compositoraly linked to the baby's needs. Breastmilk stimulates the immune system. Besides the fact that breastfeeding has physiological advantages, it also plays an important role in the attachment relationship. Breastfeeding implies body-contact, eye-contact and sucking, and these self attachment behaviours occur only minutes after birth. Breastfeeding plays a important role in restoring and continuing the symbiotic relation between mother and child.

7). Every child has the right to have available, sensitive and responsive parents.
As Bowlby has shown a secure attachment relation is based upon a mother who is available when the child needs her. If she is sensitive to his basic needs and if she responses to his signals, child develops a basic sense of trust. A sensitive mother senses the bodily felt needs and feelings of her child. A secure attachment relation is based on the fulfilling of these basic needs at the moment when the baby needs it most. This gives the baby trust in its caregiver and in itsself. This basic sense of trust and security is determinating the future healthy development.

8). Every child has the right to experience his own feelings.
To become a fully functioning person, as Carl Rogers has described, it is important that the child can keep in contact with his experienced feelings. In order to be able to have a bodily felt meaning come to conscious awareness the child must find support and containment to experience his feelings. The 'good-enough'- parent (Winnicott) provides the child with a containing environment so that it can learn to deal with complex emotions and feelings.

9). Every child has the right to have his basic needs fulfilled.
The humanistic psychologist Maslow has develop a hierarchy of basic needs that have to be fulfilled in order to function in a healthy way. These needs not only include physiological needs, but also the needs for safety, belongingness, estimation. These deficiency needs must be met sufficiently and at the right time in the development of the child, so that the growth needs can emerge. These growth needs are called selfactualisation. To become oneself, that is to realize one's potentials, is based on childhood experiences within a secure attachment. 'Not being seen' and 'not being heard' will produce breakdown, compliance and a 'false' self, as Winnicott has indicated.

10). Every child has the right to have his boundaries respected.
The bodily and psychological integrity of the child should be protected by respecting his bounderies. Bounderies result from the separation-individuation process and are essential in developing a basic sense of 'I am' and 'I am different' and 'I may be different from my mother'. Healthy tendencies, such as to open or to close oneself, to protect oneself against dangers without shutting off or splitting off, is developed in a secure and respecting relationship, prenatally and in early childhood.

Conscious parenting

Although we accept that this charter is confronting parents with there daily childrearing practices, although we can understand that these ideas may give rise to feelings of guilt, in the name of the vulnerable prenatal and newborn child we need to speak them out loudly. Guilt does not lead to responsibility. On the basis of scientific and psychotherapeutic evidence we need to inform parents about the recent finding on prenatal bonding and postnatal attachment and its importance for a healthy personality development. It is in society's interest that we help parent to become aware of their vital influences on the child's wellbeing and that they started to influence from conception on. The prenatal life and the first two years of the child are crucial to his later functioning. Working on a peaceful and nonviolent world includes conscious parenthood. As the Canadian prenatal psychiatrist Thomas Verny has stated: conscious parenthood includes three principles, namely personal growth work by each future parent to process any psychological complexes that may interfere with their becoming loving and caring parents; an examination by each partner of their relationship to each other and a willingness to engage in open and honest communication; an appreciation of the essential humanity of the unborn child and his or her need for love and affection both pre and post-natally. We would like to add a fourth condition to conscious parenting. Every future parent should make contact with his or hers 'inner child' and to recognise his or her unmet needs from very early childhood. Restoring the contact with one's 'true self' is an essential dedication to future parents.

This text is based on two books by Gaby Stroecken: Het miskende kind in onszelf (The unrecognised child within), published by ACCO, Leuven, 1994 and 'Gezocht: pleitbezorgers voor het jonge kind; wie beschermt zijn affectieve rechten?' (Wanted: advocates for the very small child; who defends his emotional rights? Published by Garant, Leuven, 2000. Both books are only available in Dutch.