Thesis of doctoral (PhD) dissertation

ROLE OF INTERGENERATIONAL SPIRALS IN ANTENATAL DEPRESSION

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Aim

Pregnancy, as a pivotal period of preparing for maternity, is the very process, whereby somebody's daughter turns into somebody's mother, securing by this an equal role with one's own mother (Stern, 1995). This process is rightfully considered to be one of the most important events in any woman's life.

While it is supposed to be a highly positive life event, sadly, it can be also a psychological crisis state, either due to reactivated memories of earlier conflicts or to new conflicts generated.

Expecting women tend „to get closer" to their mothers, wanting to know more about her mothering style a generation earlier (Stern, 1995). This process is motivated by an unconscious urge to decide whether her mother may serve as an „appropriate" model for mothering. It was established, that pregnant women's representations on mothering style, developed during their childhood strongly influence their own later mothering activities (Fónagy, 1991, Zeanah, 1989). Parents' attachment-related childhood memories become incorporated into their working model,strongly affecting their children's mental representation of sensitive parental caregiving behavior. This is a primary causal factor in determining the child's quality of attachment to the parent (Bretherton, 1989.). These working models are assumed to regulate children's behavior with the attachment figure and in due course organise their behavior in all their significant relationships, with special reference to the caregiving interactions with their own offsprings (Fonagy, 1993).

Children develop expectations (models) regarding the nature of interactions between themselves and the attachment figure, based on representation of past experiences (Bowlby, 1980.) Internal working models, however, are no passive introjections of the objects of past experiences. They are, instead, active constructions available for continuous restructuring. Such restructuring, however, while widespread, is difficult because these models tend to operate outside the realm of consciousness, further, they tend to actively self-perpetuate (Bacciagaluppi, 1994).

An expecting woman's identification with her mother is reinforced bodily, due to the pregnancy. Namely, the unseen fetus within her body enables her to reexperience the feeling of being in primary unit with her mother. Simultaneously, it helps to indentify with the same intrauterine fetus, as if it were herself, in her mother's body again (Pines, 1972).

This process is especially decisive in cases of childhood memories of „poor maternal care". This provides the mechanism of intergenerational spirals of neglect (Diamond and Doane, 1994, Benoit and Parker, 1994). Their importance is accentuated by the finding that rememberance of poormaternal care is often associated with depressive symptoms (Tóth, Gervai, 1999). It was also revealed, that a woman's unresolved symbiotic illusion with her mother plays central role in the genesis of perinatal depression (Halberstadt-Freud, 1993). Consequently the expecting woman's representation about her own mother's earlier caregiving style will strongly influence her own mothering. This *„proactive" representation* is formed from the second trimester of pregnancy (Stern, 1995).
If the pregnant woman's representation is „being with a depressed, low care mother", this particular mothering style will be the model for herself. This mechanism could elicit intergenerational transmission of depressed symptoms during pregnancy.

Depression is one of the main public health problems of Western societies, being the leading cause of disease-related disabilities among women (Kessler, 2003). Both pregnancy and the postpartum period are associated with and accompanies by profound physiological as well as emotional changes. They might be also accompanied by mental symptoms and disorders ranging in severity from very mild to psychotic (Brockington, 2004). In particular, women of childbearing age are at high risk for major depression. Pregnancy and motherhood may further increase the risk of depressive episodes. Antenatal depression – not unexpectedly - is one of the most powerful predictors of postnatal depression (Lee et al., 2004).
Epidemiological studies conducted in Western societies regularly reveal depressive episodes to occur in 10–20% of pregnant women. There is also a growing literature showing that antenatal psychological distress can adversely affect both maternal and foetal well being (Lee at al., 2004).
Postnatal depression has an exaggerated, potentially devastating negative effect on mother-infant relationship (Tronic, 1979). Infants of depressed mothers showed significantly reduced likelihood of developing secure attachment (Martins and Gaffan, 2000). Research showed also that insecurely attached people are, in fact, more prone to depression and depressive symptoms than their securely attached counterparts. Viewed together, these studies indicate that people with insecure attachment orientations - particularly those who are preoccupied or anxious/ambivalent — are at increased risk of suffering from depressive symptomology. Liotti suggested, that insecurely attached children will reproduce the painful experiences of neglect with their own children (see Eagle, 1993).

Related research data also suggest that insecurely attached women may be more vulnerable to depressive symptoms than insecurely attached men (Lewinson at all. 1988).

Women with preoccupied/ambivalent or fearful-avoidant attachment styles, for example, are particulary vulnerable to depression (Carnelley, Pietromonaco, & Jaffe, 1994). These studies suggest that women of insecure attachment styles—particularly those, characterized by highly preoccupied/ambivalent one—may be especially vulnerable to the onset of depressive symptoms as response to major life stressors. Postnatal depression (PND) affects 13% of women who just gave birth (O'Hara and Swain, 1996), with potential long-term mental health consequences for their families (Murray and Cooper, 1997). The majority of women with postnatal depression fail to seek treatment, because either of fear of stigmatization or of an unrealistic perception of motherhood. Occurence of both antenatal and postpartum depression periods [is] associated with marital problems and with subduedlsocial, emotional, and cognitive competence. Depression during pregnancy is associated with poor social support, and low maternal education (Yonkers. 1995), unemployment, low own education, poverty, poor family relations, low marital age, lack of medical services, and mental health problems (Inandi, 2002). Risk of depression during pregnancy is reliably predicted by history of earlier psychiatric/psychological problems, as well as psychosocial factors. Wide ranging factors, found to increase the risk include presence of an earlier depressive period, ambivalent attitude to the pregnancy, living through negative life events, presence of depressed person/people in family, poor access to social support, young age of the women, conflict with the husband, smoking (O'Hara. 1986, Wishner and Weehler 1994, Rigetti és Veltema 1998).

Depressive symptoms are elicited by a complex interaction of neurohormonal, psychological and psychosocial problems. Irrespective of the nature of factor or the interaction of factors causing the symptoms, an intergenerational spiral of depression will appear and destruct the expected, mutually rewarding relationship of newborn and mother, participants of an evolutionary dyad (Nagy, Molnar, 1996, 2004).

A depressed mother may experience difficulties in responding always to her baby in a loving and caring way.. This condition may lead to "insecure attachment', which can elicit problems during infancy and in later childhood (Tényi, 2002).

Sample and methods

Sample

One hundred and fifteen pregnant women took part in our study undertaken from May to July, 2007. During that 3 months period patients who appeared in a compulsory ultra-sound examination did fulfill our set of questionnaires voluntarily.
They were in the second trimester of their pregnancy (from 12 gestation weeks to 23 gestation weeks). Mean age (+/-S.D.)=28,9 (+/-4,835). Four obstetrics departments from the North-Estern region of Hungary participated int he project.
Most of the participants were married or lived together with the father of her child (88,70%). Percentage distribution of their schooling level : primary education 26,09%, secondary education 12,17%, college graduates: 61,74%. Average number of pregnancy was: 2,2. There were no affective disorders in the history of the participans.

Measures

1. Depression was measured with the 13-item, shortened version of *Beck Depression Inventory* (BDI) (Beck, 1972). The shortened versions of the original scale, including the Hungarian one - have reliable psychometric properties (Kopp, Fóris, 1993). The Beck Depression Inventory (BDI) is a widely used self-report measure of the presence and severity of depressive symptomatology (Beck et al., 1961).

2. Rememberance of maternal care was measured with the *Parental Bonding Instrument* (PBI). The PBI elicits memory-based responses to questions regarding parental rearing styles, experienced during the first 16 years of life. It consists of a 25 four-point Likert items that respondents have to complete for both of their parents (Parker et al., 1979). The psychometric properties of the scale are good (Cronbach's α from 0.74 to 0.95, Parker, 1989). Originally the PBI was developed to measure parental care and overprotection (Parker et al., 1979). In our study we considered only the factor of care of the mother of pregnant woman - like the mother of own childhood -, because we were curious to establish the pregnant woman's early

mothering experiences, knowing their decisive influence on later mothering. (Parents respond to children's behavior and characteristics with expectations based upon past experiences with their own primary caregiver figures /Fonagy, 1993/).
The response on the PBI is not affected by current depressive symptoms (Duggan, 1995).

Statistical analysis

Statistical analyses were performed using Statistical Package for Social Sciences, 10th version (SPSS. 10) (Norusis, 2000).

Main hypothesis

Rememberance of inadequate maternal care increase the probability of antenetal depression.

Results

Our results revealed a correlation between an expecting woman's representation of the emotional tune of her mother's mothering style, and the appearance of depressive symptoms in the second trimester of her own pregnancy.
The subjective experience of maternal care in early childhood strongly influences the later mothering style. Representation of mothering starts to be formed in the second trimester of pregnancy and this representation will influence the later mother-child bonding-history.
In pregnancy, a brend new stage of life, somebody's daughter turns into, becomes1 someone's mother. This secures a role, equal to her mother's (Stern, 1995).
Each pregnant woman gets closer to her mother, wanting to know more about the events of her own childhood (Stern, 1995). This process is an unconscious probe, whether her mother were or failed to be an appropiate model for mothering. Pregnant women's ideas about the mothers of their childhood profoundly influence their own mothering style (Fónagy, 1991, Zeanah, 1989). This mechanism creates intergenerational spirals, because the first, and one of the most important relationships in human life is that one with the first caretaker, usually the mother.

We all long for experiencing security, which can be realized by the adequate mirroring in the face-to-face interaction with our respective „Significant Others".

From the very first moment of our life we are social beeings, possesing a peculiar sensitivity to social stimuli surrounding us, while we are still unable to regulate our emotions. For healthy personality development, we need a series of „Significant Others" who are „good enough" in mentalisation, therefore are able to regulate us.

Should our primary relationship fail to provide the experience of „secure base", both our early and later interpersonal relationships will be disturbed.

If someone reaches parenthood with attachment problems, with high probability, will carry this bonding disturbance over to the next generation. An intergenerational spiral of bonding problems appear.

If the relevant mental representations are built on experiences of „inadequatematernal care", this will cause problems in the mother-child realtionship, being poor maternal care associated with symptoms of depression.

However, should the pregnant woman's rememberance be connected with „being with a depressed mother" this particular mothering style will serves as the model for her own childcare. Symptoms of depression originating from conscious as well as unconscious memories of own mother-child relationship might elicit antenatal depression in the second trimester of pregnancy.

Antenatal depression is one of the strongest predictor of postpartum depression. Should this occur, the offsprings are destined to meet with mothers, incapable of positively charged „first dialoques" (Nagy, Molnár, 1996, 2004). Instead, being immersed in their negative moods, develop traumatized face-to face relationship with their babies. Further, depressed mothers, being unable to regulate their babies' emotions (Fonagy, Gergely, Jurist, Target, 2002), cannot teach them to cope with stress and negative emotions. Infant girls, grown like this, will be unable to fullfill the task of adequately („good enough") mirroring, and so unable to regulate their own babies' emotions a generation later.

Consequently an experience of „being with the depressed, non-responding mother" will serve as a foundation for a matching representation, to be be activated a generation later, when she expects a baby herself. An intergenerational spiral of neglect is being born and/or painfully replicated.

Consequently we can catch the intergenerational continuity in the time of motherhood constellation, i.e. in the second trimester of pregnancy.

Our data show that the representation of early care with emotional neglect serves as an important factor in the genesis of antenatal depression.

This study further shows, that the depression is a multietiological psychopatology, because we can't reconstruct the early mothering style from the data on depression.

We know, however, that rememberance of wanting maternal care is a strong predictor for depressed symptoms in the second trimester of pregnancy.

Publications related with the thesis

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Lectures related with the thesis

2005 10. 28-29. Magyar Gerontológiai Társaság: „Az egészségügyi és a szociális ellátás határterületei a geriátriában": **Szemán Anita**, Hegyi Péter, Molnár Péter: Életvégi érzések kötődéstörténeti vetülete

2006 02.02. Magyar Pszichiátriai Társaság nemzeti kongresszusa (Budapest) **Szemán Anita**, Nagy Gábor: Intergenerációs spirálok a depresszió és a II-es típusú diabetes mellitus létrejöttében

2006. 5. 25-27: Magyar Pszichológiai Társaság: XVII Országos Tudományos Nagygyűlés (Budapest): **Szemán Anita:** A gátlással szennyezet kötődés áttörésének lehetőssége intim kapcsolatokban

2006. 09. 27-30: 26th European Conference oOn Psychosomatic Research (Dubrovnic/Cavtat):
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2007. 10. 8-10: Geriátriai konferencia (Pécs): **Szemán Anita**, Hegyi Péter, Bakó Gyula, Molnár Péter: Az élet értelmébe vetett hit vizsgálata idősek körében

2008.01.24. Magyar Pszichiátriai Társaság Vándorgyűlése (Sopron). **Szemán Anita,** Péter Molnár: Az antenatális depresszió elemzése a várandósság második trimeszterében

2008. 06.12. V. Debreceni Belgyógyászati Napok: **Szemán Anita**: A depresszió és a II-es típusú diabetes mellitus összefüggése a korai anya-csecsemő kapcsolat zavarával.

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2008.09.26.:"A népegészségügy jövője"-A Népegészségügyi Képző-és Kutatóhelyek Országos Egyesületének II. Konferenciája (Mátraháza). Molnár Péter-**Szemán Anita:** Múltba nézve-jövőt látva: A prevenció intergenerációs szükségessége és lehetőssége.

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2009. 03. 06-07. Magyar Pszichoszomatikus Szülészeti- Nőgyógyászati Társaság VII Kongresszusa (Debrecen): **Szemán-Nagy Anita:** Korai kapcsolati reprezentációk szerepe az antenatális depresszió létrejöttében

Further lectures

2004 12. 9. Magatartástudományi Napok: Az orvosi bölcsesség harmadik arca: magatartástudományok és orvosképzés: Pék Győző. Síró Ágnes, Csörsz Ilona, Kollár János, Keresztúry Emőke, **Szemán Anita,** Molnár Péter: Curriculum fejlesztés: az oktatás módszerei és kontextusa

2005 02. 01.: MAKOG13: Kognitív tudomány, affektív tudomány: **Szemán Anita** és Molnár Péter: Alapemóció-felismerés: Nemi különbségek a torzításban

2005 10.16-19. TCM at the crossroads between China and Europe Congress on Traditional Complementary Medicine, Odense, Denmark: Orsolya Varga, **Anita Szemán**, Peter Molnar: Emphatic and creative skills of physicians and doctors studying complementary and alternative medicine methods: a statistical report

2007 08. 23-26. International Congress on Stress, Budapest, Hungary: Anikó Hazag, János Major, Regina Molnár, **Anita Szemán,** Antal Bugán: Perceived stress, burn-out and engagement, somatisation, depression, career-motivation, parental treatment and coping among Hungarian students.

2007. 10. 8-10: Geriátriai konferencia (Pécs): Kőpájer Gabriella, **Szemán Anita**, Molnár Péter: Preventív pedagógia: az orvostanhallgatók idősek ellátására való felkészültségének vizsgálata

2008. 09.02-05. International conference on communication in health. Oslo, Norway: P. Molnár, E Nagy, M Csabai, L Nemes, **A. Szemán**,I Csörsz, Cs Trinn:Adjectives of the brain: the 'bonding brain hypothesis' as applied to foster emotion/empathy literacy in helping professionals