

Paternal Perinatal Mental Health(PPMH): Research and Practice

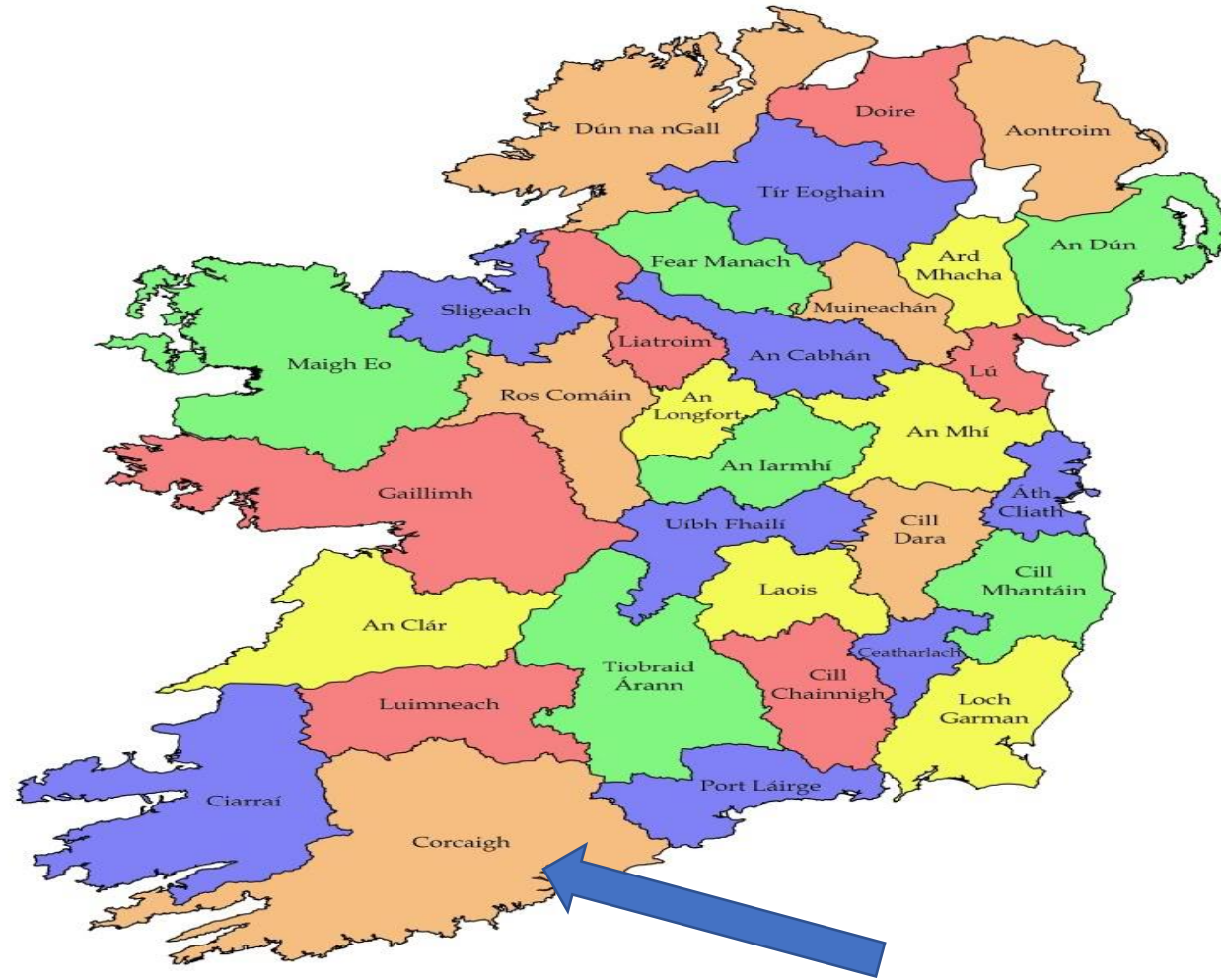
Dr Lloyd Frank Philpott

Overview of presentation

- Introduction
- Development of Perinatal Mental Health
- Men's Health: Policy and transition to fatherhood
- Paternal Perinatal Health: Stress and the Co-existence of symptoms
- Paternity Leave and Paternal Perinatal Mental Health
- Future research, practice and policy
- Conclusion



Republic of Ireland

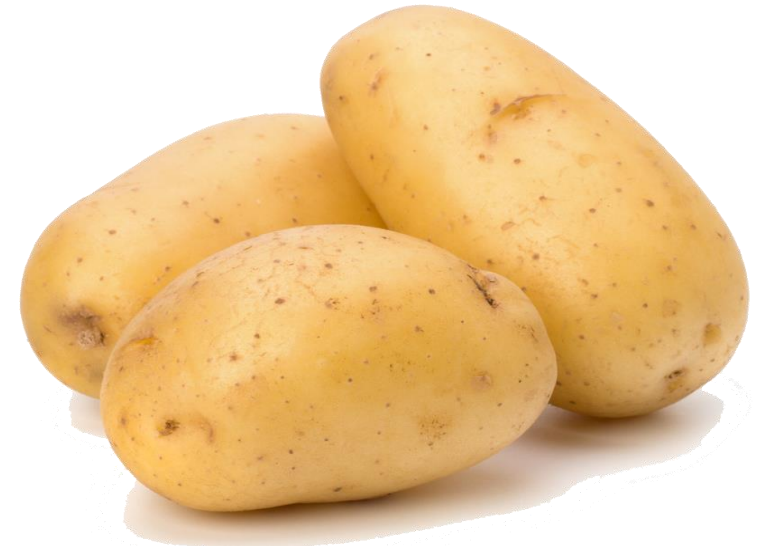


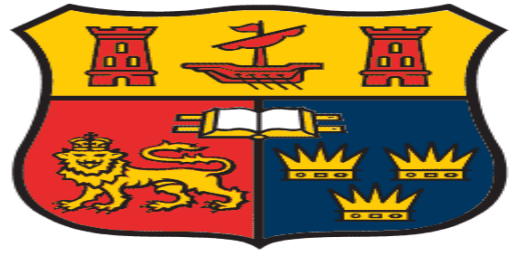


NOT CORK

CORK

What is Ireland famous for?





UCC

University College Cork, Ireland
Coláiste na hOllscoile Corcaigh



University College Cork

- Established 1845
- 4 colleges - Arts, Celtic Studies and Social Sciences, Business and Law, Medicine and Health, Science, Engineering and Food Science
- 20,000 students, including 4,500 postgraduates
- Nationalities and Diversity: Over 60 countries
- Number of Staff at Cork University: 3,000



UCC

University College Cork, Ireland
Coláiste na hOllscoile Corcaigh



University College Cork School of Nursing and Midwifery



UCC

University College Cork, Ireland
Coláiste na hOllscoile Corcaigh

University College Cork School of Nursing and Midwifery

- 1,030 students Undergraduate and Postgraduate
- BSc programme is of 4 years' duration, leading to registration with The Nursing & Midwifery Board of Ireland as a General Nurse (RGN), Children's Nurse (RCN), an Intellectual Disability Nurse (RNID), or a Mental Health Nurse (RMHN)
- Postgraduate programmes PHN, ED, ICU, Gerontology, Midwifery, Ethics, Palliative Care,
- Masters, PhD

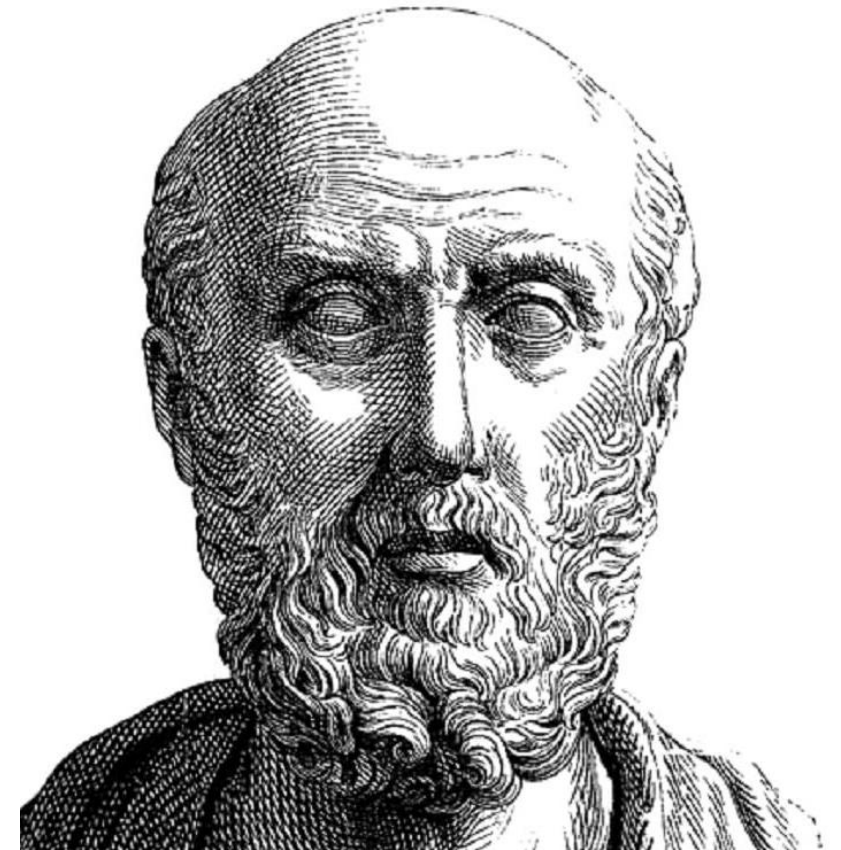
Historical context of Perinatal Mental Health Care

- Controversies and speculation about adverse mental health outcomes following childbirth have existed since the earliest medical literature.



Historical context of Perinatal Mental Health Care

- Hippocrates “father of modern medicine” made the first known reference in the fourth century B.C.
- He proposed that lochial discharge—if suppressed, could flow to the head and result in agitation, delirium and attacks of mania.



Historical context of Perinatal Mental Health Care

- Another early reference to adverse perinatal mental health came from Trotula, a 13th century female physician, who believed that postpartum mental disturbances were due to increased moisture in the body following childbirth.
- She wrote “If the womb is too moist, the brain is filled with water, and the moisture running over the eyes, compels them to involuntarily shed tears.”



Historical context of Perinatal Mental Health Care

- During the Middle Ages, women who exhibited melancholy during or after childbirth were thought to be witches or victims of witchcraft.



Historical context of Perinatal Mental Health Care

- A well--known 16th century physician, Castello Branco, described a case of postpartum melancholy:
- “The beautiful wife of Carcinator (a wealthy merchant) who always enjoyed the best of health, was attacked after childbirth by melancholy, and remained insane for a month, but recovered with treatment.”

(Kokkinaki 2015)



Historical context of Perinatal Mental Health Care

- In 1858, Louis--Victor Marcé published the first formal paper devoted entirely to perinatal mental illness, his *Treatise On Insanity In Pregnant, Postpartum, And Lactating Women*.



Historical context of Perinatal Mental Health Care in Ireland

- He wrote of 310 cases of pregnant and postpartum women that he had personally observed and became the first to systematically address categorization of their disorders.
- In his results, he reported that 9% of women developed depression during pregnancy, 58% in the puerperal period (the first six weeks following childbirth), and 33% in the lactational period.





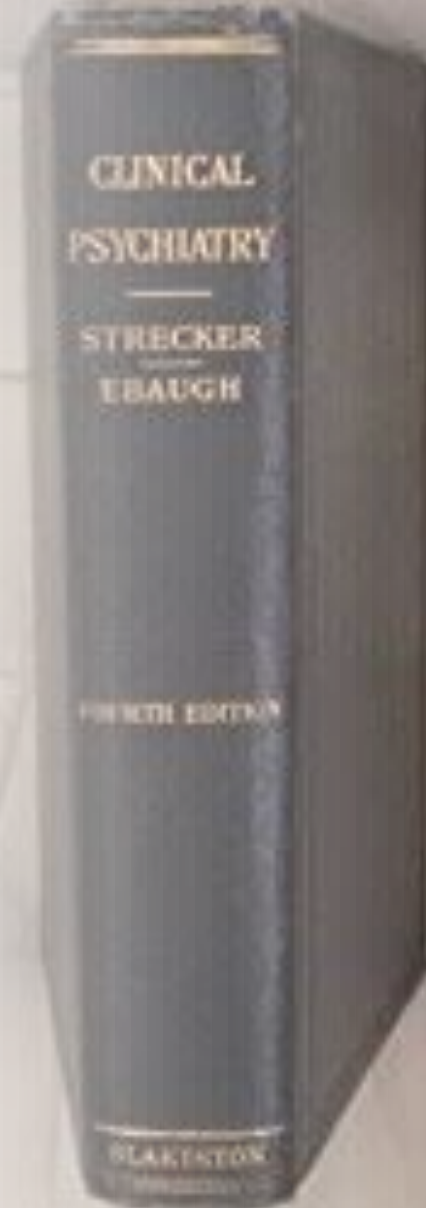
Historical context of Perinatal Mental Health Care in Ireland

- Marcé is still remembered today through the Marcé Society, a group of researchers who unite to study PPD throughout the world.



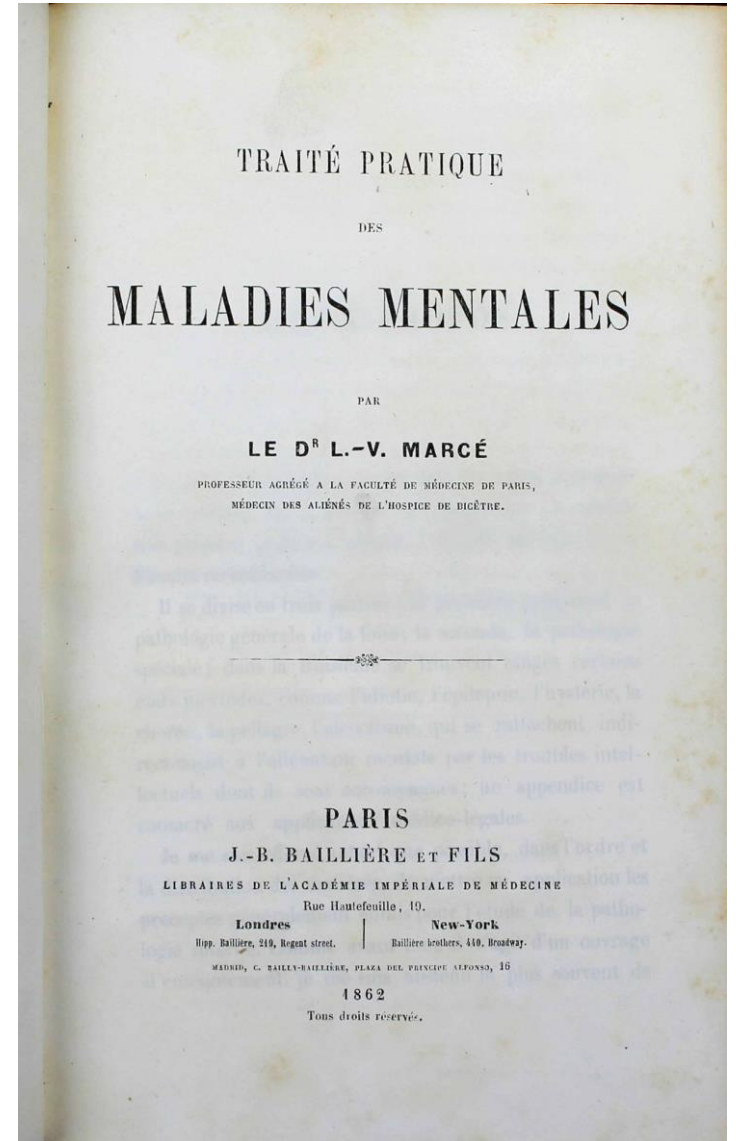
Historical context of Perinatal Mental Health Care in Ireland

- In the early 20th century, two main lines of thought emerged regarding the description of mental disturbance and depression following childbirth.
- The first theory, proposed by Strecker and Ebaugh in 1926, suggested that depression following childbirth had no actual relationship to the pregnancy, delivery, or postpartum changes and was indistinct from other psychiatric illness.



Historical context of Perinatal Mental Health Care in Ireland

- The second theory of the time harkened back to the work of Marcé, as well as Hippocrates and Trotula.
- Suggesting that physiologic changes in women's bodies surrounding the birth of the child may uniquely lead to postpartum mental health changes distinct from other illnesses.



Historical context of Perinatal Mental Health Care

- Following the Second World War in the mid--20th century, many psychiatrists began studying perinatal mental health.
- It was noted that women often did not seek care for postpartum illness due to fears of being placed in a psychiatric hospital and separated from their husbands and children.



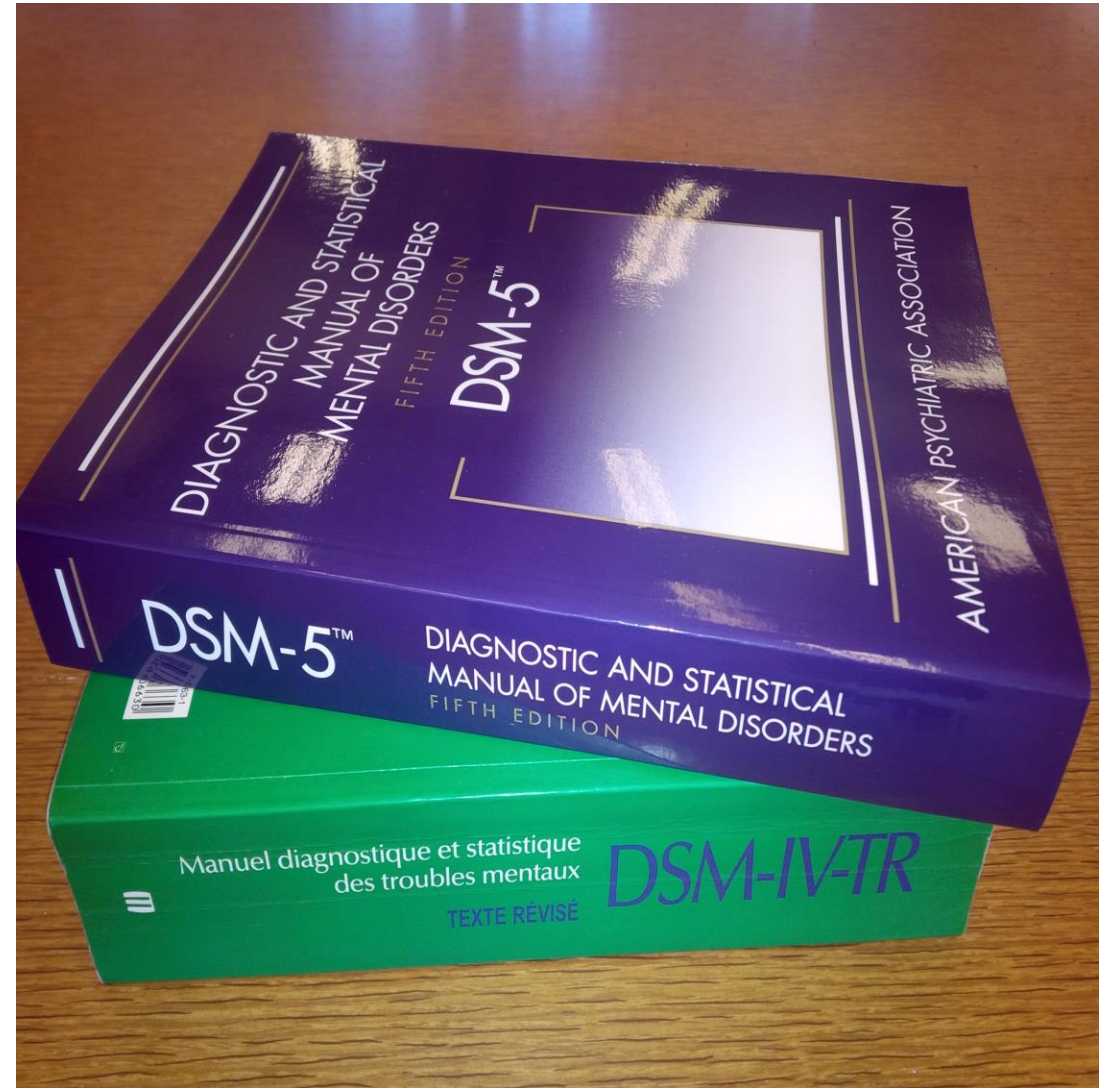
Historical context of Perinatal Mental Health Care in Ireland

- In 1968, Brice Pitt described “atypical” depression in the postpartum period. His was one of the first modern studies to draw attention to “less severe” depressions than postpartum psychosis.
- His study was designed in response to the work of community health visitors who went to check on new mothers in their homes after discharge from the hospital following childbirth.
- These nurses reported to him that many women dealt with varying degrees of depression following birth, but most did not seek treatment.



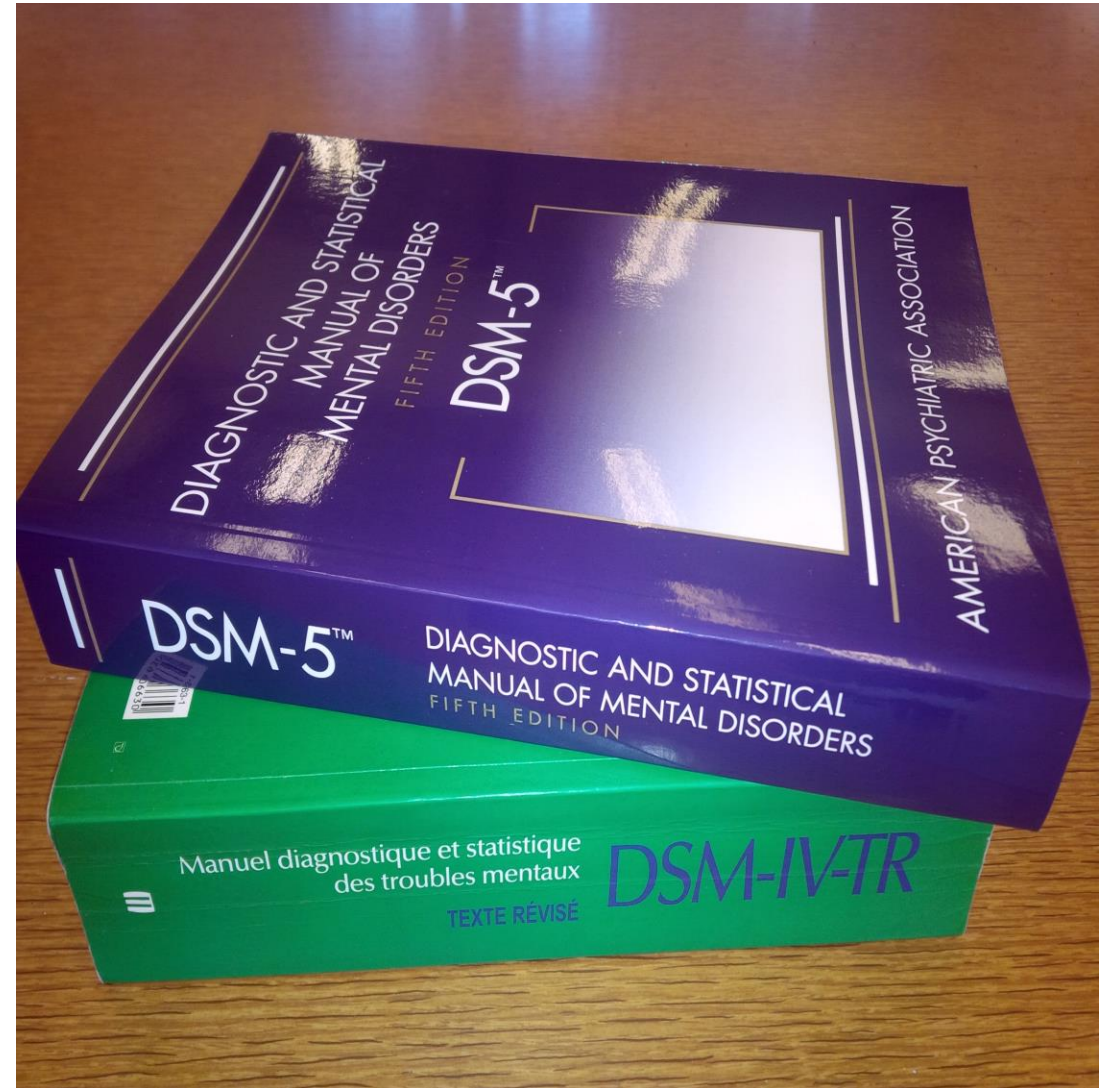
Historical context of Perinatal Mental Health Care

- Until the 1990s, most psychiatric organizations still espoused the idea that there were not enough unique features of PPD to warrant a separate disease categorization in psychiatric diagnostic manuals.



Historical context of Perinatal Mental Health Care

- The DSM--IV, released in 1994, incorporated “postpartum onset” as a modifier to major depression, bipolar illness, and other psychiatric diagnoses; this specifier is used when such disorders appear within four weeks following the birth of a child.
- However, much current literature challenges the “postpartum” definition of 4 weeks following birth and suggests that PPD may still appear even months after giving birth.



Historical context of Perinatal Mental Health Care

- Perhaps the greatest change in thinking surrounding PMH has been the shift to include more focus on screening, as well as the surge of advocacy surrounding the diagnosis.
- In the last two decade, there has been widely increased focus on prevention of PPD via support groups and therapy.
- Screening at postpartum obstetrics visits and initial newborn visits are now increasingly commonplace.

In the past 7 days:

4. I have been anxious or worried for no good reason	
— No, not at all	0
— Hardly ever	1
— Yes, sometimes	2
— Yes, very often	3
5. I have felt scared or panicky for no very good reason	
— Yes, quite a lot	3
— Yes, sometimes	2
— No, not much	1
— No, not at all	0
6. Things have been getting on top of me	
— Yes, most of the time I haven't been able to cope	3
— Yes, sometimes I haven't been coping as well as usual	2
— No, most of the time I have coped quite well	1
— No, I have been coping as well as ever	0
7. I have been so unhappy that I have had difficulty sleeping	
— Yes, most of the time	3
— Yes, sometimes	2
— Not very often	1
— No, not at all	0
8. I have felt sad or miserable	
— Yes, most of the time	3
— Yes, quite often	2
— Not very often	1
— No, not at all	0
9. I have been so unhappy that I have been crying	
— Yes, most of the time	3
— Yes, quite often	2
— Only occasionally	1
— No, never	0
10. The thought of harming myself has occurred to me	
— Yes, quite often	3
— Sometimes	2
— Hardly ever	1
— Never	0

Historical context of Perinatal Mental Health Care

- Over the past 40 years, there has continued to be much debate surrounding perinatal mental health.
- Questions have arisen such as:
- “Is pregnancy protective against depression or a risk factor for depression?”
- Are there other factors besides physical factors that can impact mental health during the perinatal period?



Historical context of Perinatal Mental Health Care in Ireland

- Studies identified important risk factors such as stressful life events, history of mood disorders, unplanned or unwanted pregnancy, sleep disturbance, fatigue, relationship strain, financial worries.
- Fathers experience many of the same changes and stresses that mothers do (McCoy, 2022).
- This raised the question could men's mental health be impacted by the transition to fatherhood?



Historical context of Men's Health

- Historically, men, as a population group, have tended to be overlooked in healthcare research, practice and at a global and national health policy level (Richardson & Carroll 2018)
- However, In recent years, the issue of men's health has moved from the margins to the centre of health discourse (Richardson 2017).



Historical context of Men's Health

- Ireland has been to the forefront internationally in advancing men's health and was the first country in the world to develop a National Men's Health Policy and Action Plan (NMHP) in 2008.

Table 1. Men's health policies

Year	Country	Strategy
2008	Republic of Ireland	National's Men's Health Policy 2008 - 2013
2009	Brazil	National Healthcare Policy for Men (PNAISH)
2010	Australia	The National Male Health Policy: Building on the Strengths of Australian Males
2013	Iran	Strategic plan to address men's health
2020	Australia	National's Men's Health Strategy 2020-2030

Historical context of Men's Health

- Despite the fact that many of the social determinants of health work in men's favour
- Male life expectancy is lower than female life expectancy and men have higher death rates for most of the leading causes of death across the lifespan (Department of Health (DoH) 2019).



A close-up photograph of a man in a blue polo shirt lighting a cigarette. He is holding a lit matchstick in his right hand and a cigarette in his left. The background is blurred, showing what appears to be a public setting like a train or bus.

Historical context of Men's Health

- While biology plays some part in the variances between men's and women's health trajectories and life expectancies, it has been argued that the influence of biology alone to predict gender difference in morbidity and mortality is relatively minor compared to gender specific behaviours (Crimmins et al. 2019, Baker 2021)

Historical context of Men's Health

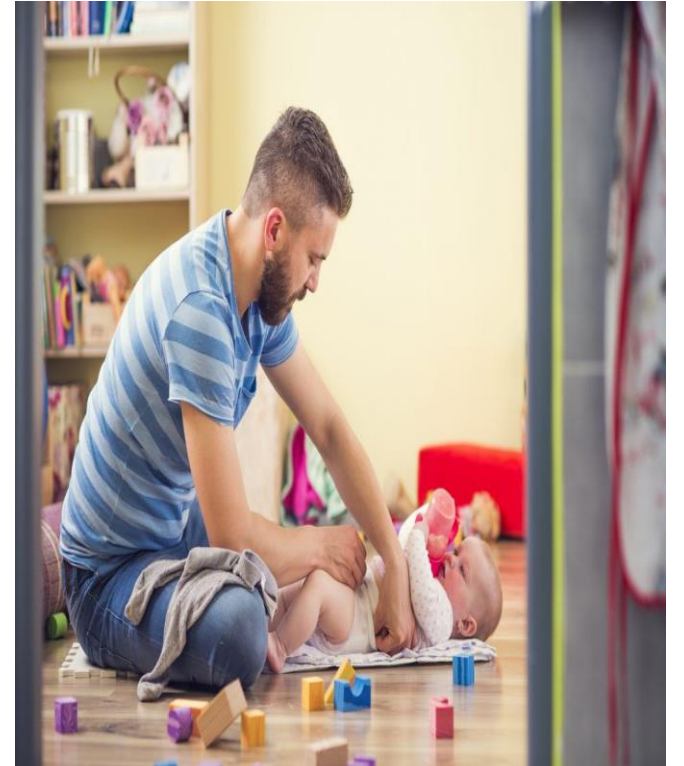
- Academics and clinicians seek to identify windows of opportunity to improve men's health and it is suggested that fatherhood may be one such avenue worthy of exploration
- Men's health has the potential to be influenced by the transition to first-time or subsequent fatherhood as it constitutes a turning point and offers a structured opportunity to alter one's trajectory

(Torche & Rauf 2020).



Historical context of Men's Health

- Becoming a father, for many men, signals a shift away from individualism and leads to an increasing sense of personal responsibility and self-reflection that initiates positive behaviour changes (Garfield et al, 2010).
- Research has shown that fatherhood has a protective effect on men's health (Markey et al, 2005; Garfield et al, 2010).



Perinatal Period



Transition to fatherhood

- The transition to first-time or subsequent fatherhood takes place across the perinatal period which covers the antenatal period when a man's partner is pregnant ('expecting fatherhood'), labour and birth and the postnatal period up to 12 months after birth
- Distinctive psychological developments have been observed in these three timeframes

(Leach et al. 2014)

Transition to fatherhood: The early antenatal period

- In the early antenatal period, fathers have reported feeling somewhat ambivalent and removed from their partners' pregnancy due to a lack of explicit evidence of the existence of their unborn infant (Genesoni & Tallandini 2009, Fenwick et al. 2012).

“There is a sense of no control as a father in pregnancy. Often you can feel not attached to the situation” (P67)

(Philpott et al. 2023)





Transition to fatherhood: The early antenatal period

- Father's feelings of disconnection during the early antenatal period are further compounded by their interactions with healthcare professionals (HCPs) such as midwives and doctors during appointments and scans where they feel unsupported, side-lined, and unimportant (Dryden et al. 2012, Leach et al. 2014, Nash 2018, Baldwin et al. 2019).

Transition to fatherhood: The later antenatal period

- In the later antenatal period, the reality of fatherhood becomes more tangible for fathers, and they change their focus towards preparing for the birth of their unborn infant (Johansson et al. 2015).
- This change of focus can evoke negative feelings around concerns for the health and life of their baby and their partner (Darwin et al. 2017).
 - *“During the pregnancy I have sometimes got worried. Not at the start much, but later in the pregnancy I was more worried how it would all impact on my wife” (P99) (Philpott et al. 2023)*



Transition to fatherhood: Labor and Birth

- Due to changing social attitudes towards more proactive, involved fatherhood, men are encouraged to attend the birth of their infant (Jomeen 2017).
- Paternal presence at labour and childbirth has been linked to a more emotionally engaged, mature fatherhood and is considered beneficial and positive for father's health and that of their partner and infant (Johansson et al. 2012).





Transition to fatherhood: Labor and Birth

- Despite the potential positive benefits, paternal labour and birth experience is complex and multidimensional and remains a particularly ambiguous time for fathers (Johansson et al. 2015).
- During labour, some fathers report feeling “*useless*” (P99) and “*helpless*” (P67). While, for some, the birth provided “*relief*” and “*happiness*” (P77), other fathers found it a “*frightening experience*” (P49) (Philpott et al. 2023)

Transition to fatherhood: Labor and Birth



- The COVID-19 pandemic brought about new challenges for fathers in Ireland and across the world due to “**visitor**” restrictions that have significantly affected some of the major milestones to fatherhood such as attending antenatal scans and the birth of their infant (McGreevy 2021).

Transition to fatherhood: Postnatal period

- The postnatal period is a significant time in the lives of fathers, their partner, and their infant.
- The postnatal period can be filled with uncertainty and challenges as fathers take on new responsibilities (Johansson et al. 2013).
- *“Becoming a father can cause worry and stress which needs to be overcome quickly as (the) important role of (a) father is to keep both mother and baby calm and provide this sense of comfort and safety that so much is needed early on (after birth)” (P47) (Philpott et al. 2023)*



Transition to fatherhood: The early postnatal period

- During the early postnatal period, fathers have a vital role in caring for their infant and supporting their partner (Brunstad et al. 2020).
- However, it has been reported that in the later postnatal period, fathers feel torn between their desire to be participating fathers with the need to provide for their families (Reimer 2015).
- *“The work brings stress. I hope to be able to bring a better balance to work/life”* (P50) (Philpott et al. 2023)



Transition to fatherhood: The early and later postnatal period



- While fatherhood provides an opportunity to improve men's health, it also can potentially increase the risk for adverse mental health.
- *"I feel stressed from work and juggling being a dad, but this is normal at my life stage"* (P5)

(Philpott et al. 2023)

A man with dark hair and glasses is sitting at a desk, holding a baby. The man is wearing a dark grey t-shirt and is looking down at the baby. The baby is wearing a white dress with black polka dots and is looking towards the camera. The desk has a laptop, a mouse, and a white mug on it. The background is a bright, out-of-focus window with white curtains.

Transition to fatherhood

- This complex process has resulted in some fathers feeling inadequate and ill equipped as they begin their journey and this can negatively impact on their mental health resulting in increased stress, anxiety, and depression (Cameron et al. 2016, Leach et al. 2016, Philpott et al. 2017).



Take a moment to reflect on your own perceptions, knowledge of perinatal depression

Close your eyes and take a moment to think about perinatal mental health and perinatal depression, anxiety etc..

What comes into your mind? What images present themselves?





Paternal perinatal mental health

- Positive mental health is important and all times in life; however, during the perinatal period it is critical as fathers support their partner and care for their infant (Bakermans-Kranenbur et al. 2019).



Paternal perinatal mental health

- Over the past three decades, addressing the mental health needs and wellbeing of the general population has been identified as a priority in European health and social agenda, and by the World Health Organization (WHO) (Baldwin, Sharin, Bick, Debra, 2018).
- Subsequently, mental health and wellbeing during the perinatal period is also receiving more attention (Philpott et al., 2019).



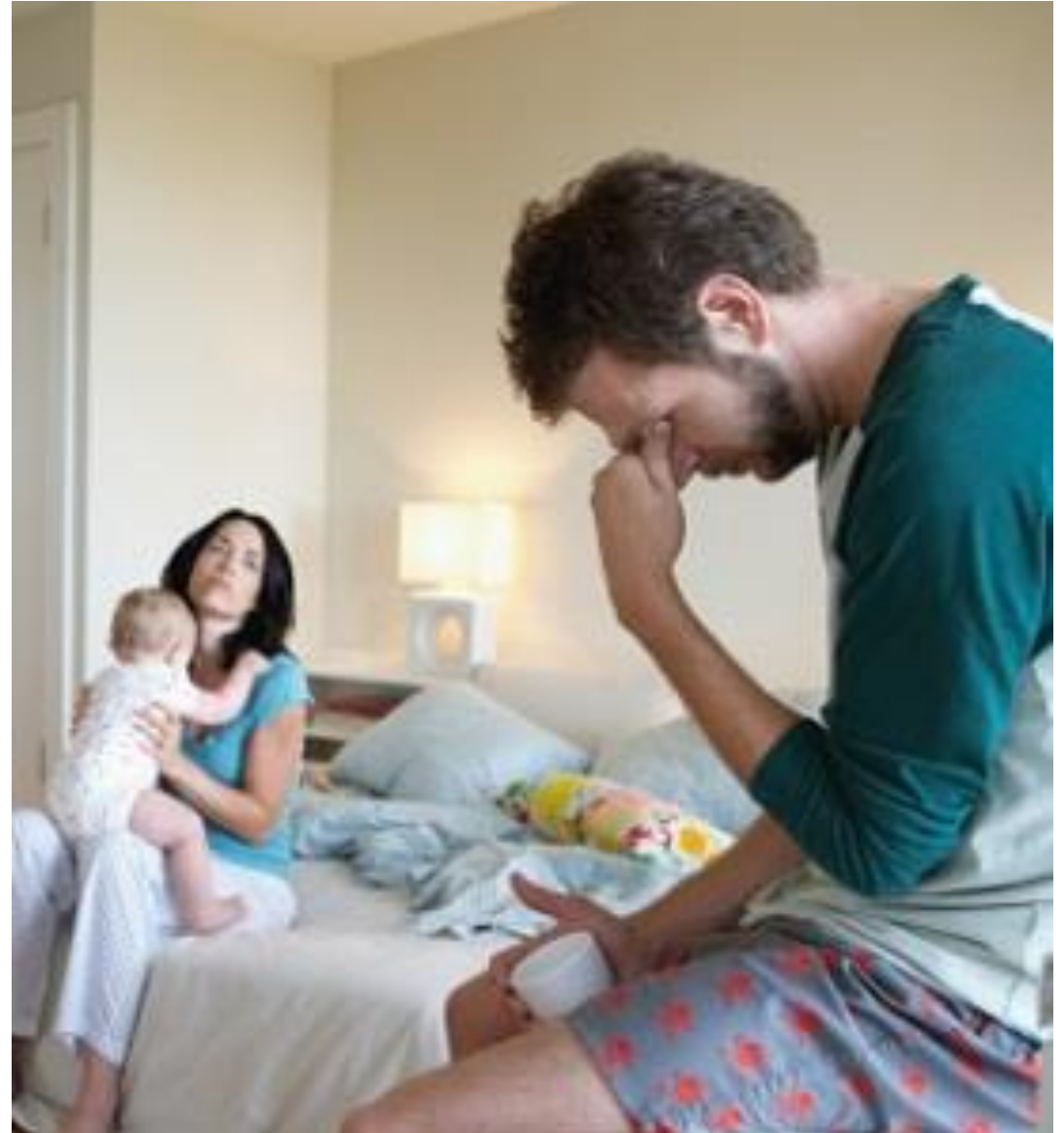


Paternal perinatal mental health

- Over the last 20 years there has been a growing body of research reporting that some fathers experience stress, anxiety, and depression (Cameron et al. 2016, Philpott et al. 2017, Philpott et al. 2019).

Paternal perinatal mental health

- As well as affecting fathers themselves, adverse perinatal mental health outcomes can also have an impact on the health and wellbeing of his partner and infant.
- For example, fathers who experience adverse perinatal mental health exhibit fewer positive behaviours such as sensitivity, affection and responsiveness and increased negative behaviours such as hostility and disengagement, which may negatively impact his partner and infant (Philpott 2020).



Paternal perinatal mental health

- To date, the majority of research on PPMH has focused on depression; however, stress and anxiety may be more common than depression in the perinatal period (Wynter et al., 2013| Leach et al. 2016; Philpott et al., 2022).
- As well as focusing primarily on depression, existing research assessing paternal perinatal mental health has been predominately quantitative (Shorey and Chan 2020).
- Fewer studies have explored men's experiences of their own perinatal mental health (Darwin et al. 2018).



Paternal Perinatal Depression

- Depression is 'a state of low mood, with symptoms such as sadness, fatigue, loss of interest, and loss of appetite' [World Health Organisation (WHO), 2017, p. 7].
- Cameron et al. (2016) in their meta-analysis of 74 studies reported a prevalence of 8.4%. These rates of depression are above those seen in the general male adult population which are estimated at 4.7% (National Institut of Mental Health, 2015).



Paternal Perinatal Depression

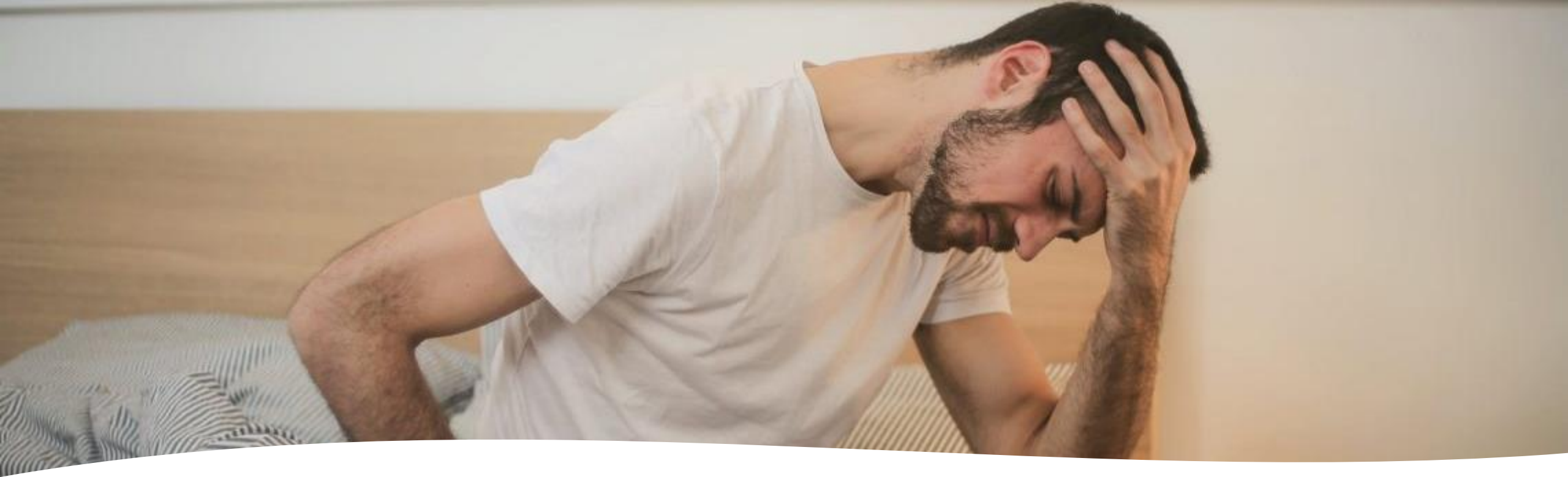
A photograph of a woman and a man sitting on a dark blue couch. The woman is in the foreground, looking towards the man. The man is in the background, with his head buried in his hands, suggesting a state of distress or depression. The background is a bright, out-of-focus window.

- While fathers can experience many of these depression symptoms during the perinatal period (Cameron et al., 2016), for the majority their symptoms are transient and are linked to stresses associated with the transition to fatherhood, or the arrival of subsequent children.

Paternal perinatal anxiety

- Spielberger (1972, p. 12) in his State–Trait Anxiety theory defined anxiety as ‘as an emotional response to stimulus perceived as dangerous’.
- In Spielberger’s theory, anxiety facilitates the avoidance of danger and is a normal adaptive response; however, anxiety becomes maladaptive when it interferes with functioning, becomes overly frequent, severe, and persistent (Spielberger, 1972; Beesdo et al., 2009).





Paternal perinatal anxiety

- During the early postnatal period fathers face many new anxieties arising from the need to balance family and work life (Koh et al., 2015), supporting their partner and caring for their infant (Mahmoodi et al., 2017).

Paternal perinatal anxiety

- Philpott et al. (2019) in their systematic review reported that the prevalence rate for anxiety symptoms ranged between 3.4% and 25.0% during the antenatal period and between 2.4% and 51% during the postnatal period.





Paternal perinatal anxiety

- Studies assessing paternal perinatal mental health have reported wide variations in reported prevalence rates.
- This wide variation may be attributed to diverse settings, sample size, recruitment strategies, inclusion and exclusion criteria, assessment timepoints, cut-off scores, the use of different measurement tools, and the cultural setting of the study.
- The sociocultural context of fatherhood can potentially have an impact on perinatal mental health.

Paternal Stress in the Perinatal Period

Global Mental Health

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Other Original Research Paper

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Prevalence and associated factors of paternal stress, anxiety, and depression symptoms in the early postnatal period

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Abstract

Background. The changes experienced during the transition to first-time or subsequent fatherhood are mainly positive; however, fathers can also experience adverse mental health outcomes such as stress, anxiety, and depression. The aim of this study was to investigate the prevalence and associated factors of paternal stress, anxiety, and depression symptoms in the early postnatal period.

Methods. A quantitative, descriptive correlational design was used. Data were collected using a self-administered questionnaire comprising of the Perceived Stress Scale, the State-Trait Anxiety Inventory, and the Edinburgh Postnatal Depression Scale.

Results. A total of 336 fathers were included in the study. The prevalence rates were 41.1% ($n = 138$) for moderate/high stress symptoms, 20.8% ($n = 70$) for state anxiety symptoms, 25.9% ($n = 87$) for trait anxiety symptoms, and 13.4% ($n = 45$) for depression symptoms. In the multivariable analysis, several factors were associated with increased stress, anxiety, and depression symptoms including being a subsequent father ($p = 0.009$), not living in a house ($p = 0.009$), having a history of adverse mental health ($p = 0.008$), and having a partner with a history of anxiety ($p = 0.040$).

Conclusion. The findings suggest that fathers are at risk of adverse mental health in the early postnatal period which is a pivotal time for fathers in terms of bonding with their infant and

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Stress in fathers in the perinatal period: A systematic review



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ABSTRACT

Background: despite the evidence that fatherhood has a long-term positive and protective effect on men's health, there is also evidence that fatherhood in the perinatal period can be complex and demanding. Due to the potential increase in stressors in the perinatal period, there is reason to hypothesise that it is a time of increased stress for fathers. However, it is not clear how significant a problem stress is for fathers during this stage of life. This is in part, due to the fact that the available research has not been systematically reviewed.

Purpose: the purpose of this systematic review was to critically appraise the empirical evidence that examined stress in fathers in the perinatal period.

Design: systematic review.

What about stress?

- Despite the fact that there is strong evidence that the onset and duration of anxiety and depression is strongly linked to stress (Cohen et al., 2007), there has been little focus on paternal perinatal stress.
- Furthermore, when discussing their own mental health in the perinatal period, men prefer to couch their discussions around stress rather than mental illness and depression (Darwin et al., 2017).



Paternal Stress in the Perinatal Period

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- Stress is defined as “a relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being” (Lazarus & Folkman 1984, p.19).

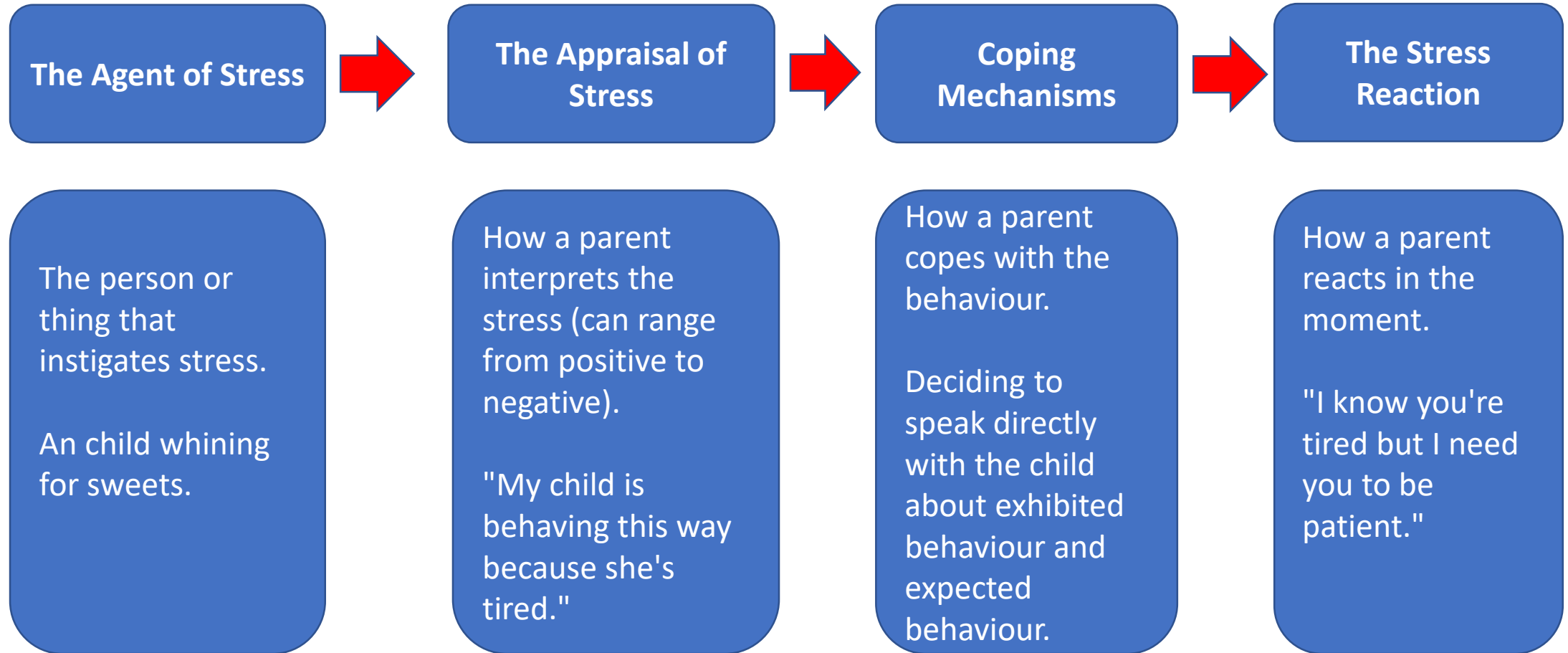


Paternal Stress in the Perinatal Period

- Stress is a transaction between an individual (father) and the environment (stressors e.g., lack of sleep, work-family conflict, sick infant), in which stress is seen as an adaptive response to an event (becoming a first-time or subsequent father) that may have positive or negative implications for well-being (Cronin & Becher 2015).



Lazarus' Stress Model





Paternal Stress in the Perinatal Period

- Most of the research literature to date has paid little attention to the potential positive benefits of adapting to stress (Meurs & Perrewé, 2011).
- Selye (1955) was one of the first to argue that stress can be beneficial. There is evidence for an enhancing form of stress, known as eustress, which can help individuals accomplish tasks more efficiently (Petrick et al. 2020)

Paternal Stress in the Perinatal Period

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- However, despite the potential benefits of stress in some contexts, unmanaged stress can have negative consequences and has been linked to health problems, both physical and mental, in the general population and among fathers during the perinatal period

(Ribeiro et al. 2018, Pascoe et al. 2020)



Paternal Stress in the Perinatal Period

- a) How stress was measured
- b) The levels of stress
- c) Factors contributing to stress
- d) Interventions and strategies used to manage stress
- g) the impact of stress on fathers in relation to their health and social relationships

- Things to consider:

When was the study undertaken, ante, birth, labour postnatal ?

What tool was used and what were the cut-off scores?

Study sample characteristics, location, first time- fathers?



Study Characteristics

- There were studies from several countries including Australia (n=5), China (n=3), Sweden (n=2), Taiwan (n=2), Hong Kong (n=1), Canada (n=1), Iran (n=1), Portugal (n=1), Norway (n=1), and the United States (n=1).
- Sample sizes ranged from 31 to 1064
- First-time fathers only (6), mixed sample of both first-time fathers and subsequent fathers (7), no reference to the status of fathers (5)
- Research designs used included cross-sectional (n=8), longitudinal (n=9) and randomized clinical/control trials (n=2).



The course of stress across the perinatal period

- The findings from the longitudinal studies suggest that stress levels decreased from the antenatal and early postnatal period to the later postnatal period. An \cap -shaped pattern was identified whereby fathers' stress increased soon after birth but then lowered overtime in the postnatal period.



Factors contributing to stress

- Eleven of the 18 studies reported factors that contribute to paternal stress in the perinatal period.
- Stress can be related to father, child, relationship and environmental factors.



Factors contributing to stress: Environmental factors

- Financial pressure/money worries (Pollock *et al.* 2005; Yu *et al.* 2011)
- Work problems/job issues (Yu *et al.* 2011)
- Lack of time, too many responsibilities, feeling overloaded (Pollock *et al.* 2005)
- Rigorous schedule (Pollock *et al.* 2005)
- Perceived pressure to be present at the birth (Johnson 2002)

- *“I feel typically happy and content most of the time but stressful days at work can get to me and as I try to help out as much as I can at home when I get home, I do feel there are days that the stress and anxiety gets to me” (P84) (Philpott et al. 2023)*



Factors contributing to stress: Relationship factors



- Partner stress level (Ngai & Ngu 2014)
- Perceived lack of partner support (Kamalifard et al. 2014)
- Perceived lack of emotional and instrumental support from extended family members and friends (Gameiro et al. 2011)
- Problems related to family/friends (problems not specified) (Yu et al. 2011)
- Relationship problems (Hildingsson & Thomas 2014)
- A lower/weaker sense of family coherence (Ngai & Ngu 2015)
 - *“Relations are the ones to pinch your nerve”* (P63) (Philpott et al. 2023)

Factors contributing to stress: Child factors

- Concerns about the child's health (Pollock *et al.* 2005)
- Child care issues (Pollock *et al.* 2005)
- *“My experience was good until baby came out and it didn't go so well, since then it has been worry and sad thoughts”* (P3) (Philpott *et al.* 2023)



Impact of stress

- Eleven of the 18 studies reported on the impact that stress has on fathers in the perinatal period. From the findings, stress can impact on father's mental health, physical health and relationships.





Impact of Stress

- Loutzenhiser *et al.* (2015) found that higher levels of prenatal stress were associated with post-partum fatigue
- Stress had adverse effects on marital satisfaction ($p < .05$) (Lu *et al.* 2006)
- *“In my opinion, a lack of sleep especially in first 2 months is the main cause of stress and anxiety”* (P80) (Philpott *et al.* 2023)

Conclusion

- The majority reporting that fathers in the perinatal period experience moderate levels of stress.
- The early postnatal period was identified as the most stressful time.
- Multiple causes of stress that are unique to men transitioning to fatherhood in the perinatal period were identified.
- The review pointed to the fact that stress has a negative impact on father's mental health, physical health and relationships.
- In conclusion, the perinatal period is a time when men face unique stressors that can impact negatively on their health and relationships.



The co-existence of paternal stress, anxiety, and depression symptoms during the early postnatal period





The co-existence of paternal stress, anxiety, and depression symptoms during the early postnatal period

Men's Social and Community Health

Original Article

THE COEXISTENCE OF PATERNAL STRESS, ANXIETY, AND DEPRESSION SYMPTOMS IN IRELAND DURING THE EARLY POSTNATAL PERIOD

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Abstract

Background: For most fathers, the early postnatal period is a time of great joy and happiness; however, some fathers experience difficulties in repositioning themselves in relation to their partner, child, and work, which can lead to increased stress, anxiety and depression. The aim of this study was to investigate the coexistence of paternal stress, anxiety, and depression symptoms in the early postnatal period (0–4 days).

Rationale for the study

- Only study to date investigating the co-existence of paternal stress, anxiety and depression symptoms
- Does the focus on depression accurately represent the substantive risk to paternal mental health wellbeing.
- Understanding if the co-existence occurs, establishing its prevalence is important, and understanding the role that different demographics have in protecting against or increasing the risk of the coexistence will help identify at risk fathers, inform services and lead to more targeted interventions to support fathers.

Aim and objectives of the study

- The aim of this study was to investigate the co-existence of paternal stress, anxiety, and depression symptoms and predictive factors.
- The objectives of the study are to identify the characteristics of the sample and to investigate the prevalence of and predictive factors for the co-existence of paternal stress, anxiety, and depression symptoms.



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Findings

- Demographic characteristics and mental health history
- Stress, State/Trait Anxiety and Depression Symptoms Scores
- Co-existence of stress, anxiety, and depression symptoms
- Predictive factors for the coexistence

Findings

- A total of 553 questionnaires were administered of which 361 were returned.
- Three hundred and sixty-one were included yielding a response rate of 65%.

Demographic characteristics and mental health history

Table 1. Demographic characteristics and mental health history, n=340¹ (¹unless otherwise stated)

	n	(%) ¹
Age (years): mean(SD)	35.7	(5.8)
Nationality		
Irish	286	(84.1)
Non-Irish	54	(15.9)
Highest level of education (n=339)		
Primary Level	1	(0.3)
Secondary Level	97	(28.6)
Third Level	241	(71.1)
Current relationship status		
Married	239	(70.3)
Co-habiting	77	(22.6)
In a relationship but not co-habiting	21	(6.2)
Single	3	(0.9)
Current employment status		
Full-time employment	280	(82.4)
Self-employed	36	(10.6)
Unemployed	12	(3.5)
Part-time employment	7	(2.1)
Student	3	(0.9)
Homemaker	1	(0.3)
Retired	1	(0.3)
Self-reported mental health history		
Anxiety	31	(9.1)
Stress	22	(6.5)
Depression	22	(6.5)
Other	3	(0.9)
Partner mental health history		
Depression	35	(10.3)
Anxiety	27	(7.9)
Stress	15	(4.4)
Other	5	(1.5)



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Stress, State/Trait Anxiety and Depression Symptoms Scores (n=340)

(The median(IQR) was used for the STAI and EPDS as the data distributions were positively skewed)



	Definition	Mean(SD) median(IQR)	Prevalence % (n)	(95% CI)
Stress	Moderate or high perceived stress: Score \geq 14	12.36(6.01)	41.8 (142)	(36.5 - 47.2)
Trait-Anxiety	Clinically significant anxiety: Score \geq 40	32(26-40)	26.5 (90)	(21.9 - 31.5)
State-Anxiety	Clinically significant anxiety: Score \geq 40	29(24-38)	21.8 (74)	(17.5 - 26.5)
Depression - symptoms	Depressive symptoms: Score \geq 12	5(2-8)	13.8 (47)	(10.3 - 18.0)

Co-existence of stress, anxiety, and depression symptoms

One symptom only

Stress	46	13.5 (10.1 - 17.6)
State-Anxiety	6	1.8 (0.7 - 3.8)
Depression - minor symptoms	2	0.6 (0.1 - 2.1)
Depression - major symptoms	2	0.6 (0.1 - 2.1)
Trait-Anxiety	2	0.6 (0.1 - 2.1)

Two symptoms

Stress, Trait-Anxiety	10	2.9 (1.4 - 5.3)
Stress, Depression - minor symptoms	7	2.1 (0.8 - 4.2)
Stress, State-Anxiety	5	1.5 (0.5 - 3.4)
Stress, Depression - major symptoms	4	1.2 (0.3 - 3.0)
Trait-anxiety, Depression - minor symptoms	4	1.2 (0.3 - 3.0)
State-Anxiety, Trait-Anxiety	3	0.9 (0.2 - 2.6)

Three symptoms

Stress, Depression - major symptoms, Trait-Anxiety	10	2.9 (1.4 - 5.3)
Stress, State-Anxiety, Trait-Anxiety	9	2.6 (1.2 - 5.0)
Depression - minor symptoms, State-Anxiety, Trait-Anxiety	3	0.9 (0.2 - 2.6)
Stress, Depression - minor symptoms, Trait-Anxiety	3	0.9 (0.2 - 2.6)
Stress, Depression - minor symptoms, State-Anxiety	2	0.6 (0.1 - 2.1)

All four symptoms

Stress, Depression - major symptoms, State-Anxiety and Trait-Anxiety	31	9.1 (6.3 - 12.7)
Stress, Depression - minor symptoms, State-Anxiety and Trait-Anxiety	15	4.4 (2.5 - 7.2)

Co-existence of stress, anxiety, and depression symptoms

- Symptoms of stress were more common than symptoms of anxiety and depression and when a father had two symptoms, stress was the symptom most likely to co-exist with another symptom
- The co-existence of two or more symptoms was almost twice as common (n=106; 31.17%) as having one symptom only (n=58; 17.0).
- For the 33 fathers with two symptoms, the co-existence of stress and trait-anxiety was the most common (n=10, 2.9%; CI 1.4-5.3), followed by stress and depression symptoms (n=7, 2.1%; CI 0.8-4.2).
- Forty-six fathers (13.5%) had the co-existence of stress, anxiety, and depression symptoms.



Co-existence of stress, anxiety, and depression symptoms

- Highlights the need to move away from a predominant focus on depression.
- Focusing on depression does not accurately represent the substantive risk to paternal mental health wellbeing and the resultant negative impact.
- The co-existence of adverse mental health outcomes results in fathers presenting with complex and mixed symptoms, making their symptoms harder to identify and manage when the focus is almost exclusively on depression.



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Predictive factors for the coexistence of stress, anxiety, and depression symptoms

- Being of a younger age ($p=0.034$).
- Single/not cohabiting ($p=0.043$).
- A history of adverse mental health outcomes ($p<0.001$) including a history of stress ($p<0.001$), a history of anxiety ($p<0.001$) and a history of depression ($p=0.009$).
- A negative experience of labour and birth ($p<0.001$).



Conclusion

- The co-existence of paternal adverse mental health has not received attention from researchers to date.
- The co-existence of two or more symptoms was almost twice as common as having one symptom only, highlighting that the current focus on depression does not accurately represent the substantive risk to paternal mental health wellbeing.
- If clinicians and researchers want to more accurately understand and capture the range of challenges experienced by fathers during the transition to first-time or subsequent fatherhood, they will need to move towards a broader understanding of adverse mental health outcomes to include stress and anxiety.



What about clinical practice?

- Paternal perinatal mental is not widely acknowledged in clinical practice (Seedat 2020).



Lack of father-specific supports (Qualitative paper currently under review)

- Fathers felt that the supports that they received were not paternal specific but more as a result of visiting their partner at the hospital. When it came to accessing support for their own wellbeing, fathers highlighted the paucity of services available:
- *“Need more support services for fathers as I feel they don’t have much for fathers” (P12)*
- *“I scarcely recall any info for help for fathers struggling and wish it was more visual and vocal. So much help for the mothers which is quite right but I feel Dads can get left behind a bit” (P92)*

Is there some universal support that could impact PPMH?

- The unintended consequences of parental leave policy

The unintended consequences of parental leave policy

- Several countries have introduced paternal leave policies in order to encourage and involve fathers in caregiving.
- Besides supporting fathers' involvement, paternal leave may have other consequences such as health improvements.
- Paternity leave could potentially improve mental health outcomes by reducing stress and anxiety associated with work–family conflict.

The unintended consequences of parental leave policy

- Rapid literature review; 9 studies
- The findings suggest that fathers experience mental health benefits as a result of availing of parental leave.
- The length of leave availed by fathers had an impact on their mental health, with longer duration of paternity leave associated with higher levels of mental well-being.
- Flexible leave impeded fathers from fully engaging in their paternal role or their employment duties.

The unintended consequences of parental leave policy

- Policy could provide a framework for action, a benchmark for evaluating impact, and a mechanism for holding services accountable for their performance (Richardson & Carroll 2018).

The unintended consequences of parental leave policy

“2 weeks paid paternity leave is better than nothing, but it is still a long way off maternity leave. I am not asking for 26 weeks paid leave, but 6 or 8 weeks would be a start. Paternity leave should be made mandatory” (P96)

“I’m a father of twin girls and I worry that paternity leave will not be adequate enough to help my wife. I feel it should be at least double what is currently is for twins” (P95)

“Paternity leave is €250 a week which is not enough! Can’t live on that with a mortgage, bills to pay, and now a baby to feed and clothe. Causes stress, NOT realistic, can’t afford to take paternity. Needs to change, currently only a token gesture” (P56)

“Only because company are paying me full wages otherwise, I wouldn’t take it [paternity leave] €250 not enough to run a family, needs to increase” (P48)

Recommendations for research

- Paternal mental health during the perinatal period continues to be under-researched.
- Future research needs to move away from a depression centred focus to encompass a broader concept of paternal perinatal mental health to include the use of measurement tools specifically developed to detect SAD in men, qualitative studies and mixed methods/triangulation of findings.



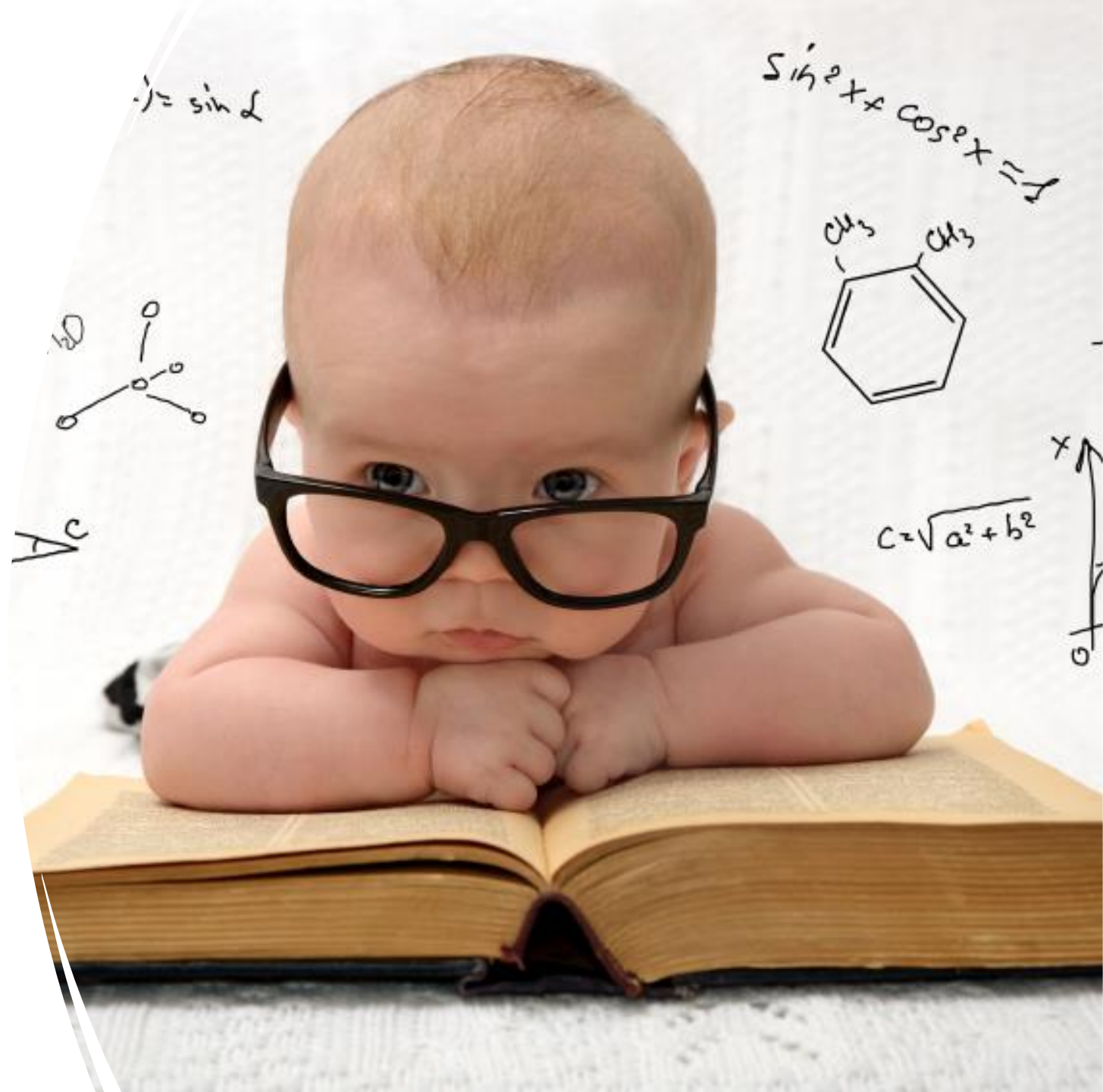


Recommendations for research

- Longitudinal studies are needed to build a more comprehensive picture of paternal mental health across the perinatal period.
- Research is needed to establish evidence-based interventions that are clinically proven to reduce stress.

Recommendations for research

- Studies involving fathers from diverse backgrounds are needed, as most of the studies to date have included homogeneous populations of white, married, employed, highly educated, heterosexual fathers living in high income countries (Cameron et al. 2016, Leach et al. 2016).



Recommendations for research

- The existing research assessing paternal perinatal mental health has been predominately quantitative (Shorey & Chan 2020).





Recommendations for education

- Men are twice as likely as women to have low health literacy (Hambidge et al. 2021), and they lack exposure to information about the potential adverse mental health that they may experience during the transition to first-time or subsequent fatherhood (Philpott & Corcoran 2018).

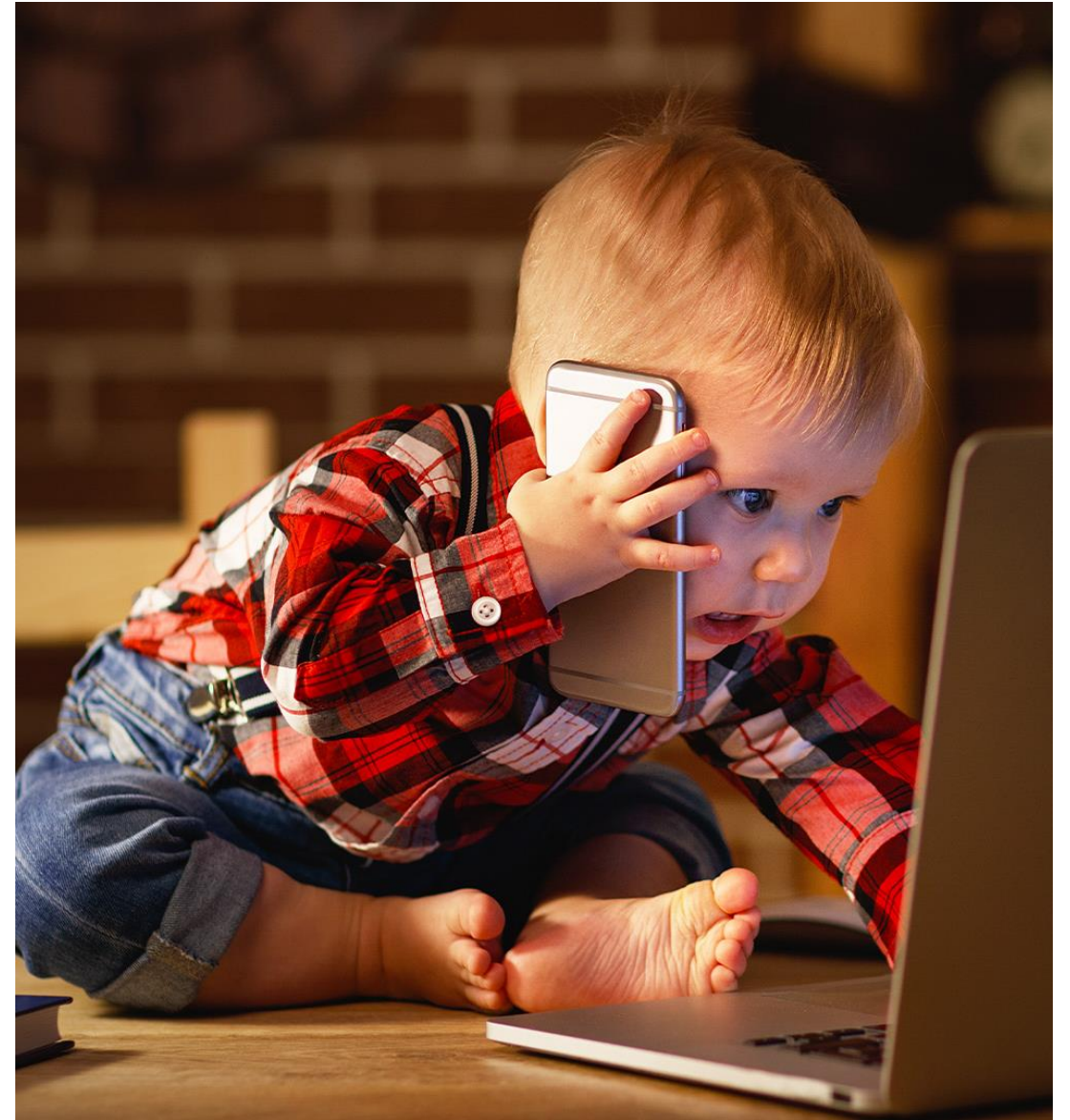


Recommendations for education

- It has been reported that the most effective support for fathers is likely to come from their partner (Wee et al. 2013). More than 90% of fathers rely on their partner as a source of emotional and/or informational support during the perinatal period (Forsyth et al. 2011).
- Therefore, a couples-focused approach to education could be vital to enhance the knowledge that fathers glean from the all-male antenatal classes.

Recommendations for education

- The research literature suggests that HCPs lack knowledge and education in relation paternal perinatal mental health (Hambidge et al. 2021).
- Education on preventing, identifying, and managing paternal perinatal adverse mental health could be provided as part of undergraduate and postgraduate education curricula and continuing professional development to address the knowledge deficit.



Recommendations for clinical practice

- Midwives, PHNs and GPs who engage with fathers in the postnatal period should consider mental health issues such as stress, anxiety and depression.



Recommendations for clinical practice

- Currently in Ireland and globally, there are specialist mental health services accessible to women during the perinatal period. The remit of these services does not to extend to fathers experiencing adverse mental health.



Recommendations for policy

- A policy specifically focused on paternal perinatal mental health or as a detailed component of the next men health's strategy has the potential to increase visibility and be a catalyst for raising the profile of the perinatal mental health issues affecting fathers at a local, national, regional, and global level.



Conclusion

- The importance of PPMH is highlighted by the fact that it occurs at a time which is a crucial time for fathers in terms of bonding with their infant, supporting their partner and redefining their relationship with wider society (Bakermans – 214 Kranenburg et al. 2019).
- It is also during this period, that fathers have contact with midwives while visiting their partner and new-born infant at the maternity hospital and PHNs undertaking primary visits in the community.
- These contacts could potentially provide a window of opportunity to engage fathers in conversations about their mental health (Huusko et al. 2018).



Questions



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