

Introduction

Depression in women during their childbearing years is a major public health concern. Because childbirth is a complex life event associated with numerous biopsychological changes. PPD has a long term effect on mental health since it may increase the risk of continuing or recurrent depression (*Wisner and Scholli, 2008*).

Postpartum depression can have profound effects not only on women, but also on her infant, partner, and other children. It adversely affects maternal-infant interaction (*Logsdon and Wisner 2006*), and women with depressive symptoms are more likely to discontinue breastfeeding earlier than non-depressed mothers (*Dennes and McQueen, 2009*).

Common consequences of postpartum depression for the child include emotional and behavioural problems, cognitive delay, and low social competence (*Rokous et al., 2001*).

Partners of women with postpartum depression experience major disruption in their lives and marital relationships, fear, confusion, uncertainty about future, and risk mental health problems (*Carter et al., 2001*).

Older children are affected in that they may be (pushed away) by their mothers because women with

depression have difficulty coping with more than one child. In addition, they often take on adult roles prematurely by assuming a care-taking role for siblings and the depressed parent (*Zelkowitz et al., 2001*).

PPD has also been associated with adverse effects on early infant development specially among socially disadvantaged children. Serious consequences for the child include increased risk of accidents, sudden death syndrome, and an overall higher frequency of hospital admissions (*Sharp et al., 1995*).

It is still not clear whether postnatal depression is a continuation of an existing state, or it first occurs after delivery, and at what time after delivery a depression can be regarded as specifically postnatal in onset (*Cooper & Murray, 1997; Paykel, 2002*).

The early detection and treatment of PPD can ensure improvements in the quality of the mother-child relationship and the development of the child. Research shows that there are still a lot of PPD cases missed, up to more than half of the cases seem to remain undetected (*Hearn et al, 1998; Perfetti, Clark, & Fillmore, 2004; Zauderer, 2009*). It is important for care givers to be aware of this and that they give attention to the fact that mothers can have PPD.

Patient satisfaction is an important health outcome in today's cost conscious health care arena. It is used by health care providers, administrators and policymakers to assess the quality of care, make decisions about the organization and provision of health care services, avoid malpractice litigation and maintain a competitive edge in the health care arena (*Jackson et al., 2001*). Therefore, understanding women's satisfaction with their childbirth experience is relevant to health care providers, administrators and policymakers as an indicator of the quality of maternity care (*Hodnett, 2002*).

Woman's satisfaction with her childbirth experience may have immediate and long-term effects on her health and relationship with her neonate. A satisfactory childbirth experience has contributed to a woman's sense of accomplishment and self-esteem and has led to expectations for future positive childbirth experiences (*Goodman et al., 2004*).

Aim of the Work

This study is designed to assess the prevalence of Postpartum Depression among women who delivered at Ain Shams University, Maternity Hospital.

Research question

In women who delivered at Ain Shams University, Maternity Hospital what is the prevalence of PostPartum Depression?

DEPRESSION

Depression is a major cause of disability for all ages and both sexes worldwide (*WHO, 2010*).

According to the World Health Organization, by 2020 depression is projected to carry the highest disease burden of all health conditions in women, accounting for 5.7% of the total disease burden measured in disability-adjusted life years.

It accounts for 4.3% of the global burden of disease and it causes 11% of all years lived with disability globally (*World Health Organization, 2013*).

Depression is a major public health problem with a consistently high prevalence rate worldwide (*Haddad 2010*). About 5 % of the adult population will have a major depressive episode every year, and roughly one-half of these cases will come to medical attention. Women are affected by depression twice as often as men (*Warren 2010*).

The different types of depression include its major and minor forms, and depression related to bipolar disorder. The symptoms of minor depression are bothersome to the person, and last at least 2 years at low level. However, these symptoms are usually not enough to disable the

person. In case of major depression, the person is disabled by sadness and the depressive symptoms (*Paolucci & Paolucci, 2007*). It is the most severe form of depression and has strict diagnostic criteria (*Warren 2010*). In bipolar disorder, the periods of depression take turns with shorter periods of mania (*Paolucci & Paolucci, 2007*).

The clinical features of depression include both physical and psychological symptoms. The symptoms are pervasive and sustained (*Haddad 2010*).

According to the American Psychiatric Association the two core symptoms of depression include low mood and diminished interest. For the diagnosis of depression one or other of these must be present. In addition to these there are other symptoms which include reduced energy or fatigue, insomnia or hypersomnia, agitation or slowed down speech or movement, disturbed appetite which may be accompanied by significant weight loss or gain, feelings of guilt or worthlessness, reduced concentration, and recurrent thoughts of death or suicidal ideas (*Haddad, 2010*). For the diagnosis been given the symptoms have to be present for a period of two weeks or more, and at least five symptoms expressed most of the day nearly every day (*Burcusa & Iacono 2007*).

Only about one-quarter of the patients with depression will satisfy the criteria for major depression, but it is, however, more likely to be diagnosed than milder forms, and primary care has been criticized in the past for failing to diagnose people with depression. However, the use of structured questionnaires has been shown to increase the detection rate of depression. As already mentioned, when depression is diagnosed and treated early it is shorter in duration and less severe (*Warren, 2010*).

Women are also often reluctant to accept the clinical diagnosis of being labeled as depressed. The study done by Bilszta et al, highlights that health care professionals have to be more aware of the personal and societal attitudes which prevent women from talking about their distress. According to the research, a key facilitator to help seeking is a professional who is empathic, does not attempt to normalize or minimize feelings, helps women recognize depression as not a sign of failure (*Bilszta et al., 2010*).

MATERNAL MENTAL DISORDERS

Several distinct mood and anxiety disorders have been identified during the postnatal period each with unique presentations and symptoms including maternal “blues”, postpartum depression (PPD), postpartum psychosis, postpartum anxiety disorders, bipolar disorders and post-traumatic stress disorder secondary to birth trauma (*Beck & Driscoll, 2006*).

Although women may experience a broad range of psychiatric symptoms following birth and while mothering, maternal “blues”, PPD and postpartum psychosis collectively fall under the umbrella term of postpartum mood disorders (PPMDs) (*Beck & Driscoll, 2006*) although it should be understood that they are distinct disorders requiring different intervention and support.

Postpartum blues

Taking the three postpartum depressive disorders as distinct, the most prevalent and the mildest disturbance of the postnatal period is called the "postpartum" or "baby blues". Its prevalence rate ranges from 50 to 80% and is in fact so common, that it is considered as a normal reaction resulting from hormonal changes following childbirth. It occurs in the first few days postpartum and lasts from 24 to 48 hours. Its symptoms include weepiness, irritability, insomnia, anxiety and depressive mood (*Boath & Henshaw 2001*).

The expression of these symptoms may be variable and generally fade by two weeks postpartum without any specific treatment (*Schanie et al., 2008*). It has also been argued, that the baby blues has been recognized as a medical condition not only because of its high prevalence rate, but also because it occurs during the mother's stay in the hospital and therefore under the supervision of health care staff (*Boath & Henshaw 2001*).

Puerperal psychosis

Puerperal Psychotic episodes during the postpartum period are life threatening psychiatric emergencies, occurring after nearly 0.1% of all deliveries. The strongest predictor for postpartum psychosis is a history of bipolar disorder and/or postpartum psychosis (*Munk-Olsen et al., 2009*). Consequently, guiding women at high risk for psychosis through pregnancy and the postpartum period is a major challenge for mental health practitioners and obstetricians (*Cohen et al., 2007*).

The condition occurs in 1-2/1000 childbearing women within the first 2-4 weeks after the delivery (*Sit et al., 2006*). Puerperal psychosis involves severe disconnection from reality by severe depression, mania, and hallucinations or delusions. A mother suffering from this condition is seriously disconnected from the reality and therefore usually requires hospitalization (*Boath & Henshaw, 2001*).

A major goal of peripartum psychiatric care is the development of an effective prophylaxis algorithm that optimally balances the risks and benefits for the mother and fetus (*Wieck, 2010*).

The treatment of puerperal psychosis consists of acute pharmacotherapy and supportive therapies. Acute pharmacotherapy for puerperal psychosis concentrates on managing the psychotic and mood-related symptoms. According to Sit et al, psychotherapy options found effective in the treatment of postpartum mood disorders in general, such as family-focused therapy, cognitive behavioral therapy, or interpersonal psychotherapy are effective with treating puerperal psychosis as well (*Sit et al., 2006*).

All in all, puerperal psychosis is a rare condition, and according to data available, puerperal psychosis is an overt presentation of bipolar disorder after delivery. From the patients who develop PP immediately after childbirth 72%-88% have bipolar illness or schizoaffective disorder, and 12% have schizophrenia. Puerperal hormone shifts, obstetrical complications, sleep deprivation, and increased environmental stress are possible contributing factors to the onset of illness. The risk for developing puerperal psychosis also increases in case of a previous episode (*Sit et al., 2006*).

Postnatal depression

The term postpartum comes from the Latin words post and partus, which respectively mean after and birth (*Eberhard-Gran, 2009*).

Postnatal depression (PD) can be seen as intermediate of the three postpartum mood disorders, between postpartum blues and puerperal psychosis. When these two conditions can be distinguished from depression out with the puerperium, postnatal depression is more complicated to define (*Boath & Henshaw, 2001*).

It is however, a major depression defined to occur during the first 6 months, the first 4 weeks, and the first 3 months postpartum, from which the first 3 months being the most recent definition (*Craig & Howard, 2009*).

Prevalence

According to Boath and Henshaw, its incidence rate on new mothers is 13-19% and its symptoms include similar ones to depression occurring at other times in life (*Boath & Henshaw 2001*). A meta-analysis of studies mainly based in resource-rich countries found the incidence of postnatal depression to be 12-13%, with higher incidence in resource-poor countries (*Craig & Howard 2009*). According to Chew-Graham et al, postnatal depression represents a substantial public health problem

affecting 8-15% of women and can result in long-term adverse consequences for maternal mood and infant development (*Chew-Graham et al., 2009*).

Also PPD prevalence rate was 15.8% in Dubai, United Arab Emirates (*Ghubash & Abou-Saleh, 1997*), 20.7% in Brazil (*Tannous et al., 2008*) and 32.7% in Ho Chi Minh City, Vietnam (*Fisher et al., 2004*). The variation in prevalence rates may be due to both cultural and socio-economical differences in the societies investigated in the previous studies (*Kessler et al., 2003; Bernert et al., 2009*).

DIAGNOSIS OF PPD

For a depressive episode to be labeled postpartum, it must have occurred within 4-6 weeks after birth. This decision may be based on the theory that postpartum depression is mainly caused by hormonal dysregulation (physiological view) after birth. This hormonal dysregulation is again assumed to be connected to genetic susceptibility (ontological view) (*Halbreich, 2005; Jones & Cantwell, 2010*).

For the majority of women, postpartum depression starts within the first 12 weeks postpartum and common symptoms include dysphoria, emotional lability, insomnia, confusion, guilt, and suicidal ideation. For about 8% of mothers, their depressive symptoms will continue past the first year postpartum (*Dennis, 2012*).

In the Diagnostic and Statistical Manual, an episode of major depression after delivery is defined as two weeks or more of persistent: 1) depressed mood, or 2) loss of interest in daily activities plus four associated symptoms: appetite disturbance, sleep disturbance, psychomotor agitation or slowing, fatigue, feelings of worthlessness or inappropriate guilt, poor concentration, suicidal ideation that onset within 4 weeks after childbirth (*Sit & Wisner 2009*).

According to the World Health Organization, the specific postpartum onset symptoms may also include fluctuations in mood, preoccupation with infant wellbeing, severe anxiety, panic attacks, and fearfulness of being alone with infant (*Craig & Howard, 2009*). Postnatal depression is present for the majority of time for at least two weeks (*Schanie et al., 2008*).

According to Sit & Wisner, the presentations of postnatal depression vary, but mothers with major depression typically describe a diminished pleasure in interacting with people or formerly enjoyable activities as well as feelings of low self-efficacy, rather than having depressed mood (*Sit & Wisner, 2009*).

According to Craig and Howard, the symptoms are similar to symptoms of depression at other times of life, but in addition women with postnatal depression also experience guilt about their inability to look after their new baby (*Craig & Howard, 2009*).

In practice, however, it is generally accepted that PPD may develop any time in the first year after giving birth (*Goodman, 2004*). Women may also experience post-traumatic stress disorder secondary to birth trauma which presents with a unique configuration of symptoms that may include extreme fear, panic, dissociation, and flashbacks (*Beck & Driscoll, 2006*).

It is estimated that between 1.5 and 6% of mother's experience a posttraumatic stress disorder (PTSD) after childbirth (*Beck, 2004*). PTSD after childbirth does not have a distinct diagnostic category in the DSM-IV-TR but the experience can be defined as a traumatic event resulting in PTSD which may manifest itself as profound anxiety, depression, hopelessness, fear, and constant arousal deeply affecting a woman's mental health. Because of the affective elements of the disorder, it does share some commonalities with PPMDs.

For women experiencing a PPMD, symptoms may persist for months and even years if left untreated with an increased incidence of self-medication for relief of the debilitating symptoms that define these disorders (e.g. alcohol abuse) (*Beck & Driscoll, 2006*).

It is also important to note that while diagnostic criteria of PPD are useful, they tell us little about what a new mother goes through when she feels depressed or sad after having a baby. Leahy-Warren & McCarthy (2007) reviewed qualitative studies that had examined mothers' thoughts and feelings with regards to PPD, and found that, consistent with diagnostic criteria, feelings of loneliness, anxiety, hopelessness, confusion, guilt, low sense of concentration, tiredness, and a loss of control and previous identity signified the women who found the postpartum