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DADS

Depression Among Dads: Study

A Cross-Sectional Multicentric Study on Paternal Postpartum Depression in Pakistan

DADS Protocol Version **1.0**

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Introduction:

Childbirth can be an emotional experience for both parents ranging from immense joy to feelings of sadness and tearfulness called baby blues. While it is widely recognized that tremendous physical, hormonal, emotional and psychological changes take place in the mother's familial and interpersonal world, the psychological vulnerability experienced by the male parent is often neglected. (1) Postpartum depression is a major depressive episode that occurs right after childbirth, although it can affect fathers as well, it is usually recorded in mothers. PPD in men is defined as a major depressive episode marked by limited emotions, irritability, and lasting depression that lasts for a minimum of one year after the childbirth. following the birth of a child., however there are no accepted diagnostic criteria for this condition. (2). A recent study states that during the perinatal period, which is from the beginning of pregnancy to 12 months after delivery (O'Brien et al., 2017), both mothers and fathers are more likely to experience depression. (4)

According to estimates, PPD affects 10-20% of the world's population and is more prevalent in low-income areas (18.7, 95% CI 17.8–19.7, compared to 9.5, 95% CI 8.9–10.1, in high-income countries). (3) It is shown in a recent study that global incidence of paternal postpartum depression (PPD) ranges from 1.2% to 25.5%. (5) A study published in 2021 indicated the range of postpartum depression as 1.2% and 25.5% (6) Based on factors such as the sample size, sampling technique, measuring tools used to assess postpartum depression, the prevalence of paternal PPD during the time leading towards fatherhood is estimated to range from 1% to 46% respectively, the sample size used to calculate incidence and the measure employed to evaluate postpartum depression. The study also describes PPD as a serious mental risk for fathers during the adjustment to parenting (7).

When seen its global prevalence, Cameron et al. conducted a meta-analysis in 2016, the results of the study showed 8.4% of fathers suffering from PPD till up to one year postpartum(8). In Germany a longitudinal study conducted by Gawlik et al. in 2014 discovered postpartum depression in 7.8% of the fathers during the postpartum duration only up to 6 weeks post birth (9). According to estimates, 5% to 10% of fathers experience depression from conception to one year after childbirth in the UK. Research shows, regardless of the mother's mental health, children are more likely to show elevated levels of depression and are at a higher risk of negative behavioral and psychological changes when their father is suffering from depression. (10).

PPD is quite prevalent across Asia, a recent study in Japan found out that 11.2 and 12% males at one and 6 months experienced paternal postpartum depression (11). A meta-analysis was conducted by Wen-Wang Rao et al. to assess the prevalence of paternal PPD, 47 studies were taken in account with over twenty thousand subjects. It was found that 9.76% of fathers suffered PPD in all three trimesters, and around 8.4% experienced PPD between six to twelve months post birth. The study concluded that paternal PPD was a relatively common problem. (12). Paternal PPD is also prevalent in India, neighboring country of Pakistan with significantly higher values in fathers who had a female child (13). In Bangladesh a study showed 17.09% of fathers of newborns suffered from severe PPD with most of them struggling with it silently (14). In Anuradhapura district in Sri Lanka, prevalence of paternal PPD is estimated to be 11%, with a shortage of screening programs for fathers (15).

When coming to Pakistan as far as we know, currently scarce information on Pakistani men suffering from PPD is still readily available(16). A recent study conducted in Karachi, Pakistan discovered paternal

PPD in 28.3% of fathers, with 2.5% of them showing severity in their symptoms (17). Depressive disorders are quite common in developing countries like Pakistan, where they affect 22% to 60% of the country's 220 million population(18). Pakistani culture has a strong stigma towards mental health. The stigma connected with depression and other mental health issues that still conflict with the dominant ideas of masculinity in Pakistani society present particular challenges for men suffering from it (19).

Rationale:

Postpartum depression is more commonly associated with women, according to WHO postpartum depression impacts nearly 10-15% of the mothers worldwide however, its impact on fathers is still largely unexplored. Recent studies have raised awareness that paternal PPD is getting relatively common despite of it, there is a dearth of research exploring the prevalence of PPD in men. Understanding the extent of the problem is critical for healthcare professionals, policy makers and the general public alike. Little is known by the existing researches on PPD about its prevalence and impact on Pakistani men, our research aims to add to the understanding of this growing problem by exploring its prevalence, identifying the factors triggering PPD symptoms and by providing an insight into the effective treatment and preventive measures for PPD. An increasing number of men are taking on the role of care giver to their newborns, thus PPD in those fathers can have serious implications directly effecting not only their own health but the child as well. It can effect a father and child's bonding, can increase marital conflicts, ultimately impairing the early development of a child. Lack of research and the stigmatization of emotional disturbances in men means this condition often goes undiagnosed and untreated. By exploring the prevalence of paternal PPD we can provide better support for fathers in their new roles and promote a healthy start to their families. This research can pave the way for the development of evidence based interventions and support services for PPD, creating opportunities for men to access special healthcare services, parental education to help better adapt parenthood, screening programs and psychological counselling to decrease suffering for both parents. The findings of this study can have significant implications for healthcare professionals, policymakers and other stakeholders, the study could provide insights into the need for early diagnosis and treatment of paternal PPD. Additionally it can also lay the foundations for the development of culturally sensitive interventions tailored to meet the specific needs of South Asian, specifically Pakistani men, who this research targets, leading to better health outcomes and improved quality of life for families.

To conclude, this study contributes to the scarce knowledge of prevalence of PPD in Pakistani men and therefore can be an excellent starting point for future researchers to further investigate and formulate new research questions relevant to this problem in men living in Pakistan.

Objectives:

- 1.To determine the prevalence of postpartum depression among Pakistani men.
- 2.To identify the factors associated with postpartum depression in Pakistani men.
- 3.To explore the impact of postpartum depression on fathers' mental health, family relationships, and parenting practices.
- 4.To examine the cultural beliefs and attitudes that may contribute to the underestimation of postpartum depression in Pakistani men.
- 5.To identify the gaps in the existing literature on postpartum depression in Pakistani men and propose recommendations for future research and clinical practice.

Operational definition:

PPD: PPD or Postpartum depression is defined as having feelings of sadness, trauma, anxiety and lethargy manifested after childbirth lasting for few weeks to few months. Symptoms may include loss of interest in daily activities, irritability, changes in appetite, sleep pattern and difficulty in bonding with the child.

Mental illness: It is a disorder that affects the psychological well-being of male parent in South Asia after childbirth.

Pakistani men: married men with minimum one child from Pakistan

Methodology:

Study Design: It will be a cross sectional study (multi-centric)

Study Duration: 6 months

Sampling Technique: Convenience sampling technique

Study Population: It includes fathers having one or more children of different age groups arriving at HITEC IMS Taxila, National Institute of Child Health, Liaquat National Hospital, Civil Hospital, Abbasi Shaheed, Jinnah Post Graduate Medical Centre.

Setting: Pediatric Department, Internal Medicine Department, Family Medicine Department.

Inclusion Criteria:

1. Fathers of newborns 10 weeks postpartum to 1 year postpartum.
2. Parents consenting for the study.

Exclusion Criteria:

1. Fathers of newborns less than 10 weeks.
2. Fathers of infants of more than 1 year
3. Men with preexisting mental health conditions, such as depression, anxiety disorders, or bipolar disorder.
4. Men with any chronic illness and with a history of trauma or abuse.

Data Collection Procedure: Data will be collected from female health care workers of Hospitals through a Beck's Depression Inventory questionnaire. The questionnaire has 21 items. The questionnaire will also be translated into Urdu language for those who are unable to read and understand English. For those who can't even read Urdu, one to one interviews will be conducted from them by the data collectors. For those who can read and write the questionnaire will be handed over to them and then collected back once they fill the form completely. Before the interview, the participants will be briefed about the purpose of study and confidentiality. Their consent will be taken either by signature or thumb print. It will take a maximum of 10 minutes to fill the questionnaire.

Variables:

1. Dependent Variable: Severity of Postpartum Depression Symptoms
2. Independent Variables: Age, Marital Status, Number of Children, Socioeconomic Status, Social Support, Personal History of Mental Health, Health Behaviors

Instrument:

Sample Size: Sample size has been calculated through software openEPI version 3.01e anticipated frequency of 28.3% , keeping confidence level at 95% and 5% absolute error. The estimated sample size is 312. (20)

Data Analysis Plan: With SPSS version 27 all descriptive analyses and calculations will be done. All calculations Mean and standard deviation will be determined for continuous variables like age. Frequency and percentage will be calculated for categorical variables. The total PSS scores and FAI scores will be calculated by summing the score of each item in the questionnaire. The total scores will be compared among the groups of participants using a t-test. The scores will be divided into categories using the cut points mentioned above. One-way ANOVA test will be used to determine the association between dependent and independent variables. A general linear model for univariate and multivariate analysis will also be done. The p-value of <0.05 will be considered significant.

Authorship:

The authors who will appear on the by-line of the publications will follow the international committee of medical journal editors (ICMJE) authorship guidelines. All collaborators who contributed to the study will be known under the group name as a single author “xyz study Collaborative” representing all collaborator efforts. All collaborator names along with their detailed contributions will be listed at the end of the publications. Every member of the local study team and independent validators at each institution will be listed as PubMed citable collaborator status authors on all publications resulting from this study, along with other individuals who contribute substantially to the study including principal and chief investigators mentioned below. This collaborative authorship model aims to reduce conflicts and to encourage collaborators to participate by using a single group name and maintaining a list of what everyone has done

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SCHEDULE/PHASING:

Steps	1st	2nd	3rd	4th	5th	6th
Synopsis Submission & Approval						
Data collection, Analysis & Tabulation						
Article Writing & Submission For Publication						

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AMC/PGMI/LGH/Synopsis No/-116/24---/ Date 06-03-2024

IRB no

Approval of Synopsis from Ethical Review Committee

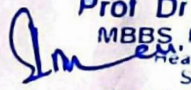



It is certified that we have read the synopsis titled:

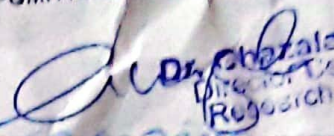

“Prevalence and recognition of PPD as a mental illness among Pakistani men.”

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We have found it acceptable ethically and hence approved for further submission.

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