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Prevention of infanticide and suicide in the postpartum period: the importance of emergency care

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Unrecognized and untreated postpartum mental illness can have tragic consequences, as underscored and often sensationalized in news media coverage of maternal infanticide (http://www.brusselstimes.com/belgium/justice/12386/father-will-continue-to-support-woman-who-murdered-three-children; http://www.kiis1011.com.au/newsroom/mother-kills-baby-after-throwing-her-from-a-moving-car; https://www.commercialappeal.com/story/news/2018/07/15/weathersbee-jayml-price-postpartum-psychosis-depression/783771002/). After such a tragic incident up to 30% percent of filicidal mothers commit suicide [1]. In those mothers who survive, repercussions may include intense feelings of guilt and grief as well as stigma. Furthermore, women may face criminal charges in several countries, including the U.S: in contrast to other nations, the U.S. judicial approach to infanticide is particularly punitive, with four states lacking an insanity defense [2].

When assessing women at risk of filicide, it is important to draw a distinction between neonaticide and infanticide. At risk for neonaticide (taking the life of a child within 24 hours after birth) are underprivileged, young, unmarried women concealing their pregnancy and lacking prenatal care [1]. Generally, women at risk for infanticide (taking the life of a child between 24 hours and one year after birth) represent a more heterogenous group, although some risk factors may be shared between the two groups. Perhaps unsurprisingly, early life trauma, domestic violence, and substance abuse have all been linked to infanticide. However, independent of these social risk factors, case series have underscored the importance of psychosis after childbirth as a risk factor for infanticide [3].

Importantly, infanticide in women with postpartum psychosis (PP) can be prevented because the disorder carries an excellent prognosis when treated timely and adequately [3]. We therefore focus this viewpoint on the identification and management of women suffering from PP. Postpartum psychosis is an umbrella term referring to women with the most severe episodes postpartum, including manic, depressive and mixed episodes with psychotic features and psychosis not otherwise specified [3]. Importantly, although women with schizophrenia are not as susceptible to postpartum psychotic episodes as women with a history of PP or bipolar disorder,

some cases of PP may actually mean the debut of non-affective psychotic illness. The current viewpoint focuses on PP as an umbrella term as little is known about possible diverging treatment efficacies across diagnostic categories falling under the term. We believe that three steps are pivotal to ensure adequate preventive and management strategies of PP: 1) prevention of PP in women at high risk (primary prevention); 2) early detection of PP (also in women without a previous psychiatric history, secondary prevention); and 3) prompt and adequate treatment and management of PP, ensuring the safety of both mother and child (tertiary prevention).

Primary prevention

The only robustly established risk factors for PP are a personal history of bipolar disorder (estimated risk of 17%, CI 13-20%) and a history of postpartum psychosis (estimated relapse risk of 29%, CI 20-41%) [4]. Women with bipolar 1 disorder are at higher risk for manic and psychotic episodes than women with a bipolar 2 disorder; at highest risk are women with both a bipolar 1 disorder and a previous PP [5]. Women with a history of bipolar disorder and/or PP should have specialist care during pregnancy and be seen by a psychiatrist. These women should have a pre-birth planning meeting during pregnancy with their spouse, family, friends, mental health professionals, midwife, obstetrician, and/or GP to compose a postpartum psychosis prevention plan. This plan should include strategies to ensure sufficient rest and sleep once the baby is born and a plan for pharmacologic treatment. Women at high risk of PP should not be treated with antidepressant monotherapy during pregnancy or after delivery. Pharmacologic prophylaxis immediately after delivery is highly effective to prevent PP, with the strongest evidence for lithium in high dosages, but in clinical practice antipsychotics are also used successfully [3].

Early detection (secondary prevention)

The majority of women admitted with a diagnosis of PP do not have a history of psychiatric illness. Early detection is therefore warranted for this group [3]. Screening tools for postpartum psychosis are unlikely to result in cost-effective detection of a substantial number of cases given the low incidence of 1 per thousand deliveries. In

clinical practice, it can be challenging to properly discern symptoms more likely to be associated with PP than with postpartum depression or physiological postpartum mood instability. Postpartum psychosis is a severe affective disorder and mood symptoms (including manic, depressive and mixed symptomatology) are the most prominent features of the disease. Other symptoms include agitation and delusions. Importantly, symptoms fluctuate over time (also called "kaleidoscopic picture" of PP) and women often do not express suicidal or infanticidal thoughts. An extensive interview of the partner and/or other family members is of paramount importance and should be included in the diagnostic procedure and risk assessment. Alternatively, psychotic symptoms may antedate delivery by several months or years, raising suspicion of relatively chronic non-affective psychotic illness. Optimizing antipsychotic treatment before delivery is pivotal here and may prevent worsening of symptoms postpartum.

Further complicating the diagnostic workup, fluctuating mood symptoms as well as infanticidal thoughts are common phenomena in the physiological postpartum period. For example, intrusive infanticidal thoughts occur in about 50% of women in the general population, particularly those experiencing parenting stress and low social support [6]. Furthermore, these thoughts are common in women with depression without psychotic features and women with obsessive-compulsive disorders, but infanticide in these groups is extremely rare. How to elicit infanticide thoughts in a non-judgmental way during history taking and management is described elsewhere by Lawrence et al [7].

Management of Postpartum Psychosis (tertiary prevention)

The aforementioned recent cases of women with likely PP committing infanticide, illustrate the importance of immediate action. In fact, some of these women had appointments with psychiatrists only days after the dreadful events.

When a possible or probable diagnosis of PP is suspected by a maternity care assistant or family member, we believe the referring physician should try and contact a psychiatrist in the course of that same consultation and have the patient evaluated the same day. The woman should not be left alone after that point as impulsivity and possible (self-)harm are unpredictable in women suffering from PPs. The spouse

and/or family members should be actively involved in the management plan. If the psychiatrist establishes a diagnosis of PP, ideally the patient is admitted that same day to optimize pharmacological interventions and allow intensive monitoring of possible suicidal and infanticidal ideation and acts.

Pivotal in the adequate management of PP and prevention of suicide and filicide is an adequate infrastructure allowing for fast and efficient communication between referring physician and psychiatrist, as well as sufficient admission capacity in the area and timely transits to PP treatment facilities. Women with postpartum psychosis respond particularly well to treatment with lithium or ECT and full remission is usually achieved within 2 months [3].

A Cohrane Review on 11,000 subjects across 12 randomized controlled trials (RCTs) did not detect benefits of early postpartum home visits on maternal and infant mortality [8]. We thus believe that inpatient care, preferably at a Mother Baby Unit, is required to ensure safety, complete the diagnostic evaluation, and initiate treatment. The establishment of psychiatric inpatient Mother-Baby Units in the U.S. and other nations will save lives of both mothers and babies.

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