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# Postnatal depression and its consequences in public health

**Key words:** postnatal depression, public health

## ■ Introduction

Postnatal depression (PND) is a common psychological illness after child birth. Symptomatically, PND is not different from depression. Both partners may be affected by PND after childbirth but much attention has been paid to maternal depression. 10 to 15% of mothers and 4 to 10% of fathers suffer from postnatal depression [1–5]. An episode of mild to severe depression markedly shows within first 4 weeks to one year after child birth [6, 7]. Women experience physiological and emotional stresses during childbirth. Along with these, the role and identity are changed for the women which act as precipitant to depression. In the same way fathers develop postnatal depression which is closely associated with maternal PND [8]. Postnatal depression not only affects new mother's and father's health but also affects family's health and wellbeing. The high incidence and consequences of PND are indicating more attention towards PND in the public health context.

## ■ What is postnatal depression?

Postnatal depression refers to non-psychotic depressive episode that develops after childbirth. The clinical manifestation is similar to depressive disorders. The features are described as less interest and pleasure in almost all activities; significant weight loss or weight gain or loss of appetite; sleep alteration; psychomotor agitation; feeling fatigue most of the time; sense of guilty and worthlessness; diminished ability to thinking, decision making and concentrating; and suicidal thoughts [6].

Often, an individual experiences irritability and tearfulness. Due to increased responsibilities, women often develop fear about their ability to cope with their babies [9]. As a result anxiety and phobia are typically seen in PND.

## ■ What are the risk factors of PND?

The basis of postnatal depression is complex. The leading etiological factor is of social nature [7, 9]. However, there is little evidence for genetic factors [9]. A meta-analysis includes the following risk factors: previous history of depression, depression during prenatal stage, poor social support during and after pregnancy, poor relation with partner, severe baby blues, and adverse circumstances after child birth [10]. The other risk factors are related to older age, negative response from her own mother in childhood, previous postnatal psychosis, and other psychosocial stressor [9, 11, 12]. Depression may be influenced by mixed feelings towards pregnancy, single mother, and unwanted pregnancy [9, 12]. There are weaker associations with a past history of abuse, lower socio-economic conditions, and poor experiences during child birth [7, 9]. After child birth, alteration of oestrogen and progesterone suggests a possible risk factor for PND but there is no evidence of hormonal association in PND [7].

Paternal risk factors are highly associated with maternal depression [8]. Fathers whose partners have depression are 2.5 times higher at risk of PND [13]. In a study it is revealed that 24 to 50% of men whose partners were depressed also suffered depression during first year after childbirth [14]. Other than this, men are at risk of PND when they experience a lack of sleep, fatigue, complications of pregnancy, poor social support, marital instability, lifestyle changes, recent negative life events, and feelings of incompetence in parenting role [15]. First time father and infant irritability also act as risk factors for paternal PND [15].

## ■ What are effects of PND?

In child bearing years, new mothers and fathers are vulnerable to develop depression which has adverse

consequences on mothers, fathers, children and family. Postnatal depression has negative effects on parents and infant relationships [16]. This may cause weaker family bonding and social life.

The postnatal depression has an adverse effect on the future health of the women. Consistent evidences indicate that women who have experienced postnatal depression are at risk of future depression [17, 18].

Mothers who experience depression have less optimal mother-infant interactions [19], specifically in verbal and playing interaction [20]. Thus, mothers with PND experience delay in adopting mothering role [21] and report lower self-efficacy as a mother [22]. As a result, depressed mothers offer poor or less stimulation to their babies, which may lead to delay in achieving cognitive milestones for babies [23]. Hence, the postnatal depression affects the child's cognitive and emotional development [23]. The children of depressed mothers have lower cognitive functioning [24, 25], particularly it has been seen in language and IQ development [26]. Male infants are more prone to impaired cognitive abilities that are associated with postnatal depression [23].

The children of depressed mothers have more behavioural problems than the children of non-depressed mothers [24]. In a study mothers who experienced postnatal depression reported higher neurotic and antisocial behaviour of their children [27]. It is also noted that the postnatal depression is a cause of poor infant growth and development in early infancy (6 months) [28].

Severity and chronicity of mother's PND influence the level of child behavioural problems. Severe and chronic depression of mother leads to the higher level of behavioural problems in children [29]. The chronic maternal depression also causes lower infant cognitive and psychomotor development [30].

The paternal depression has an intensifying role on child development outcomes. The children with postnatally depressed fathers and mothers have more behavioural problems, than the children of postnatally depressed mothers and non depressed fathers [31]. There is risk for developing psychopathology in children of depressed fathers and mothers [32, 33]. The children with depressed fathers-mothers are at higher risk of developing psychopathology than children of one depressed parent [34]. On the other hand, the absence of paternal postnatal depression may be a protective factor when the mother is postnatally depressed.

Hence, the normal child development is at risk in early childhood but the long-term consequences of such developmental difficulties have not been researched. The above consequences direct our attention towards the early detection and treatment of postnatal depression.

### ■ Are there screening tools available for identification of the disorder?

It is well known that the PND for most of the time was undiagnosed and untreated. The identification is needed for health and well-being of child bearing families. One of the methods of early detection is to use screening

tools. There are a number of screening tools available to detect the postnatal depression. The Beck Depression Inventory (BDI) [35], The Beck Depression Inventory – II (BDI-II) [36], the Edinburgh Postnatal Depression Scale (EPDS) [37] and Postnatal Depression Screening Scale (PDSS) [38] are the most frequently used self-report instruments for diagnosis of postnatal depression. There are challenges of using self-reported instruments for PND. The parents may ignore their mood status [39]. They may not answer truthfully because of fear of being stigmatised [39]. They want to be good parents and fear having babies been taken away [40]. Thus, administration of screening tools needs to be supervised by health personnel. Mass screening programmes would probably increase the case diagnosis.

### ■ What are the treatment and prevention of PND?

The depressive episodes are commonly treated with pharmacological treatments such as tricyclic antidepressants (TCAs) or selective serotonin reuptake inhibitors (SSRIs) [9] and psychological intervention including cognitive behavioural therapy (CBT) [41], non-directive counselling [41], routine primary care [41] and interpersonal therapy [42]. In reality, most PND cases are undiagnosed and untreated as PND develops gradually after child birth. It is overlooked in most of the cases because the new mothers think that tiredness and/or loss of energy are due to overwork or excess workload from the baby [43]. Early identification and close monitoring of at-risk women are needed to prevent the occurrence. PND can be prevented by support and education [44].

After considering the public health issue of PND, it is important to prevent the occurrence in the high risk group. The interventions are found for prevention in both psychotherapy and pharmacotherapy. Psychotherapy is more acceptable than pharmacotherapy, as psychotropic medication has not been formally approved during pregnancy by the food and drug administration [45]. Hence, some women consider taking medication during breastfeeding is not good. The risk of long term use of some medicines is not well known [46]. Other than pharmacotherapy, psychotherapy is used for prevention. A few studies are found which used psychotherapy as an intervention. The limited number of psychological trained professionals are a possible reason for less effective prevention [47].

### ■ Conclusion

In conclusion, postnatally depressed fathers and/or mothers go through silent suffering. Hence, postnatal depression not only increases the global burden of depression but also affects physical, social and emotional health of the family. As a result of that, it becomes a major public health issue. There are risks of developmental delay of the children whose one parent is depressed and the risk increases when both parents are depressed. The negative effect of parental depression on the family indicates the need for early identification of the disease

as well as treatment and prevention. The consideration of postnatal depression of mothers as well as fathers is an important next step in research, practice and policy involving childbearing families.

## References:

- Campbell S.B., Cohn J.F., *Prevalence and correlates of postpartum depression in first-time mothers*, „Abnormal Psychology” 1991, 100, 594–599.
- Beck C.T., Reynolds M.A., Rutowski P., *Maternity blues and postpartum depression*, „Journal of Obstetrics and Gynaecology” 1992, 21, 287–293.
- O’Hara M.W., Swain A.M., *Rates and risk of postpartum depression – a meta-analysis*, „Review Psychiatry” 1996, 8, 37–54.
- Ramchandani P., Stein A., Evans J., O’Connor, T.G., *Paternal depression in the postnatal period and child development: a prospective population study*; „Lancet” 2005, 365, 9478, 2201–2205.
- Paulson J.F., Dauber S., Leiferman J.A., *Individual and combined effects of postpartum depression in mothers and fathers on parenting behavior*, „Pediatrics” 2006, 118, 2, 659–668.
- American Psychiatric Association, *Diagnostic and statistical manual of mental disorders*, Fourth Edition, Text Revision, Washington, DC, 2000.
- Johnstone E.C. et al., *Companion to psychiatric studies*, Seventh Edition, Elsevier Limited, 2004.
- Areias M.E.G., Kumar R., Barros H., Figueiredo E., *Correlates of postnatal depression in mothers and fathers*, „British Journal of Psychiatry” 1996, 169, 36–41.
- Puri B.K., Laing P.J., Treasaden I.H., *Textbook of psychiatry*, Second edition, Elsevier Limited, 2002.
- O’Hara M.W., Swain A.M., *Rates and risks of postpartum depression: a meta-analysis*, „International Review of Psychiatry” 1996, 8, 37–54.
- Paykel E.S., Emms E.M., Fletcher J., Rassaby E.S., *Life events and social support in puerperal depression*, „British Journal of Psychiatry” 1980, 136, 339–346.
- Sample D., Smyth R., Burns J., Darjee R., McIntoch A., *Oxford handbook of psychiatry*, Oxford University Press, Great Clarendon Street, Oxford, 2005.
- Matthey S., et. al., *Paternal and maternal depressed mood during the transition to parenthood*, „Journal of Affective Disorders” 2000, 60, 2, 75–85.
- Goodman J.H., *Paternal postpartum depression, its relationship to maternal postpartum depression, and implications for family health*, „Journal of Advanced Nursing” 2004, 45, 1, 26–35.
- Post and Antenatal Depression Association Inc., *Men and postnatal depression*, <http://www.panda.org.au/docs/Men%20and%20postnatal%20depression.pdf> (Accessed on 14<sup>th</sup> May 2009).
- Matthey S., Barnett B., Kavanagh D.J., Howie P., *Validation of the Edinburgh Postnatal Depression Scale for men, and comparison of item endorsement with their partners*, „Journal of Affective Disorders” 2001, 64, 175–184.
- Cooper P.J., Murray L., *Course and recurrence of postnatal depression. Evidence for the specificity of the diagnostic concept*, „The British Journal of Psychiatry” 1995, 166, 191–195.
- Philippis L.H., O’Hara M.W., *Prospective study of postpartum depression: 4½ -year follow-up of women and children*, „Journal of Abnormal Psychology” 1991, 100, 2, 151–155.
- Carter A.S., Garrity-Rokous E., Chazan-Cohen R., Little C., Briggs-Gowan M.J., *Maternal depression and comorbidity: Predicting early parenting, attachment security, and toddler social-emotional problems and competencies*, „Journal of American Academy of Child and Adolescent Psychiatry” 2001, 40, 1, 18–26.
- Righetti-Veltama M., Bousquet A., Manzano J., *Impact of postpartum depressive symptoms on mother and her 18-month-old infant*, „European Child & Adolescent Psychiatry” 2003, 12, 2, 75–83.
- Barr J.A., *Postpartum depression, delayed maternal adaptation, and mechanical infant caring: A phenomenological hermeneutic study*, „International Journal of Nursing Studies” 2008, 45, 362–369.
- Teti D.M., Gelfand D.M., *Behavioral competence among mothers of infants in the first year: The mediational role of maternal self-efficacy*, „Child Development” 1991, 62, 918–929.
- Murray L., Cooper P.J., *Effects of postnatal depression on infant development*, „Archives of Disease in Childhood” 1997, 77, 2, 99–101.
- Beck C.T., *The effects of postpartum depression on child development: a meta-analysis*, „Archives of Psychiatry Nurse” 1998, 12, 1, 12–20.
- Milgrom J., Westley D.T., Gemmill A.W., *The mediating role of maternal responsiveness in some longer term effects of postnatal depression on infant development*, „Infant Behavior & Development” 2004, 27, 4, 443–454.
- Grace S.L., Evindar A., Stewart D.E., *The effect of postpartum depression on child cognitive development and behaviour: A review and critical analysis of literature*, „Archives Women’s Mental Health” 2003, 6, 4, 263–274.
- Murray L., Sinclair D., Cooper P., Ducournau P., Turner P., *The socio-emotional development of 5-year-old children of postnatally depressed mothers*, „Journal of Child Psychology Psychiatry” 1999, 40, 1259–1271.
- Patel V., DeSouza N., Rodrigues M., *Postnatal depression and infant growth and development in low income countries: a cohort study from Goa, India*, „Archives of Disease in Childhood” 2003, 88, 1, 34–37.
- Brennan P.A., Hammen C., Andersen M.J., Bor W., Najman J.M., Williams G.M., *Chronicity, severity, and timing of maternal depressive symptoms: relationships with child outcomes at age 5*, „Developmental Psychology” 2000, 36, 6, 759–766.
- Cornish A.M., McMahon C.A., Ungerer J.A., Barnett B., Kowalenko N., Tennant C., *Postnatal depression and infant cognitive and motor development in the second postnatal year: The impact of depression chronicity and infant gender*, „Infant Behavior & Development” 2005, 28, 4, 407–417.
- Conrad M., Hammen C., *Protective and resource factors in high- and low-risk children: A comparison of children with unipolar, bipolar, medically ill, and normal mothers*, „Development and Psychopathology” 1993, 5, 593–607.
- Carro M.G., Grant K.E., Gotlib I.H., Compas B.E., *Postpartum depression and child development: An investigation*

- of fathers and mothers as sources of risk and resilience, „Development and Psychopathology” 1993, 5, 567–579.
33. Marchand J.F., Hock E., *The relation of problem behaviours in preschool children to depressive symptoms in mothers and fathers*, „Journal of Genetic Psychology” 1998, 159, 353–356.
  34. Weissman M., Prusoff B., Gammon G., Merikangas K., Leckman J., Kidd K., *Psychopathology in children (ages 6–18) of depressed and normal parents*, „Journal of the American Academy of Child Psychiatry” 1984, 23, 78–84.
  35. Beck A.T., Ward C.H., Mendelson M., Mock J., Erbaugh J., *An inventory for measuring depression*, „Archives of General Psychiatry” 1961, 4, 561–571.
  36. Beck A.T., Steer R.A., Brown G.K., *BDI-II manual*, Psychological Corporation, San Antonio, TX.
  37. Cox J.L., Holden J.M., Sagovsky R., *Detection of postnatal depression: Development of the 10-item Edinburgh Postnatal Depression Scale*, „British Journal of Psychiatry” 1987, 150, 782–786.
  38. Back C.T., Gable R.K., *Postpartum depression screening scale: development and psychometric testing*, „Nursing Research” 2000, 49, 5, 272–282.
  39. Coyle B., Adams C., *The EPDS: guidelines for its use as part of maternal mood assessment*, „Community Practitioner” 2002, 75, 10, 394–395.
  40. Shakespeare J., Blake F., Garcia J., *How do women with postnatal depression experience listening visits in primary care? A qualitative interview study*, „Journal of Reproductive and Infant Psychology” 2006, 2, 24, 149–162.
  41. Cooper P.J., Murray L., *The impact of psychological treatments of postpartum depression on maternal mood. Infant development*, in: Murray L., Cooper P.J. (eds), *Post partum depression and child development*, Guilford Press, New York 1997, 201–220.
  42. O’Hara M.W., Stuart S., Gorman L.L., Wenzel A., *Efficacy of interpersonal psychotherapy for postpartum depression*, „Archives of General Psychiatry” 2000, 57, 11, 1039–1045.
  43. Small R., Astbury J., Brown S., Lumley J., *Depression after childbirth – Does social context matter?* „The Medical Journal of Australia” 1994, 161, 8, 473–477.
  44. Gelder M., et al., *Shorter Oxford textbook of psychiatry*; fifth edition, Oxford University Press, 2006.
  45. Gold L.H., *Treatment of depression during pregnancy*, „Journal of Women’s Health and Gender-Based Medicine” 1999, 8, 5, 601–607.
  46. Stuart S., O’Hara M.W., Blehar M.C., *Mental disorders associated with childbearing: Report of biennial meeting of the Marce Society*, „Psychopharmacology Bulletin” 1998, 34, 333–338.
  47. Huynh-Nhu L., Ricardo F.M., Ghosh I.C., Jacqueline L.S., *Treatment is not enough: We must prevent major depression in women*, „Prevention & Treatment” 2003, 6, 10.

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