

# Postpartum depression in men – a common but rarely understood problem

Depresja poporodowa u mężczyzn – rzadko rozumiany częsty problem

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### **■** Abstract

**Introduction.** Postpartum depression (PPPD) is defined as the occurrence of a depressive episode in the postpartum period, with a peak incidence between 3–6 months. It is estimated that 1 in 10 fathers are currently affected, yet most research focuses only on postpartum depression in mothers.

**Objective.** The aim of the study was to analyze scientific reports on paternal postpartum depression in men. The available literature on 'postpartum depression among men' was reviewed based on the Scopus, PubMed and OVIDMedline databases.

**Brief description of the state of knowledge.** The questionnaire useiln the diagnosis of PPPD is the Edinburgh Postnatal Depression Scale (EPDS), a screening test for postnatal depression occurring in mothers, but it has also found application in fathers.

**Results.** Fathers perceived a lack of perinatal health care education in relation to their needs and a shortage of specialist support. The father's disturbed mental state prevents him from taking full responsibility for the family and places a mental strain on the mother. At the same time, a poor partner relationship is a risk factor for PPPD. Paternal PPD is a danger to newborn children who are at a critical stage of their development.

**Conclusions.** Fathers should be screened for early detection of PPPD and intervention in a disorder that lacks appropriate diagnostic tools. Public awareness of PPPD is important because fathers are particularly vulnerable, and can be lacking in meeting traditional expectations and modern fatherhood tasks.

# **Key words**

fathers, man, depression, postpartum

### **■** Streszczenie

**Wprowadzenie i cel pracy.** Depresję poporodową definiuje się jako pojawienie się epizodu depresyjnego w okresie po porodzie, ze szczytem występowania między 3. a 6. miesiącem od rozwiązania. Szacuje się, że obecnie problem ten dotyczy 1 na 10 ojców, a mimo to większość badań skupia się jedynie na depresji poporodowej matek.

**Cel pracy.** Celem badania była analiza doniesień naukowych nt. depresji poporodowej u mężczyzn (PPPD – paternal postpartum depression). W tym celu dokonano przeglądu dostępnego piśmiennictwa na temat "Poporodowa depresja wśród mężczyzn", korzystając w tym celu z baz danych: Scopus, PubMed oraz OVIDMedline.

**Opis stanu wiedzy.** Kwestionariuszem stosowanym w diagnostyce PPPD jest Edinburgh Postnatal Depression Scale, który jest wykorzystywany jako test skriningowy w kierunku depresji poporodowej występującej u matek, ale znalazł także zastosowanie w przypadku ojców.

**Wyniki.** Ojcowie dostrzegali problem braku edukacji w zakresie opieki zdrowotnej w odniesieniu do ich potrzeb w okresie okołoporodowym oraz niedobór wsparcia specjalistów. Zaburzony stan psychiczny ojca uniemożliwia mu wzięcie pełnej odpowiedzialności za rodzinę i obciąża psychicznie matkę. Jednocześnie zła relacja partnerska jest czynnikiem ryzyka PPPD. Depresja poporodowa u mężczyzn stanowi niebezpieczeństwo dla ich nowo narodzonych dzieci, znajdujących się w okresie ich rozwoju, kiedy to są szczególnie wrażliwe.

**Podsumowanie.** Ojcowie powinni być poddawani testom scriningowym celem wczesnego wykrywania PPPD i podjęcia interwencji. PPPD jest zaburzeniem, w odniesieniu do którego brakuje odpowiednich narzędzi diagnostycznych. Uświadamianie społeczeństwa na temat PPPD jest ważne, ponieważ ojcowie są szczególnie narażeni na PPPD, chcąc spełnić tradycyjne oczekiwania i podejmować nowoczesne zadania związane z ojcostwem.

# Słowa kluczowe

ojcowie, depresja poporodowa, mężczyzna

# **INTRODUCTION**

Postpartum depression is defined as the occurrence of a depressive episode in the postpartum period, with a peak incidence between 3–6 months [1]. At the turn of the 20th

century, it was shown that the problem of postpartum depression may affect as many as 25% of men [2], and it is estimated that 1 in 10 fathers are currently affected, yet most studies focus only on maternal postpartum depression [3]. At present, there are no diagnostic criteria for this disorder in men and no appropriate diagnostic tools [4]. The reason for this may be the different clinical picture of depression in men. Whereas in women, depressed mood and apathy predominate, in men, depression is most often manifested by irritability and isolation from the environment.

### **OBJECTIVE**

The aim of the study was to analyze scientific reports on paternal postpartum depression (PPPD) in men. The available literature on 'postpartum depression among men' was reviewed on the Scopus, PubMed and OVIDMedline databases.

# **MATERIALS AND METHOD**

The first database analyzed was Scopus with search results limited to the key words 'postpartum depression', 'man', 'father' (n=515), and further limited to 'free full text', '3 years', and 'review article' (n=27). Fourteen articles were selected as being consistent with the theme of the study. Analogously, a review was conducted in other mentioned databases (Tab. 1). A total of 20 papers and articles cited were retrieved and analyzed in detail. Inclusion criteria were male postpartum depression compared to female postpartum depression, description of factors affecting the onset of the disorder, and impact on neonatal development. Exclusion criteria were the description only of maternal depression, or description of a correlation between depression and changes in the child over a lon period of time.

The current review examines several aspects concerning the epidemiology, diagnosis of PPPD, the role of health care in its prevention, influence of socio-economic factors and stress on its development, and the impact of postpartum depression in men on partner relationships and child development. It also identifies tasks for the future that could contribute to a deeper understanding of the phenomenon and prevention.

Table 1. Search strategy

DATABASES	SCOPUS	PUBMED	OVIDMedline
K	EY WORDS		
Postpartum depression	n= 11,249	n= 12,068	n= 2,032
Man	n= 1, 224, 055	n= 23,765	n= 23,056
Father	n= 91,772	n= 6,129	n= 6,027
S	CREENING		
Postpartum depression AND father OR man	n= 515	n= 10,060	n= 5,274
E	LIGIBILITY		
5 years and open access, English language, review and article	n= 27	n= 15	n= 31
ı	NCLUDED		
Met all criteria	n= 14	n= 4	n= 2
		N=20	

# STATE OF KNOWLEDGE

**Epidemiology.** The prevalence of paternal depression (PPPD) is difficult to estimate. According to a 2019 study, it occurs in approximately 8–10% of fathers and has its peak incidence between 3–6 months postpartum, while a 2010 study estimated it to be 25.6% during the same period [1, 3]. Nevertheless, this disorder can develop unnoticed for up to a year [1]. Analysis of 43 international studies indicated that 18% of men reported high levels of anxiety after the birth of their child, which could not be classified as a specific anxiety disorder [5].

A 2016 meta-analysis estimated the prevalence of PPPD at 8.4% [6, 7 and the prevalence of depression nearly doubles within the first year of fatherhood [8]. These data indicate that the mental status of fathers should be monitored for up to a year after the birth of an offspring.

Tools used in the detection of PPPD. The Edinburgh Postnatal Depression Scale (EPDS) is a questionnaire used in the diagnosis of PPPD. It is a 10-item scale used as a screening test for postpartum depression occurring in mothers, but it has also found application in fathers. Comparing the results of the measured percentage of fathers with depression using the Beck Depression Scale (10.5%) and the EPDS (18.5%), almost twice as many positive results were obtained than by using the EPDS [9, 10]. This questionnaire was used in a study conducted on a group of 436 fathers (including 61 with depression, to measure general distress (anxiety symptoms, depressive symptoms, stress) in men rather than detecting depression – a disease entity [11]. A disadvantage of the EPDS questionnaire is the lack of items that would determine the presence or absence of male-specific depressive symptoms e.g. avoidant behaviou and, substance abuse. This may influence the low detection rate of PPPD [9].

The development of an appropriate tool that takes into account the distinctiveness of the course of male depression would allow examination of the true value of the proportion of new fathers with this disorder. Frequently used forms in research are the questionnaires EPDS – Partner (EPDS – P) and Patient Health Questionnaire (PHQ-9) [1]. Other instruments used to study the PPPD phenomenon are the Emotional Memory section of the Birth Memories and Recall Questionnaire (BirthMARQ), the 12-item General Health Questionnaire (GHQ; Goldberg et al., 1997), the 20-item Centre for Epidemiological Studies Depression Scale (CESD; Radlo, 1977), and the 6-item State-Scale of the State-Trait Anxiety Inventory (STAI).

Health care – support. Perinatal care is aimed at the health of the mother and child who are also subject to psychological assessment, e.g. with the EPDS, although a 2020 study reports negative experiences with the use of this questionnaire. Some participants reported that despite obtaining high scores, they did not receive assistance. The expectations of the mothers in talking about outcomes with medical staff were not met; however, there were women in the study group who did receive support. They emphasized staff understanding of the problem and being provided with professional help [4]. Fathers are not psychologically screened at this difficult time in their lives and most reports report the need to educate medical staff about the effects of PPPD [12, 13].

A study by A. Mayers et al. identified a potentially specific role for providing information and support to fathers

witnessing a traumatic birth which was life-threatening to the partner and/or child. Fathers also perceived a lack of perinatal health care education in relation to their needs, and a shortage of specialist support. It was noted that earlier intervention may have helped reduce the impact of traumatic events on their mental health in the longer term.

According to another study, anxiety/depression symptom variables showed that negative memories of birth presented similar associations with well-being for both mothers and fathers. BirthMARQ scores were associated with postnatal well-being for both mothers and fathers, even when taking into account the stability of individual differences in well-being. Greater access to support for both partners can have a positive impact on the wellbeing of the whole family [12, 13].

Role of stress in PPPD. Changes in social roles and gender expectations influence the expression of depression, and the onset of parenthood is often associated with the experience of stress, which can trigger atypical depressive symptom, e.g. aggression, both in women and in men [14]. Parental stress is defined as psychological distress resulting from the challenges of raising children. Some parents experience it specifically in terms of feelings of significant resentment and negative attitudes towards themselves and their children, the quality of their marriage, the quality of their parenting behaviours, and adjustment of the child [4]. Awareness of stressors in the postpartum period paradoxically results in greater vulnerability to their effects [15].

Men often report that the period after childbirth is associated with high levels of stress, characterized by exhaustion and the presence of both positive and negative emotions related to their new life situation [14]. In one study, fathers did not identify themselves as suffering from depression, although there were signs in their accounts that they had experienced the symptoms of depression, and seemed to express their stress and negative feelings in the form of irritation. Some of the fathers interviewed tried to control these feelings by working and reducing family involvement [4].

Previous stressful experiences modulate the effect of the father's postpartum depression on the child. Therefore, in screening to assess the risk of depression, it would be appropriate to ask parents about the traumas they have experienced. One of the tools that could be used for this purpose is, e.g. the Stressful LifeEvents Questionnaire (SLEQ), which assesses whether the surveyed parents have experienced any of seven stressful life events – a serious accident, illness or death of a close friend or family member, separation or divorce, a serious argument with a partner, physical violence by partner, or sexual abuse [16]. In a combined study of maternal and paternal depression, the effect of paternal postpartum depression on child behaviour at ages 3. 5 and 7 years was mediated by maternal postpartum depression and a stressful life event such as marital conflict [17].

Marital/partner relationship quality and socio-economic factors versus PPPD. The change in a man's behaviour in response to assuming a new role has a negative impact on the mother's well-being. Female partners feel lonely and disappointed. This manifests as a lack of intimacy and decreased satisfaction with the sex life of the spouse. The father's mental state prevents him from taking full responsibility for the family and places a mental strain on the mother. Failure to fulfill the role of family caregiver is

sometimes the cause of relationship breakdown [18]. At the same time, a poor marital relationship is a risk factor for PPPD [4, 19].

Physical and emotional changes resulting from pregnancy and childbirth generate more conflicts, a decrease in mutual support, and isolation from each other [12]. According to a 2020 study, the challenges of combining work and family responsibilities may exacerbate depressive symptoms in fathers, with a high symptom profile, and therefore more susceptible to these stressors, especially at the end of the first year after childbirth when many mothers return to work [20].

Fathers who are less able to provide support, usually measured as adequate earnings to support the family, may have a poorer self-image, leading to lower mood [21]. High levels of social support as well as relationship satisfaction correlated with socio-economic factors, protect both parents from the onset of postpartum depression [22].

Impact of PPPD on child development. PPPD not only negatively affect the fathers themselves, but also poses a danger to their newborn children who are at a particularly vulnerable time in their development [2, 23]. Research shows that fathers with postpartum depression are less likely to be involved in building rapport with their infants. Moreover, paternal depression may affect child development independently of maternal PPD comorbidity, which may particularly affect behavioural development in the first year of a child's life [14]. Postpartum depression occurring simultaneously in both mother and father has been shown to increase the likelihood of psychiatric disorders in the ch, and induce higher levels of aggression in children aged 0-4 years [1]. Men burdened with postpartum depression are more likely to speak negatively and critically of their offspring compared to men without PPPD.

According to Beck's postpartum anxiety scale,f Fathers with elevated levels of anxiety were less sensitive and less responsive to the needs of the infant, which may indicate the disturbing effects of the father's depression on the cognitive, social, and emotional development of the child, especially if a male child [2].

# **CONCLUSIONS**

Recent research on PPPD has shown that it is widespread. Its detectable incidence depends on many factors: the period after the birth of the offspring, and the methods and place of examination. Due to the latter two, the frequency varies between 4–25% [3]. Public awareness of PPPD is now particularly important as fathers are faced with the task of taking on the role of fatherhood in both its traditional and modern forms [20]. Fathers should also undergo screening tests for early detection and intervention. The mother's selfimage projects onto the father's psychological well-being.

Other risk factors for PPPD include pre-existing mental illness, high expectations of childbirth, as well as low levels of family support and an unsatisfactory relationship with the partner [15]. Many research reports have emphasized the need for a standardized questionnaire suitable for the different course of male depression [9, 11]. Introducing earlier intervention as well as education could contribute to reducing the incidence of PPPD. [24]. Many of the surveyed fathers reported informational support as most valuable [12].

Further studies should determine the prevalence, comorbidity and treatment efficacy of paternal PPD, taking into consideration fathers from different demographic groups [1]. PPPD is a disorder that should be given more attent, and more health promotion activities should be proposed. Conducting public awareness campaigns on the prevalence of mood disorders in fathers could influence more frequent screening of expectant fathers.

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