

# Possible Role of Maternal Mental Disorders in Sudden Infant Death Syndrome

## Annenin Psikiyatrik Bozukluklarının Ani Bebek Ölümü Sendromundaki Olası Rolü

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**ABSTRACT** Sudden infant death syndrome (SIDS) is defined as a death during the first year of life that occurs during sleep and after a thorough investigation, no explanation of the death can be found. Although many risk factors for SIDS have been identified, it is also associated with parental mental illness. Researches have defined that children of parents with schizophrenia, peripartum psychosis, maternal depression, and alcohol-drug using related disorders have higher rates of SIDS. However, women with a mental illness could act homicidal behaviors include infanticide related with their psychotic symptoms. Thus, it should be taken into consideration that an infanticide could be assessed as SIDS. Besides, mothers with psychiatric disorder and their infants are more likely to have poorer interactions which may cause deficiencies in taking care infants necessities such as feeding, medical conditions and hygiene. Consequently, it is important to provide appropriate conditions and better protection for infants whose mother have psychiatric disorders due to the increased risk factors for SIDS.

**Keywords:** Sudden infant death; infanticide; mental disorders

**ÖZET** Ani bebek ölümü sendromu (ABÖS) yaşamın ilk yılında ve uykuda meydana gelen, detaylı araştırmalara rağmen ölüm sebebinin bulunamadığı durum olarak tanımlanır. ABÖS için tanımlanan pek çok risk faktörü olmakla birlikte, bu durumun ebeveynlerin ruhsal rahatsızlıkları ile de ilgili olduğu bilinmektedir. Araştırmalarda, şizofreni, peripartum psikoz, annede depresyon varlığı ve alkol-madde kullanım bozukluğu ile ilişkili psikiyatrik bozukluklarda ABÖS oranının arttığı gösterilmiştir. Ayrıca, ruhsal bozukluğu olan bir anne, psikotik semptomları doğrultusunda infantisid gibi homisidal davranışlarda bulunabilir. Bu nedenle, ABÖS vakalarında infantisid gibi homisidal davranışların olabileceği de göz önünde bulundurulmalıdır. Bunun yanında, psikiyatrik bozukluğu olan anneler ile bebekleri arasındaki zayıf anne-bebek ilişkisi, infantın beslenme, sağlık koşulları ve hijyen gibi birtakım gereksinimlerinin karşılanmasında yetersizliğe yol açabilir. Sonuç olarak, annelerinde psikiyatrik bozukluk olan infantlar için uygun koşulları sağlamak ve daha iyi korumak, ABÖS için artmış risk teşkil etmesi nedeniyle önemlidir.

**Anahtar Kelimeler:** Ani bebek ölümü; bebek katili; mental hastalıklar

Sudden infant death syndrome (SIDS) is the sudden and unexpected death of an infant under 1 year of age, with the onset of the lethal episode apparently occurring during sleep, that remains unexplained after a thorough investigation including performance of a complete autopsy, and review of the circumstances of death and the clinical history.<sup>1</sup> Studies have revealed the possible risk factors for SIDS such as male gender, maternal smoking, premature birth, prone sleeping, soft bedding.<sup>2,3</sup> The incidences SIDS vary between 0.06-0.8 per 1000 live births in different countries.<sup>3</sup> SIDS is likely to be

associated with parental mental and behavioral conditions through multiple ways.

#### RELATIONSHIP BETWEEN PSYCHIATRIC DISORDERS AND PREDISPOSITION TO SIDS

Maternal psychiatric illnesses represent a considerable public health concern because of the fact that many people with mental illness currently become parents. Having a parent with a history of mental disorder doubles the risk of SIDS compared with general population rates.<sup>2</sup> A strong relationship between mother and infant is important due to provide infants' necessities for its survival include feeding and infant care. According to the widespread view, psychiatric disorders in mothers are associated with deficits in maternal-infant relationships; such mothers have difficulties in taking care (nutrition, hygiene, etc.) and have been observed less responsive to their infants' behaviors or illnesses. Mothers with major mental disorders are usually unsuccessful to manage known modifiable risk factors.<sup>4</sup> Additionally, it was discerned that health professionals were frequently preoccupied with the mental state in such mothers, rather than being aware of the importance of reducing risk factors.<sup>5</sup> Prone sleeping position is regarded essential for reducing SIDS rates; however, mothers with mental illness were believed to show poor compliance to this suggestion.<sup>2</sup> Independently from birth weight and gestational age, increased risk of SIDS and stillbirth was shown in children of women with schizophrenia.<sup>6</sup> This risk has been attributed to fact that those mothers are smokers, substance users, and living in poor socioeconomic conditions due to their psychotic symptoms.<sup>7</sup> Besides environmental and modifiable factors, common genetic liability between schizophrenia and several congenital malformations has also been suggested.<sup>6</sup> However, sufficient correlation between congenital or physical malformations which were thought to be related to schizophrenia and infant death has not been established.

Postnatal depression has long-lasting effects on infant development due to impaired mother-infant interaction. Mothers with depression may have ideas of harming their babies; however, infanticide by women with non-psychotic depression is a rare

condition contrarily to the common belief. Postnatal depression is rather associated with SIDS through the fact that stressed and depressed mother would be more likely to be smokers and they have difficulties in providing sufficient maternal care including breastfeeding.<sup>8</sup> Nevertheless, as a tragic fact, infants had died of supposed SIDS were reported as victims of non-accidental death. Post-mortem findings revealed infanticide incidents which were committed by depressed women with obsessional thoughts about infanticide.<sup>8</sup>

Maternal smoking, as an environmental factor, was found to significantly elevate SIDS risk in the postnatal period.<sup>9</sup> Smoking is known to be at higher rates of mental disorders. Infants whose mothers have alcohol- or substance-related disorder are believed to be particularly vulnerable to SIDS.<sup>2</sup> Conditions related exposure to maternal drug or alcohol use during pregnancy, such as fetal alcohol syndrome, were slightly linked with SIDS.<sup>2</sup> However, chaotic lifestyle and consequent neglect of care among mothers who use alcohol or substance possess more threat for the incidence of SIDS.<sup>2</sup> Substance use disorder is an independent risk factor for infant death, including SIDS; in addition, its comorbidity with other psychiatric disorders leverages the risk.<sup>10</sup> In terms of the impacts of the exposure to psychopharmacological agents during pregnancy, there is no data associating antidepressants and benzodiazepines with infant deaths. Serotonin reuptake inhibitors were found to be associated with minor septal defects of the heart, but any major congenital anomalies have not been reported with such drugs.<sup>11</sup> Both typical and atypical antipsychotics have not been found to have substantially increased the risk of birth defects or other adverse effects including neonatal deaths above rates in the general population.<sup>12</sup> All commonly used mood stabilizers, including anticonvulsants, are considered teratogenic when particularly used in the first trimester. A broad range of congenital malformations such as neurodevelopmental deficits and cardiovascular abnormalities were reported with mood stabilizers best-known likes of lithium and valproate.<sup>13</sup> These agents are also recognized for their toxicity during breastfeed-

ding period; however, no relationship was displayed for any of the psychopharmacological agents of SIDS, during pregnancy or breastfeeding.

#### PROBABLE HIGH RISK CONDITIONS FOR LEGAL ISSUES

Infanticidal ideation is a serious symptom among women suffering from peripartum psychosis. Up to 4% of mothers who have untreated perinatal psychosis murder their infants after delivery; therefore possibility of infanticide ought to be considered for infants had died of supposed SIDS, whose mothers' have known to manifest peripartum psychosis.<sup>14</sup> Prepartum psychosis is considered in the context of affective disorders. In terms of affective disorders; bipolar manic episode has not reported with a direct relationship with infanticide; however, mania with psychotic features such as persecution delusions and visual hallucinations has implicated to be related with homicidal behaviors towards infants.<sup>15</sup> A psychotic disorder or a personality disorder have reported in some mothers who induce illness in their infants. Additionally, a significant proportion of the mothers who have concerns about their ability to care for the baby and worries that they might cause them harm also induce illness in their child. Fabricated illness by the mother may be a sign of Munchausen by proxy, and this condition is seen as part of a spectrum of child abuse.<sup>16</sup> Such abuse may conclude with an infant death at the severe end of that spectrum.

In the management of the adults, who have psychiatric disorders and already have or will soon have infants, it is important to develop appropriate strategies for modifying risk factors for SIDS. It may be preventive to determine the pregnant di-

agnosed with the psychiatric disorder and follow mother and infant closely after the pregnancy in the process of taking care under the leadership of medical staff. These close follow-up may reduce and manage the risk factors for SIDS. Besides this, compliance to treatment of the mother with a mental disorder could be provided. High levels of vigilance need to be maintained for such patients to provide better protection for their infants.

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#### Authorship Contributions

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