

Paternal depression among fathers in the Christchurch Health and Development Study

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Paternal depression is a growing global health concern, as the mental health of fathers subsequently impacts the psychological, physical and mental health of the developing child.^{1,2} Paternal depression is defined as a mood episode that has its onset either during pregnancy or postpartum.³ The perinatal period is defined as the period of pregnancy and the first year postpartum.⁴ Like mothers, fathers may experience “baby blues” in the first couple of weeks after a child is born.¹ Baby blues is defined as feelings of sadness or moodiness, which tend to diminish over subsequent weeks.¹ Approximately 80% of mothers are affected, while the rate for fathers is unknown because previous research has tended to focus on mothers.^{1,5} Over these periods, men may also be at risk of developing paternal depression.¹ Nearly three decades ago, Ballard et al.⁶ suggested that fathers can experience depressed mood, worry, loss of interest, social withdrawal and role confusion as they transition into fatherhood.

Paternal depression is a form of distress potentially compromising the daily care of a child.⁷ Associations may exist between depression in fathers and later emotional and behavioural problems, and subsequent psychopathology.² Furthermore, as family dynamics change, and fathers take on the role of primary caregiver, the impact of paternal depression on both the child and the family needs to be considered.

Previous research has shown that paternal depression was more prevalent in younger fathers relative to older fathers.^{6,8} For example, birth cohort data showed that approximately 10% of fathers aged under 25 years experienced depression.⁸ Given this finding, it is important to examine paternal depression within a New Zealand context. To date, this issue is understudied. In this study, we examine the rates of major depression among men within 1 year after the birth of their child.

Methods

Participants

Participants were male cohort members from the Christchurch Health and Development Study (CHDS). This birth cohort consists of 1,265 individuals (635 males) born over a 4-month mid-1977 recruitment period in Christchurch, New Zealand.⁹ The cohort has been assessed at birth, 4 months, annually to age 16 years and then at ages 18, 21, 25, 30, 35 and 40 years. Data were gathered using a combination of sources including parental interviews, interviews with the cohort member, teacher reports, standardised testing and medical and other official records. All phases of the study have received approval from the regional Health and Disability Ethics Committee.

Eligibility

Fathers were included in this study if the measure of major depression was obtained no more than 1 year after their child's birth. In total, the CHDS obtained data from 363 fathers; 168 fathers met the eligibility criteria.

Measures

Major depression (18–40 years)

At ages 18, 21, 25, 30, 35 and 40 years, participants completed a detailed interview on their experience of the following mental health problems since the previous assessment. Questioning was based on the relevant components of the Composite International Diagnostic Interview [CIDI]¹⁰ and the criteria of the Diagnostic and Statistical Manual of Mental Disorders, 4th edition [DSM-IV].¹¹ Participants were classified on a dichotomous measure reflecting whether they met diagnostic criteria for major depression at ages 18, 21, 25, 30, 35 and 40 years for the assessment intervals from 17–18, 20–21, 24–25, 29–30, 34–35 and 39–40 years.

Analysis

Tabular analysis was used to identify the rates of paternal depression. Statistical significance ($p < 0.05$) was determined using Fisher exact Chi-squared tests for independent samples, as cell counts were below $n = 10$.¹² This test examined rates of major depression between younger (< 30 years) and older fathers (34+ years).

Results

Table 1 shows that 5.4% of fathers were affected by major depression. The highest prevalence of major depression occurred among fathers younger than 30 years. No fathers aged 34+ years were classified as having major depression. The Fisher exact test was statistically significant ($p = 0.014$).

Discussion

This study has shown that younger fathers may be at greater risk of experiencing major depression. This finding is consistent with previous literature; however, rates of paternal depression were double those of prior research.^{6,8}

Research into paternal depression is important—not only for the father but also the family—because of the impacts on the developing child and the relationship with the other parent.^{1,2} Previous literature has had a greater focus on mothers as previously, as they have most often been the main caregiver. However, an increasing

number of fathers are taking on the role of primary caregiver.¹³

Limitations include a relatively small sample size compared to past research.^{2,8} In addition, while data on major depression were obtained annually, the birth dates of the children had not been recorded. This meant that unless the birth was within 12 months of the assessment, it was unclear when individuals had fathered children. Therefore, many fathers did not meet the inclusion criteria for eligibility. These limitations may help to explain why the results from this study differ from previous research. However, the longitudinal nature of the CHDS is a strength allowing participants to be followed across their lifespan. Additionally, major depression was assessed using the CIDI and DSM-IV criteria. This ensured only those with major depression were included, ensuring results were not confounded by the inclusion of individuals with low levels of depressive symptomology.

In conclusion, findings of the current study support previous research into the rates of paternal depression.^{1,2} Fathers may be at risk of major depression after childbirth, particularly those aged under 30 years. Clinicians should consider assessing both new mothers and fathers for depressive symptomology.^{2,7} In future, more research needs to examine this issue. This will ensure adverse outcomes of parental depression will be minimised through the provision of timely support to those who need it.

Table 1: Rates of major depression among fathers (18–40 years) in the Christchurch Health and Development Study cohort within 12 months of their first child's birth

Age (years)	Number of fathers (n)	Major depression	
		%	(N)
17–18	10	20.0	2
20–21	15	33.3	5
24–25	22	0.0	0
29–30	57	3.5	2
34–35	45	0.0	0
39–40	19	0.0	0
Total 17–40	168	5.4	9

COMPETING INTERESTS

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