

Some relevant aspects of pre-and perinatal parental attitudes (a pilot study)

ÉVA HADHÁZI

Interviews with pregnant women and fathers lead us to think that different parental attitudes were formed during pregnancy and in postnatal period. The results of the content analysis of interviews were categorised by judges. Three parental orientations were outlined: „Centered around happiness”, „Guided by reality” and „Inhibitors”. These results showed similarities with categories found by a psychoanalytical therapist, Joan Raphael-Leff. This recognition helped our work in defining categories and in item selection in order to develop an attitude questionnaire.

In this pilot study 257 parents (155 mothers and 102 fathers) filled the questionnaires, trying retrospectively to recall those events and feelings which they were experiencing during pregnancy, at delivery and during the first weeks of postnatal period. The data were analysed to reveal those aspects of pregnancy, delivery and early parenting which could be important in describing and measuring the parental orientations mentioned above and to develop a questionnaire for measuring them.

Our research focuses on the process of becoming a parent, child waiting, child bearing and early parenting period. This “stage” of life seems to be very sensible, not only for the parent, or intended parent, but for the child to be born as well. This is the period of life when our deeply pampered maternal or paternal hopes may become real or may fail, but despite all these challenges we do not pay enough attention to it. People usually prepare for long years to fulfill different professional and other “important” roles in society, and still parenting is conceived a natural process, which does not need any special preparation. This fact was stated at the beginning of this century by Carl Gustav Jung and, unfortunately his findings are valid nowadays as well: „The maternal and paternal roles carry the most responsibility which should be undertaken by somebody. But just this hardest task is perceived, as everything belonging to it is obvious. There are not separate schools for parents. First of all, there are troubles with fathers: rare we can find one, who considers paternal role as the most important vocation” (Alt, 1995, p. 5).

While earlier most researchers were focused on postnatal period, from the beginning of 1950 and especially in the last decades, scientists’ attention turned to life before birth. Several myths about the new-born were refuted, e.g.; babies have *very poor brains*, their brains works as *assembly-*

lines (the brain is like an engine, doesn’t work until the last part is installed, babies *can’t think*, they *have no sense of self*, and *do not need their mothers* (health practices provided by hospital nurseries ensure the babies’ health). The *myth of age* also proved to be false, babies “seem to act as individuals long before birth, engaging in spontaneous activity to suit themselves, expressing preferences for certain sounds, motions, and tastes, and reacting to danger in the womb”(Chamberlain, 1998, p. 1). Technical improvement (like introducing ultrasound examination during pregnancy) made intrauterine life explorations possible, which gave great impulse for medical and psychological research. Different pre - and perinatal associations were found, the ISPPM (International Society of Prenatal and Perinatal Psychology and Medicine) in 1971 in Vienna, the APPAH (Association For Pre - and Perinatal Psychology and Health) in 1983 in Toronto, and the ANEP (Associazione Nazionale per L’ educatione Prenatale) in Italy. They are “devoted to the initial phase of human development - prenatal and perinatal life....considers this earliest stage of life as the first ecological position of the human being and the womb as its first ecological environment” (ISPPM, 1997).

As scientists proved, mothers provide material content for foetus but few are aware that mothers also pass information content to its foetus during pregnancy. Parent’s perceptions, and emotions are chemically communicated to the foetus through placenta. “The information relayed by the mother to the fetus concerns the status of the environment. This status is conveyed in the mother’s perceived attitudes about life” (Lipton, 1995, p.1.). Chamberlain argues

Éva Hadházi, Lajos Kossuth University of Debrecen, Institute of Psychology, H-4010 Debrecen 10, Pf.28. E-mail: hadhazie@tigris.klte.hu (Correspondence concerning this article should be sent to this address).

that "...considering all we know about the realities of life before birth, we are obliged to set back the clock of parenthood". He tries to define what early parenting is. Early parenting means: *creating a physical body*, it is the parents responsibility "whether the baby's equipment for living will be poor, average, or optimal", and fathers are deeply included in this process. "15% of childhood cancers could be due to smoking fathers"(Chamberlain, 1995, p.1.). One other duty is *creating emotional foundations*. The emotional system has been organised due to experiences encountered in utero, and the offspring carries those settings into life. And last, but not least, *establishing a rich connection with the pre-nate* is an important task. As many experimental results suggest, babies in the womb are "alert, aware, and attentive to activities involving voice, touch and music...benefit from these activities by forming stronger relationships with their parents and their parents with them making for better attachments and better birthing experiences, ...show precocious development of speech, fine and gross motor performance, better emotional self-regulation, and better cognitive processing"(Chamberlain, 1995, p.3.).

Although a number of specialists are involved in pre-and perinatal psychology in Hungary, there seems to be no study on the formation of parental attitudes during pregnancy and after delivery. Some other factors have already been studied; such as anxiety, intro- and extroversion, locus of control, neuroticism – rigidity, motivation, the effect of socioeconomics on presence of the partner at delivery, the influence of the fathers being present in the delivery room on the course of labour, and later, on the relation between father and child, on the parents' affection for each other, on sexuality and self-worth (Szeverényi, 1988). Owing to the good offices of the Hungarian Association for Pre- and Perinatal Psychology and Medicine, a great number of presentations, reviews and summarising articles were published, rendering possible to have an insight into Hungarian and foreign studies. Intrauterine life, competence and sensations of the foetus, its cognitive functions and interactive abilities gained new perspectives (Andrek, 1997). So did the role of innate social abilities in forming an early attachment (Molnár and Nagy, 1997), and the effect of this early attachment on the child's development (Gervai, 1997). The "theme of cultural and societal prenatal dimensions" (Hidas, 1997) are grasped by experts from various fields in the analysis of sociological connections of becoming a parent (Tóth, 1997), the preparation for being a parent (Bognárné, 1997), the relational analysis of mother and foetus (Raffai, 1997,1998), the prophylactics of perinatal period (Demcsákné, 1997) and family-oriented obstetrics and new-born-care system (Németh, 1997). A new approach is coming in, according to which the efforts made at improve the quality of human life should involve the period from conception to birth, because as evidenced by studies in various scientific fields, a considerable amount of physical and psychical illnesses could have been prevented. Thus any information that brings us closer to the understanding of the factors influencing pre- and perinatal life is crucial.

The aim of the present study is well compatible with the various aspects of parent typology found in the literature, albeit on different grounds. *Joan Raphael-Leff* (1993), an English psychoanalyst, had been conducting group and individual psychotherapy for pregnant women for more than ten years. She described three anticipation types, the names of which are *Facilitator, Reciprocator and Regulator* in case of women, and *Participant, Reciprocator and Renouncer* in case of men. According to *Raphael – Leff*, all three parental types are based on a particular internal combination of maternal/paternal and baby self-representations. The analytic situation made it possible to reveal various identifications and unconscious attributions, and the consideration of these is basic when a type is formed. Parental anticipation, according to *Raphael-Leff*, is determined by the following factors: the way of adaptation between parent and baby (who adapts to whom), the assumptions about who knows best, what the baby needs (the baby itself; the parents, or none, but each can find it out), the basis for behaviours (identification; inter-subjectivity or isolation), the presumed task of mother/father (support; interaction; socialisation), the new-born (it's interactive capacity, social orientation, alertness), parental goals (mature dependency, mutual dependency, independent) and unconscious attributions (the baby is an ideal self, thus the parent is afraid to hate it; or it is a unique individual, thus the parent accepts his/her own ambivalent feelings toward it; or the baby represents the denied self: the parent is afraid to love it).

As it is hopefully reflected in this short presentation, various identifications (with the mother, the father or the baby) and unconscious socialisation processes are very important in the formation of each type. At the same time, falling within one or another type might create a special susceptibility to unconscious psychic processes, such as the use of particular defenses or mental illnesses. Extreme parental discord regarding the types might play a role in depressions after delivery. According to the author, these types are not stable characteristics, they may and do change by the effect of built-in experiences. Learning is important in this respect, and it can be a real win for the individual, the family and the society: new generations' way of socialisation is determined by the parental habits of the previous ones.

METHOD

Hypothesis

During pregnancy and after delivery parental attitudes are formed in both mothers and fathers, which can be observed in their interactions to each other and to their children. Probably these parental attitudes can be categorised according to the suggestions of the interviews content analysis.

To test the hypothesis our research was divided into two parts: (1) a pilot study, in which a questionnaire was developed for measuring parental attitudes (2) and the main study, in which the parental attitudes were measured, including data analysis and the hypothesis testing.

Participants

In this pilot study 257 parents, 155 mothers and 102 fathers (having at least one baby from neonates to 6 year-old-children) filled out a questionnaire trying to recall *retrospectively* the events and feelings which they had experienced during pregnancy, at delivery and in the first weeks of the postnatal period. (The parents were recruited voluntarily, from 10 kindergarten at Debrecen with help of Regional Mentalhygienical Office). Basic demographic characteristics of pilot study sample are presented in table 1.

Measures

The primary aim of this pilot study was to develop a questionnaire to measure parental orientation, and the secondary aim was to explore the relationships among some relevant aspects of pregnancy, delivery and early parenting, and parental attitudes.

The idea of parental attitudes derives from some *interviews* made with young fathers and pregnant women in first

and last trimester of their pregnancy and in the first six weeks after delivery.

The *interviews were content analysed* from two aspects: (1) the most frequently appeared thematic matters in the interviews and (2) those emotional, behavioural, and cognitive self related changes which are rendered by the inquired people during the interviews. 236 items for mothers and 200 items for fathers were found and seemed to express *positive, negative or ambivalent* feelings regarding pregnancy, delivery, and parenting. These findings showed similarities with categories set by the psychoanalytical therapists Raphael-Leff (1993). This recognition helped our work in defining categories and item selection. We used Leff's category descriptions as a *preliminary selection*. 5 judges selected our items into three groups, and just those items were kept where the agreement was between 80% and 100%, thus 198 items for mothers and 176 items for fathers remained.

Based on our experiences and Leff's description, we developed three *attitude definitions* for both mothers and fathers (Centered around happiness, Guided by reality, and Inhibitor), which were then supervised (we asked lay persons to describe in detail how the mother and father defined in this way may act, think and feel).

The three *conceptually definite* types are presented in table 2.

For a *final selection*, 7 independent judges were asked to rate our items, using the definitions presented above. The interrater reliability was .761 for mothers and .709 for fathers ($p < 0.01$). Finally, the questionnaire used in this pilot study - for identifying parental types - contains a dichotomous format scale with 158 items for mothers and 153 items for fathers. The subjects had to decide whether they agree or not with these statements, and give yes/no answers. The items cover 8 main "attitude objects" as follows: circumstances of the conception, life style, identity and pregnancy, the couple's relationship, imagination, delivery, parental experiences, and self actualisation.

Statistical analysis

The data were analysed to reveal those aspects of pregnancy and early parenting which could be important in describing and measuring those parental orientations which can influence our way of parenting. According to frequency of yes/no answers given by parents, 88 and 99 out of 153 items were analysed for mothers and fathers, respectively. Regarding these items the answer - frequency was between 20-80 %, which allow us to take into account only those items which divide our sample. With this restriction we selected those items when more than 80% of parents re-

Table 1

The characteristics of pilot study sample

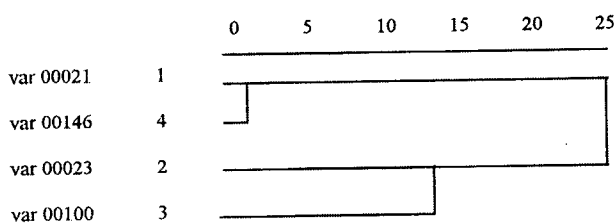
Characteristics	Fathers (n = 102)	Mothers (n = 155)
Mean age of parents	32,4 years (26 - 50)	30,3 years (19 - 40)
Education		
University / College	37 % (38)	33 % (51)
Secondary school / Technical college	25 % (25)	32 % (50)
Skilled worker	35 % (36)	28 % (43)
8 classes (elementary school)	3 % (3)	7 % (10)
The number of children		
4 children	1 %	1 %
3 children	12 %	13 %
2 children	52 %	52 %
1 child	35 %	34 %
Mean age of younger child	3, 48 years	3, 62 years

Table 2

The definition of parental attitudes

1. <i>Centered around happiness</i> ("CAH")	mother	She concentrates only on the delightful aspects of pregnancy, childbearing and parenting. The motherhood for her means to fulfil her identity.
	father	Becoming parent is considered by him as a delightful process and he wants to take part in it in every way.
2. <i>Guided by reality</i> ("GBR")	mother	She is conscious about her emotional ambivalence, yearns for pregnancy and parenting but she regrets for those changes which occur during pregnancy and in postnatal period.
	father	He is ambivalent in his feeling concerning pregnancy and parenting and he is conscious about them.
3. <i>Inhibitors</i> ("I")	mother	She thinks that having children is a task set by life and she has to make sacrifices in order to fulfil it and she has no choice if she wants to be considered as a „normal ” person.
	father	He considers pregnancy, childbearing, and childcare activity as female’s duty and he does not want to be involved in any of them.

sponded equally, although we consider that an answer should derive from different reason, for example: the social desirability predominate, social norms “prescribe” what is preferable for a “good parent”, or the item represents such an extreme attitude which can be accepted only for few. The remaining items were sorted into 8 group accordant to the 8 main “attitude objects” represented in the questionnaire filled by parents: *circumstances of the conception, life style, identity and pregnancy, the couple’s relationship, imagination, delivery, parental experiences, and self actualisation*), and analysed by clusteranalytical method



- var00021, var00146: *Centered Around Happiness (CAH)*
- var00023, var00100: *Guided By Reality (GBR)*

Figure 1. “The conception’s circumstances” (mother) (*Hierarchical Cluster analysis: Ward’s Method, Lance & William Distance*)

(Ward’s Method, Lance and William Distance). As the clusters show, the different parental orientations appear in different clusters, but not all the three types are represented in every aspect, for example (see figure 1).

For describing different parental orientations, according to the results of cluster analysis, we used only those items which formed separate clusters. So 60 items for mothers and 66 items for fathers seemed to be differentiated. The subscales and their reliabilities are presented in table 3.

As we can see, the reliabilities of subscales are quite different. We used these scales for describing the aspects of parental orientations, however, for developing the final questionnaire we considered only those subscales for which alpha coefficients reached at least .60. So the “Guided by reality” subscale proved to be less reliable and were omitted from further processing. In the case of “Centered around happiness” and “Inhibitor” subscales we took out and added items (from those items which frequency was lower than 20% or higher than 80%) to reach a higher level of reliability. Accordingly, process the aspects have been modified: the “symptoms” are missing from fathers, the “carrier” and “car” appear at mothers and the “relax” and “furnishing” disappeared at both. In this way, our final questionnaires contain two subscales for both mothers and fathers (Cronbach alpha is: .81 at “CAH”, .79 at “I” mothers, .81 at “CAH” and .81 at “I” fathers).

Table 3

The parental attitudes scales reliability

	Mothers			Fathers		
	Centered Around Happiness	Guided By Reality	Inhibitor	Centered Around Happiness	Guided By Reality	Inhibitor
Number of items	23	17	20	25	11	30
Reliability Coefficient: Cronbach alpha	.70	.58	.62	.77	.35	.80

DISCUSSION

Within the content units, all types could be separated, in the case of mothers and fathers as well; still the parental aspects with regard to the three types are of different importance (see Appendix).

Considering the *conditions of conception*, the planned or unplanned nature of pregnancy is important in case of "CAH" and "GBR" mothers. The "CAH" has a desire for pregnancy, and even if the pregnancy was unplanned she feels happy: "...it could not have come at better time". The mother "GBR" struggles with her own uncertainty "not all circumstances are favorable for having a child" and the loss of freedom also appears. We would like to point now to those two items (133: "It would be better if I did not become pregnant.", 156: "The only reason I undertook the child was to have my husband and my mother satisfied") which, although not subjected to cluster analysis, proved to be so marked protest against the undertaking of a child (characterising the "I" group) that only 7.2 % and 2 % of subjects adopted them.

For father "CAH", it is essential whether the pregnancy was planned or unplanned, while such a salient description can hardly be found for father "GBR", but we find the item for "I" father, who considers: "It's the woman's trouble to decide whether she undertakes pregnancy or not".

Regarding life style, in the case of "CAH" mothers, emphasis is transferred from job to pregnancy, accompanied by demonstrating in clothing and by the anticipation of a special treat, when pregnancy becomes public. The same aspects are important for "GBR" mothers, although with a different content, namely, the difficulties around reconciling job and pregnancy, the undertaking of the position of a pregnant woman, which is also reflected in clothing. For "I" mothers, work will have priority, and besides clothing, eating and recreation are subordinated to „original identity". We cannot speak about the undertaking of pregnancy, as it does not happen.

In the case of fathers, we only find items characteristics of „CAH" and „I" fathers. With „CAH" type, the concept of „job" will involve household duties as well, and during his wife's pregnancy eating will turn into an event that requires special attention. With respect to social relations, besides „formal" connections with the doctor and welfare officers, conversations with other fathers become important. „I" fathers remain the same, „traditional" men; pregnancy does not change their lifestyle visibly, and household chores are still the woman's duty. *Eating* gets a bit more important, inasmuch as he awaits his wife to eat „so that the baby can develop". There is a marked presence of his protest against the personal undertaking of pregnancy: „a woman has to know, what and how to do ... a man can find better occupation than being busy around a pregnant wife..." He continues his former social life, goes out with friends, and expresses difficulties with accompanying his wife to antenatal care.

When *considering identity and pregnancy*, for describing the mother "CAH" we have to mention her positive experience of symptoms, body and psychological changes. She has a strong desire for having a pregnant look, and she concentrates onto every small internal vibration. She would like „to shout her pregnancy from the housetops". For mother "GBR" each relevant aspect underlines her uncertainty: „I can hardly get accustomed being pregnant", „I have to learn to adopt to this changed body shape". For "I" mother the body shape seems to be unimportant, or she focuses on the negative experience of symptoms: „It's unpleasant how it kicks me", „I would like to make the symptoms bearable", „I hate the morning sickness". She just wants to survive this period: „I can hardly wait for this pregnancy to be finished".

For fathers, body shape is of no overriding importance. The symptoms start a process in "GBR" fathers, he has to take into account her wife's pregnancy. He is uncertain: „Can I really fulfill those role expectations which are required from a father?" The "I" father finds irritating every symptom, he doesn't show any euphorical happiness.

As we see at the couple's relationship, for mother "CAH", both in partnership and sexual life, there are just positive changes, she considers their relationship „idyllic”, and she can enjoy sexual life as much as before pregnancy. The mother "GBR" experiences doubt: „Will we fit again in our sexual life after the changes caused by pregnancy and delivery?” For "I" mother we can only find statements which stress pregnancy as disturbing her sexual life.

For father "CAH", pregnancy has positive effect onto their partnership, while for the "I" father it has negative effect (he feels he is neglected). So, he would like to obtain more and more attention sexually, he considers that his sexual demands can not be subordinated to pregnancy.

Fantasies about the foetus, the baby and, about parent-role seemed to be important in the case of "GBR", and "I" mothers. The former is afraid of going into daydreaming, she bides her time "to avoid disillusionment". "I" mothers are characterised by negative fantasies about a parasitic foetus, taking all energy and strength. In the case of fathers, fantasies are not only about the newcomer: parent-role images also appear. "CAH" fathers seek to know about everything what is going on in their wife's belly, so to share the experience at least indirectly. "I" fathers, when thinking about the baby, fear for their own territory: "I hope it will not bother too much". Images about parent-role, with the "CAH" father, are arranged along helping, and preparation for a good father. The "GBR" father keeps a distance from, and feels it difficult to identify with, a parent-role; he can hardly imagine what he will do with "such a fragile creature". "I" fathers isolate themselves from the baby even in fantasy; parent-role for them is something out of their identity, since "it is the woman, who was born to give birth to and raise children..."

Delivery appears markedly both as a fantasy and as a real experience. "CAH" mothers have a strong desire to experience the "elevating emotion of giving birth", they are motivated to learn all possible techniques in order to "know what she should do". They would like to share this experience with their partners. Similarly, after delivery they feel they have been helped by the presence of their partner, and this experience gave them a spirit of solidarity. "GBR" mothers are backed by the feeling of identity with their own mothers: "I was given birth by my mother the same way". Inhibitor mothers tend to revolve in their thinking around the lessening of pain, and after delivery they focus on their own comfort: "they should have taken away the baby at least for the night, so the mother could rest".

In the case of fathers, in all types, fantasies about delivery proved important. "CAH" fathers undertake being present at delivery; for them it is a natural part of parent-role, complemented by the participation in the courses preparing the pair for delivery. As a real experience, it is very

determining, felt to be very helpful for the relation. "GBR" fathers also often express a wish to be present at delivery, although they are afraid of "making more trouble than the mother herself...". What's more, "GBR" fathers, when deciding whether to have another baby or not, depend upon the experience of delivery. "I" fathers are reinforced by their fantasies that "delivery is women's duty", they have nothing to do with it, and when it is over, they feel evidenced that: "I could not have been able to bear the sight of delivery".

The experiences had as a *new parent* are important in the case of "CAH", and "GBR" parents. "CAH" mothers behave as if they were still one with the baby ("I always feel what it needs"); the baby has priority to anything else, it is the child that determines the timing of sleep and feeding. Inhibitor mothers have determined ideas about childcare, they know what, when and why. ("You do not have to be up in the air whenever it has a tantrum"; "the parent knows better what a child needs"). "CAH" fathers are deeply involved in taking care of the child; they take their turns in all duties around the baby; their basic principle is: "the child first". Inhibitor fathers' lives will not change deeply because of the new-born, they are not ready to forego their own interests, and they are bothered by crying of the baby.

Regarding *self-actualisation*, it is salient that mothers emphasise wealth, housing, furniture, parent-role as identity and the level of living standard; while fathers add to this list carrier, car and the establishment of financial security. "CAH" mothers subordinate all the above listed properties to having a child. "GBR" mothers, though the child is also important for them, do not neglect the importance of housing. They might choose mothering as a main profession, but financial issues are also important: "It is not just my decision, whether I stay home with the baby - the question is, whether we can make a living". "I" mothers only undertake mothering, if all conditions are provided, e. g., a spacious and well furnished flat. She knows what she needs, and what are the concerns she would never renounce of, not even for the sake of her own child. She is the one who considers motherhood as being only one role among plenty in a woman's life.

"CAH" fathers' carrier is less important, than his family, he is apt even to abandon his work, and housing matters are not so important as having an own child. "GBR" fathers tend to think that housing is very important, what's more, it is also important to have a car. Carrier plays as important role as family does. Inhibitor fathers (like Inhibitor mothers), impose conditions on having a child: flat, furnishing. He also knows, what "he deserves", he does not take part in household chores, which may enlarge with having a baby; this duty is "typically feminine". If it is not him who is able to give birth to another human being, then

he must absolve something else. His carrier is more important than his family. For him, his profession means self actualisation; still he needs to have children to "be considered a man".

Summary and conclusions

Results of the pilot study may throw light onto the aspects of pregnancy and new parent-role playing important part in determining parental types; and also show which of the former have relevance in a certain type. It gained some evidence, that certain domains are negligible in paternal typology (like body image), and some in maternal one (like housing). But we consider our result just tentative due to retrospective nature of the study. The relatively long time between the real events (pregnancy, delivery, and early parenting) and that moment when the questionnaire was filled creates opportunity for memory selection, transformation, some episodes, feelings could be dimmed, forgotten, or improved and reevaluated. With all these reservations the results offer a guideline for further investigations with more sophisticated methods. For example, it should be interesting to reveal what are the attitudinal implications for timing of parenthood. According to the results of this pilot study, there are a number of similarity to *Leff's* typology but these can be detailed only after the main study. However, this study suggests that a conceptualisation stemming from psychoanalytic experience might parallel with the measured data of a descriptive study.

Using these findings our questionnaire can be completed to identify and describe parental attitudes, although the data suggest that only two attitudes should be measured. This fact highlights that the "Guided by reality" attitude is more complicated and may have a synthetic character which cannot be "grasped" in this way.

The research on turning into a parent, besides psychological point of view (such as revealing the psychosocial factors playing a role in pregnancy, delivery, and the first year of life), is important in medical and obstetrical respect, too. There is an increasing number of studies nowadays showing that there are relationships among psychosocial indices (anxiety, depression; (Viguera & Cohen, 1998), stress (Janus, 1997), social support, smoking, alcohol and drug abuse, radiation (Kolominsky, Igumnov & Drozdovitch, 1999), anticonvulsant (Dessens et al., 1999, 1998), eating habits (Waugh & Bulik, 1999, Andreasen, 1999, Hoek et al., 1996a, 1996b, 1997, 1998), and concrete obstetrical findings (intrauterine retardation, premature birth, low birth weight, birth complications), and later development. Thus, the results of parental attitude studies (as a motivation system connected to delivery, foetus, parenthood) can be utilised directly in prenatal care: pregnant mother

care, in preparing for delivery and parenting courses, and in obstetrical and mentalhygienic prevention as well.

REFERENCES

- ALT, F. (1995). *Jung: Gondolatok az apáról, az anyáról és a gyermekről* [Jung: Thoughts about father, mother and child]. Budapest: Kossuth Könyvkiadó.
- ANDREASEN, N. C. (1999). Understanding the causes of schizophrenia. *The New England Journal of Medicine*, 340 (8), 645- 647.
- ANDREK, A. (1997). A kompetens magzat [The competent foetus]. In G. Hidas (Ed.), *A megtermékenyítéstől a társadalomig* (pp. 9-21). Budapest, Hungary: Dinasztia Kiadó.
- BOGNÁRNÉ VÁRFALVI, M. (1997). Szülészerepre történő felkészítés a szorongás és az anyaság attitűd vizsgálata tükrében [Preparing for parent-role as reflected in a study of anxiety and motherhood attitudes]. In Gy. Hidas (Ed.), *A megtermékenyítéstől a társadalomig* (pp. 61-67). Budapest, Hungary: Dinasztia Kiadó.
- CHAMBERLAIN, D. (1995). Early and very early parenting <birthpsychology.com> :APPAH's Gateway on the world wide web.
- CHAMBERLAIN, D. (1998). *The mind of your newborn baby*. Berkeley, California: North Atlantic Books.
- DEMCSÁKNÉ KELEN, I. (1997). A perinatális korszak pszichoprofilaxisa [Psychical prophylaxis of the perinatal period] . In Gy. Hidas (Ed.), *A megtermékenyítéstől a társadalomig* (pp. 93-101). Budapest, Hungary: Dinasztia Kiadó.
- DESSENS, A. B., COHEN - KETTENIS, P. T., MELLENBERGH, G. J., POLL, N., KOPPE, J. G., & BOER, K. (1999). Prenatal exposure to anticonvulsants and psychosexual development. *Archives of Sexual Behavior*, 28 (1) 31-44.
- DESSENS, A. B., COHEN - KETTENIS, P. T., MELLENBERGH, G. J., POLL, N., KOPPE, J. G., & BOER, K. (1998). Prenatal exposure to anticonvulsant drugs and spatial ability in adulthood. *Acta Neurobiologiae Experimentalis*, 58, 221-225.
- GERVAI, J. (1997). A korai kötődés jelentősége a gyermek fejlődésében [The importance of early attachment in the development of the infant]. In Gy. Hidas (Ed.), *A megtermékenyítéstől a társadalomig* (pp. 93-101). Budapest, Hungary: Dinasztia Kiadó.

- HIDAS, GY. Ed. (1997): *A megtermékenyítéstől a társadalomig, Bevezetés* [From conception to society, Introduction] (pp. 5-8). Budapest, Hungary: Dinasztia Kiadó.
- HOEK, H.W., SUSSER, E., NEUGEBAUER R., BROWN, A. S., LIN, S., LABOWITZ, D., & GORMAN, J.M. (1996a). Schizophrenia after prenatal famine. *Acta Neurobiologiae Experimentalis*, 53, 25-31.
- HOEK, H. W., SUSSER, E., BUCK, K. A., LUMEY, L. H., LIN, S. P., & GORMAN, J.M. (1996b). Schizoid personality disorder after prenatal exposure to famine. *The American Journal of Psychiatry*, 153, 1637-1639.
- HOEK, H. W., SUSSER, E., & BROWN, A. S. (1997). Neurodevelopmental disorder after prenatal famine. *American Journal of Epidemiology*, 147 (3), 213-216.
- HOEK, H. W., SUSSER, E., & BROWN, A. S. (1998): The Dutch famine and schizophrenia spectrum disorders. *Social Psychiatry & Psychiatric Epidemiology*, 33, 373- 379.
- ISPPM (1997). International Society of Prenatal and Perinatal Psychology and Medicine Philosophy, <www.isppm.de>, Gateway on the world wide web
- JANUS, L. (1997). Prenatális stressz, posztnatális személyiségfejlődés [Prenatal stress, postnatal personality development]. In Gy. Hidas (Ed.), *A megtermékenyítéstől a társadalomig* (pp. 55-60). Budapest, Hungary: Dinasztia Kiadó.
- KOLOMINSKY, Y., IGUMNOV, S., & DROZDOVITCH, V. (1999). The psychological development of children from Belarus exposed in the prenatal period to radiation from the Chernobyl Atomic Power Plant. *Journal of Child Psychology Psychiatry*, 40 (2), 299- 305.
- LIPTON, B. H. (1995). Maternal emotions and human development <birthpsychology.com>:APPAH’s Gateway on the world wide web
- MOLNÁR, P., & NAGY, E. (1997). A veleszületett szocialitás jelenségéről, [On the importance of innate sociability]. In Gy. Hidas (Ed.), *A megtermékenyítéstől a társadalomig* (pp. 23-28). Budapest, Hungary: Dinasztia Kiadó.
- NÉMETH, T. (1997). Közelítés- elmélet és gyakorlat a családbarát szülészeti és újszülött ellátási rendszer építésében [Approach-theory and practice in the establishment of family-oriented obstetrical and newborn-care system]. In Gy. Hidas (Ed.), *A megtermékenyítéstől a társadalomig* (pp. 103-107). Budapest, Hungary: Dinasztia Kiadó.
- RAFFAI, J. (1997). *Megfogantam, tehát vagyok* [I am conceived although I exist]. Pécs, Hungary: Útmutató Kiadó,
- RAFFAI, J. (1998). Mother - child bonding - analysis in the prenatal realm: the strange events of a queer world. *International Journal of Pre and Perinatal Psychology and Medicine*, 10 (2), 153-163.
- RAPHAEL - LEFF, J. (1993). *Pregnancy. The Inside Story*. London: Sheldon Press.
- SZEVERÉNYI, P. (1988). *Az együttműködés, különös tekintettel a motiváció és személyiséglélektani összefüggéseire* [Presence of the partner at delivery: connection between motivation and personality trait]. Unpublished candidate dissertation, Medical University of Debrecen, Hungary.
- TÓTH, O. (1997). A szülővé válás szociológiai összefüggései [Sociological connections of becoming a parent]. In Gy. Hidas (Ed.), *A megtermékenyítéstől a társadalomig* (pp. 49-53). Budapest, Hungary: Dinasztia Kiadó.
- VIGUERA, A. C., & COHEN, L. S. (1998). The course and management of bipolar disorder during pregnancy. *Psychopharmacology Bulletin* 34(3), 339-346.
- WAUGH, E., & BULIK, C. M. (1999). Offspring of women with eating disorders, *International Journal of Eating Disorders*, 25, 123- 133.

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APPENDIX

The aspects identified as important in measuring and describing parental attitudes

The pregnancy	Aspects of parenting	The mother's attitude			The father's attitude		
		Centered around happiness	Guided by reality	Inhibitor	Centered around W/happiness	Guided by reality	Inhibitor
1. The conception's circumstances	planned	„she expected very much”	„she is happy, but she regrets for her previous life-style”		„he planned and he expected very much”		„it's the woman's trouble”
	unplanned	„she didn't plan it, but it could not have come at a better time”	„she feels she is not prepared to it well enough”				
	work	„pregnancy is her main vocation”	„she can hardly square her pregnancy with her work”	„her job has priority”	„he thinks his wife has to live only for her pregnancy, so he undertakes house-keeping”		„the householdchores are not for him”
	dressing	„she wears pregnant clothes as soon as possible”	„she finds strange that old clothes doesn't fit her”	„she wears pregnant clothes only if it's inevitable”			
	pregnancy undertaken in everyday life	„she is longing for exceptional treatment”	„she can slowly adopt to this changed state”				
2. Life style	relax			„pregnancy in itself is not a reason for changing sleeping habits”			
	eating			„pregnancy can't influence eating habits”	„he accords special attention for eating”		„the mother is responsible for the fetus's well-being”
	social life				„he maintains such relationships which have been created for the benefit of the child”		„he insists maintaining the relationships originated in the past”
3. Identity & pregnancy	body shape	„her desire is having a pregnant look, she is proud of it”	„she has difficulties in adapting to this changed body shape”				
	psychological changes	„predominance of positive feelings: well balancing, satisfaction, happiness”	„feeling of stress, because yet she can't identify with motherhood, whereas it was expected from her”	„pregnancy is embarrassing, she wants to finish it”			„he feels antipathy, the pregnant woman is irritating for him, he doesn't experience any euphorical happiness”
	symptoms	„increased attention to body changes”	„she doesn't become pre-dominated by symptoms”	„the symptoms are awkward, she hates them and would like to make them bearable”		„the wife's symptoms remind him to fatherhood”	

4. The couple's relationship	changes in partnership	„idyllic relationship”			„pregnancy has positive effect onto their partnership”	„pregnancy has negative effect onto their partnership”
	changes in sexual life	„pregnancy doesn't restrict her in anything”	„the changes occurred make her uncertain”	„pregnancy is disturbing sexual life”		„sexual demands can't be subordinated to pregnancy”
5. Imagination	baby related imagination		„she looks forward to evidence, she is afraid of imagination”	„the foetus is parasitical, aggressive in her imagination”	„he would like to participate in their mutual secret”	„he hopes that after delivery, the baby won't disturb his life”
	imagination related to future parenting				„active preparation for baby nurturing”	„he doesn't have any imaginations, he knows that baby care is the woman's job”
6. The delivery	as it appears in his/her fantasy	„she is preparing consciously, she is looking forward to it and would like to experience it together with her husband”		„she is preoccupied with avoiding the pain”	„he is preparing for being present”	„he doesn't want to be present at the delivery and because of this he keeps on looking for arguments in order to support his decision”
	as an experience	„the childbirth is a positive, common experience”	„the identification with her mother is a possible grasp during her own delivery”	„she thinks over those things which could help her well-being”	„the childbirth is a positive, common experience”	„he looks for self justification for his absence to delivery”
7. Parental experiences	money	„the baby knows what he/she needs, the mother adapts to it”		„the mother defines when and what the baby needs”	„offspring nurturing will be placed in the centre of his life”	„the baby can't change his life”
	flat house	„the offspring is the most important, the house is not so important”	„when you have an offspring the house can't be neglected”	„the house dimension is a decisive criteria in having children”	„the offspring is the most important, the house is not so important”	„when you have offspring the house can't be neglected”
8. Self realisation	furnishing	„the furnishing is unimportant, the primary importance is having children”	„furnishing has to be taken into account when you have children”	„because of having children you can't give up high level furnishing”		„because of having children you can't give up high level furnishing”
	parenting and identity		„fulfilling full time mothering depends on making ends meet”	„mothering is just one slice of identity”		„parenting has no importance in self actualisation”
	living standard			„there are some aspects of life which she won't give up even for the sake of her child”		
	car				„when you have children you feel more safe if you have a car”	
	carrier				„the family has priority over carrier”	„carrier and work mean self-actualisation, they can't be subordinated to family”
	home creating					„he takes up the external conditions of home creating”

Note. In the above table, the short texts in the cells are *not* the items themselves; it is just the condensation of the content of the items belonging to a certain aspect