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INFANTS OF MENTALLY ILL MOTHERS – A MINI REVIEW

Psychiatry

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ABSTRACT

Parental psychopathology is considered as a risk factor for child development. The interaction between mentally ill mothers and their infants has been extensively studied using the principles of psychoanalytic theory and experimental psychology. Maternal depression, psychosis and substance abuse are the most studied among the psychiatric disorders. In all these cases the early interactive mother-infant relationship is disturbed at both quantitative and qualitative level. The psycho-emotional development of the infant is endangered and possible adverse effects range from simple functional symptomatology (anorexia, insomnia) to more complex psychopathology. Therapeutic interventions aim to improve the functioning of the mother-infant dyad and the relationship between them.

KEYWORDS

Introduction

Undoubtedly, parental psychopathology is one of the main risk factors for children's development. The prevalence of emotional and/ or behavioral disorders among children of mentally ill parents is significantly higher than the relevant figure among offspring of parents without any history of psychiatric disorders [1-3]. More specifically, children of mentally ill parents have increased risk for psychosocial stress, learning disorders [1], behavioral disorders, school misconduct [4], emotional disorders and attention deficit disorder [5].

Initial studies have focused on children of schizophrenic parents. During the last decades numerous studies on children of depressed parents have been published, pointing out the significant psychiatric morbidity of these children [5-7]. Most of the studies use an epidemiological approach. The main outcome studied was children's psychopathology, while possible risk or protective factors have also been discussed.

A second study design applies the principles of psychoanalytic theory and experimental psychology, aiming to investigate the interaction between mentally ill mothers and their children. These studies examine how specific behavioral characteristics of mentally ill mothers affect the psychological functioning of their children. Possible effects of maternal depression, maternal psychosis and substance abuse on children's development have been studied extensively.

The depressed mother

Minor, sub-clinical depressive reactions may appear three days after delivery and are known with the term "post-partum blues". It is a transient phenomenon characterized by stress related to the newborn, minor depression with feelings of insufficiency, irritability and sometimes aggression towards the spouse and/ or other family members. The symptoms are of low intensity and appear as a biopsychological reaction to childbirth.

Postpartum depression appears gradually, usually during the first months following childbirth and lasts longer. It is characterized by depressive feelings, physical complaints, fatigue and anxiety. Depressive ideas are focused on the child; the patient believes that she is an incompetent or unworthy mother and that the child is in danger or even that it may die. Although the mother is physically present, she is psychically absent and as a result the child receives inadequate maternal care.

Observations of the mother-infant interaction have shown that depressed mothers show mostly depressive or anxious mimic expressions, less psychomotor activity, less mimicking of the baby, limited responses to baby expressions and poor participation in baby games. On the other hand, infants of depressed mothers show impaired alertness, higher sleepiness, intense muscle tone, less contented expressions and higher irritability. Mother-infant communication is not always quantitatively reduced; however it is mainly without expressed emotion. The contact is mainly "mechanical", they hold the baby swinging her constantly without looking into her eyes. As a result, the interaction is not able to provide the pleasure of receiving maternal care.

In a classical experimental study, Cohn and Tronick (1983) observed 24 three-month-old infants, while interacting with their mother, who was asked to mimic a depressive face [8]. All infants reacted in the same way: protest and withdrawal that lasted even after the end of the "depressive" interaction. One year later Field (1984) repeated the same experiment with one group of depressed mothers and one group of healthy controls and recorded the interactions in three successive stages [9]. The results showed that infants of depressed mothers were less active when compared to infants of healthy mothers in all three recording stages. The author argued that maternal depression could be possibly transmitted to the infant.

More recent studies have shown that mothers with postpartum depression rate in a more negative way their infants' facial expressions in comparison to non-depressed or anxious mothers [10]. In another study mothers of one-month old infants were thinking significantly more often that they had an infant with difficult temperament and were responding significantly less actively to the crying of their child in comparison to non-depressed mothers who had a better image about their infant [11]. Electroencephalographic results showed reduced neural activation and lack of activation of limbic and prefrontal regions in these infants [12]. A further study has indicated an increased risk of gastrointestinal and lower respiratory tract infections in children of mothers with postpartum depression (40% and 27% respectively), confirming the psychodynamic idea of the psychosomatic disorganization of the depressed infant [13].

Evidence shows that maternal depression has not only significant consequences during infant life, but also profound long-term effects on the child's development. In preschoolers that have been exposed to their mother's depression difficulties in emotional regulation have been observed [14]. The effect was dose-dependent, i.e. the more intense were the symptoms of the mother, the lower was the child's ability for emotional regulation [15]. At the age of five years children that had been exposed to their mother's depression showed depressive feelings after losing during a card game. They were more frequently suffering from feelings of helplessness, pessimism and low self-worth in comparison to children of non-depressed mothers [16]. In re-

evaluations at the age of 8, 13 και 16 years, 41.5% of the children whose mother had postpartum depression developed an emotional disorder (major depressive episode, dysthymia) versus only 12.5% of children of non-depressed mothers [17]. The authors suggested a hypothesis of higher child vulnerability and lower resilience for the offspring of depressed mothers that may have been further aggravated by adverse social circumstances.

The psychotic mother

Postpartum psychosis has a special clinical picture and course, with a sudden onset between the 5th and the 25th day. Sometimes the onset is preceded by anxious ruminations and nightmares with psychomotor agitation. Symptoms vary and may change quickly. The most common clinical symptomatology involves an acute delusional episode and severe confusion. The patients may experience feelings of anxiety or depression; however, depressive periods may be short and followed by acute excitation.

The content of delusional ideation includes denial of maternity and marriage or the impression that the child does not exist or does not belong to the mother. This impression is usually accompanied by the fear of child's death or the delusional belief that the child was kidnapped or replaced. Due to the suicidal or infanticide risk, hospitalization is necessary. The symptomatology improves within a relatively short period of time after the initiation of pharmacotherapy with neuroleptics. Remission is observed in four out of five cases, but in case of a new pregnancy there is a 20% risk for relapse [18].

Postpartum psychosis is an acute condition which is partly attributed to endocrinological and psychological disturbances caused by maternity. It may affect women without any psychiatric history, but it is often associated with a psychical susceptibility of the patient. Sometimes it may be one more episode in the course of a schizophrenic condition already diagnosed prior to childbirth. Four decades ago Cohler has pointed out the significant disorders in the interaction of psychotic mothers with their infants: they did not respond quickly enough and in an appropriate way to their infant's needs and provided less social stimuli in comparison to healthy mothers [19]. Person showed that as soon as during the third day after childbirth the emotional interactions of the psychotic mothers with their infants are poorer and less harmonic. He observed special difficulties in establishing relationship through eye contact and smile [20].

In his paper David refers to a real inversion of the relationship. In response to delirious and/ or emotionally absent mothers with chaotic behavior the infants become extremely alert, with an anxious and serious glance, controlling their movements and soothing themselves. It is as if they try to protect their mothers and simultaneously not to put themselves in danger [21].

Maternal psychotic symptoms expose infants to two major types of risk. First of all, attachment per se is directly influenced by the mother's psychotic disorder. Secondly, the effects of maternal psychosis on their immediate environment act as additional sources of possible stress: difficulties in the establishment of the relationship to the father, unstable relationships with the extended family and physical absence of the mother due to long-term hospitalizations. The approach of the psychotic mother towards her infant is characterized by two contradictory elements: intense desire for a symbiotic relationship with the imaginary infant on the one hand and intolerance to the requirements and normal developmental procedures of the real infant on the other [22].

It is obvious that psychotic disorders affect directly the woman's ability to become a mother. Her relationship with the child is dominated by her great difficulty to recognize the real needs of the child and to welcome her as a different person. Immediately after childbirth she considers the child as the good part of herself, which is intensively desirable and that she has to keep it within her without allowing her any differentiation. She feels the real baby as dangerous and each of her movements (kinetic, mouth, ocular) agitates primary psychotic anxieties. Under the influence of this stress the mother may attack and/ or abuse the baby. Some psychotic mothers may ignore the infant, avoiding looking at her, feeding her or touching her, leaving her alone for many hours.

The observation of the early interactions indicates the significant effort that the infant is making in order to adapt to his mother's behavior. However, the child has often the expression of discomfort, concern and/ or sorrow and the pattern of the mother-infant interactions are organized based on the mother's and not the infant's needs. The role of the father is substantial, in order to achieve the establishment of a boundary to the mother's destructive psychotic anxieties. However, these infants often do not have a father. The psychotic woman may find a partner in order to have a child and she separates from him immediately afterwards.

The drug-dependent mother

In a study among pregnant women aged 15 to 44 years, 4.5% reported substance use, 11.6%-11.9% alcohol use and 15.3%-16.4% smoking [23]. Drug-dependent mothers are usually single, young women 20 to 25 years old. The pregnancy is often accidental and the child is most of the times unwanted, but the pregnancy and childbirth are completed, because it often takes long until the young mother recognizes the pregnancy and there is not always enough time to proceed to an abortion. The pregnancy's announcement questions the substance abuse and all drug addicted women worry about the effects of drug abuse to the embryo.

Women who use substances during pregnancy often experience serious socio-economic problems, have an unstable way of living and experience social exclusion. They often adopt risky behaviors such as substance trafficking or having multiple partners, often resulting in sexually transmitted diseases and exposure to violence. The environment in which they live is also unhealthy (poverty, poor relations with neighbors, inadequate feeding, lack of housing, limited social support, family history of drug abuse, presence of psychopath ology etc.) [24]. Socio-economic conditions are directly related to the vulnerability and sensitivity of the mother, but also determine decisevely the mother-infant interaction [25].

Substance abuse complicates the necessary for motherhood psycho-emotional processes, reduces the capacity for a successful healthy bond with the infant and causes problems in the interaction with the baby and generally in the parental role. Children of drug-dependent women may have problems, such as neurodevelopmental disorders, cognitive deficits, hyperactivity, difficulties in reading and articulation, negative reaction to stress, learning difficulties, difficulties in solving problems, ADHD, impulsivity or depressive symptoms and early onset of smoking in adolescence [23, 26].

The newborns of drug-dependent mothers have serious physical problems as low birth weight, perinatal problems, acute intoxication and neonatal abstinence syndrome. The neonatal abstinence syndrome occurs at a rate of 55-94% in infants of drug-addicted mothers that use mainly opioids. There are no studies that confirm with certainty that the use of marijuana, cocaine or methamphetamine causes similar syndromes. This syndrome is usually characterized by constant crying, sleeping disorders, tremor, hypertonia, myoclonus, seizures, fever, respiratory problems, impaired food intake etc. Symptoms typically start within 24 hours after childbirth, but can also appear 40 to 70 hours later (buprenorphine), or even 5 to 7 days later (heroin or methadone). The withdrawal symptoms become more intense when the levels of the substance in the blood of newborn are significantly reduced [27].

Substance use during pregnancy reduces the mother's ability to achieve healthy bond [28]. The first years of the child's life are characterized by poor interaction, difficulties in adaptation and difficulties in setting boundaries. However, the parental role of drug-dependent mothers is becoming difficult not only because of the mother's reduced sensitivity, but also because of the infant's distorted behavior (newborn' hyperactivity and impulsivity). Maternal substance abuse is the most common reason for which a child is given to social services due to neglect or abuse. The infants are often abandoned, taken care of by the extended family or placed in an institution or given up for adoption [29].

In the therapeutic treatment risks that threaten the child must be always considered. The primary risk is the infant's isolation from his mother in a pathological symbiotic relationship. In this isolated relationship the infant is exposed to violence and successive abandonments. Either relatives or institutions may be assigned to take care of the abandoned infant, but often without stability and adequacy of the emotional relationships.

The treatment of neonatal abstinence syndrome in infants of drug-

dependent mothers is multi-faceted. The reduction of the environmental stimuli, the provision of small and frequent high-calorie meals, adequate sleep and the preservation of the equilibrium of the electrolytes are required. Medication, mainly the provision of methadone and buprenorphine is discussed. However, these medicinal products may also cause neonatal abstinence syndrome and their gradual termination is necessary [30].

The provision of therapy for drug-dependent mothers and their children is a significant condition for the discontinuation of inter-generational transmission of abuse in families [32]. Moreover, it is important for the healthy development of the child and for the prevention of conduct and oppositional defiant disorder and other mental disorders of children and adolescents [32]. Drug-dependent women report significant difficulties to follow classic rehabilitation programs [33]. One quarter of the children of drug-dependent mothers do not receive appropriate medical care in the first two years of their life [34].

The programs that are directed both to the rehabilitation of drug-addicted mothers and to the care of their child from birth are more effective than the rehabilitation programs that designed exclusively for the mother. They have better results in the establishment of a safer mother-child relationship, lowest child abuse rates and can result in a more efficient and satisfactory parenting role [35].

Conclusions

Interdisciplinary collaboration is necessary in order to achieve and maintain the physical and mental health of the mentally ill mother and her child. The establishment of specially designed services staffed with trained personnel is imperative. The therapeutic approach of the dyad mother-infant requires often a temporary distance between the two protagonists aiming to protect both the child and the mother. A therapeutic team can be used as an intermediary for the mother-child relationship. The establishment of a stable environment for the child combined with the preservation of the mother-child relationship constitutes the core of the therapeutic treatment, regardless of the course of the mother's disorder.

REFERENCES

1. Cantwell D., Baker L. (1984), Parental illness and psychiatric disorders. J. Clin. Psychiatry, 45:503-507.
2. Orvaschel H., Weissman M., Pandian M., Lowe T. (1981), Assessing psychopathology in children of psychiatrically disturbed parents. J. Am. Acad. Child Adolesc. Psychiatry, 20:112-122.
3. Rutter M., Quinton D. (1984), Parental psychiatric disorder : Effects on children. Psych. Med. 14:853-880.
4. Cooper S.F., Leach C., Stozer D., Tange W.L. (1977), The children of psychiatric patients : Clinical findings. Brit. J. Psychiatry, 131:514-522.
5. Orvaschel H., Walsh-Allis G., Ye W. (1988), Psychopathology in children of parents with recurrent depression, J. Abnorm. Child Psychol., 16:17-28.
6. Beardslee W.R., Bemporad J., Keller M., Klerman G. (1983), Children of parents with major affective disorder : A review. Amer. J. Psychiatry, 140:825-832.
7. McKnew D., Cytzyn L., Efron A., Gershon E., Bunney E. (1979), Offspring of patients with affective disorders, Br. J. Psychiatry, 134:148-152.
8. Cohn J.F., Tronick E.Z. (1983), Three months old infants' reaction to stimulated maternal depression, Child development, 4, 185-193.
9. Field T.M. (1984), Early interactions between infants and their post-partum depressed mothers, Infant Behaviour Development, 7, 527-537.
10. Stein A, Arteche A, Lehtonen A, Craske M, Harvey A, Counsell N, Murray L. (2010) Interpretation of infant facial expression in the context of maternal postnatal depression. Infant Behav Dev, 33(3):273-8.
11. Britton JR. (2011) Infant temperament and maternal anxiety and depressed mood in the early postpartum period. Women Health, 51(1):55-71.
12. Laurent HK, Ablow JC. (2011) A cry in the dark: depressed mothers show reduced neural activation to their own infant's cry. Soc Cogn Affect Neurosci.
13. Ban L, Gibson JE, West J, Tata LJ. (2010) Association between perinatal depression in mothers and the risk of childhood infections in offspring: a population-based cohort study. BMC Public Health. 10:799.
14. Feng, X., Shaw, D. S., Kovacs, M., Lane, T., O'Rourke, F. E., Alarcon, J. H. (2008). Emotion regulation in preschoolers: The roles of behavioral inhibition, maternal affective behavior and maternal depression. The Journal of Child Psychology and Psychiatry, 49(2), 132–141.
15. Beebe, B., Jaffe, J., Buck, K., Chen, H., Cohen, P., Feldstein, S., Andrews, H. (2008). Six-week postpartum maternal depressive symptoms and 4-month mother-infant self- and interactive contingency. Infant Mental Health Journal, (5), 442–471.
16. Murray L, Woolgar M, Cooper P, Hipwell A. (2001) Cognitive vulnerability to depression in 5-year-old children of depressed mothers. J Child Psychol Psychiatry, 42(7):891-9.
17. Murray L, Arteche A, Fearon P, Halligan S, Goodyer I, Cooper P. (2011) Maternal postnatal depression and the development of depression in offspring up to 16 years of age. J Am Acad Child Adolesc Psychiatry, 50(5):460-70.
18. Lebovici S. (1983), Le nourisson, la mère et la psychanalyse, Paris. Ed. Le Centurion.
19. Cohler, B.J., Grunebaum, H.U., Weiss, J.L., Hartman, C.R. and Gallant, D.H. (1976). Child care attitudes and adaptation to the maternal role among mentally ill and well mothers. American Journal of Orthopsychiatry, 46(1); 123.
20. Person - Blennow J. (1984), Offspring of women with non organic psychosis : mothers - infant interaction at three days of age. Acta Psychiatr. Scand, 70:149-159.
21. David M. (1987), Souffrance du jeune enfant exposé à un état psychotique maternel. Persp. Psychiat., 6, 1, 7-23.
22. David M., Castex E., Leger E.M., Merlet A.M.(1981), Danger de la relation précose entre le nourrisson et sa mère psychotique. Psychiatrie de l' enfant, 24(1), 151-196.
23. Hudak, M. L., & Tan, R. C. (2012). Neonatal drug withdrawal. Pediatrics, 129(2); 540-560.
24. Minnes, S., Lang, A., & Singer, L. (2011). Prenatal tobacco, marijuana, stimulant, and opiate exposure: outcomes and practice implications. Addiction science & clinical practice, 6(1), 57.
25. Siqveland, T., Smith, L., & Moe, V. (2012). The impact of optimality on maternal sensitivity in mothers with substance abuse and psychiatric problems and their infants at 3 months. Infant Behavior and Development, 35(1), 60-70.
26. Dowdell, J. A., Fenwick, J., Bartu, A., & Sharp, J. (2009). Midwives' descriptions of the postnatal experiences of women who use illicit substances: A descriptive study. Midwifery, 25(3), 295-306.
27. Liu, A. J., Jones, M. P., Murray, H., Cook, C. M., & Nanan, R. (2010). Perinatal risk factors for the neonatal abstinence syndrome in infants born to women on methadone maintenance therapy. Australian and New Zealand Journal of Obstetrics and Gynaecology, 50(3), 253-258.
28. Alhusen, J. L. (2008). A literature update on maternal-fetal attachment. Journal of Obstetric, Gynecologic, & Neonatal Nursing, 37(3), 315-328.
29. Strathearn, L., & Mayes, L. C. (2010). Cocaine addiction in mothers. Annals of the New York Academy of Sciences, 1187(1), 172-183.
30. Cleary, B. J., Donnelly, J. M., Strawbridge, J. D., Gallagher, P. J., Fahey, T., White, M. J., & Murphy, D. J. (2011). Methadone and perinatal outcomes: a retrospective cohort study. American journal of obstetrics and gynecology, 204(2), 139-e1.
31. Niccols, A., Milligan, K., Smith, A., Sword, W., Thabane, L., & Henderson, J. (2012). Integrated programs for mothers with substance abuse issues and their children: a systematic review of studies reporting on child outcomes. Child abuse & neglect, 36(4), 308-322.
32. Webster-Stratton, C., Reid, M. J., & Hammond, M. (2004). Treating children with early-onset conduct problems: Intervention outcomes for parent, child, and teacher training. Journal of Clinical Child and Adolescent Psychology, 33(1), 105-124.
33. Hines, L. (2013). The treatment views and recommendations of substance abusing women: A meta-synthesis. Qualitative Social Work, 12(4), 473-489.
34. Callaghan, T., Crimmins, J., & Schweitzer, R. D. (2011). Children of substance-using mothers: child health engagement and child protection outcomes. Journal of paediatrics and child health, 47(4), 223-227.
35. Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. Child development, 71(3), 543-562.