Postpartum PTSD is a consequence of unexpected major pelvic floor injury and rarely identified after traumatic vaginal birth

Elizabeth M Skinner
PhD Faculty of Medicine,
The University of Sydney [In Press]
Dr Albert McKern Scholar
MHS, RN RM CFHN
Co-founder Australasian Birth Trauma Association

THE UNIVERSITY OF SYDNEY

Australasian BIRTH TRAUMA Association

Doctoral research study:

The link between psychological and somatic sequelae of traumatic vaginal birth

Hypothesis/aims of study:

- Birth damage with resultant pelvic organ prolapse and fecal incontinence, is likely to have psychological consequences, due to debilitating lifestyle alterations and sexual dysfunction.
- The aim of this study was to investigate links between psychological and somatic sequelae of traumatic vaginal birth

Methods:

- 40 first-time mothers, identified from a pelvic floor assessment study, deemed low risk prior to birth, were interviewed.
- Women were retrospectively assessed by 3D/4D imaging and diagnosed with *levator ani* muscle (LAM) damage and pelvic floor dysfunction at 3-6 months postpartum
- Template consisted of open ended questions for 35-40 minutes via phone, Skype , face to face. The interviewer was a midwife.
- Thematic purposeful analysis was undertaken. Ethics approval was granted. [Dietz 2007; HREC approval]

[Skinner, Dietz, 2015; Skinner et al, 2018]

THE UNIVERSITY OF SYDNEY

Findings from interviews of women diagnosed with LAM avulsion, 1-4 years postpartum (2013-4)

[Skinner et al, 2018]

10 statement categories identified	n= 40	%
1. *"…antenatal classes were 'idealized' with an emphasis on natural childbirth"* resulting in poor preparedness for birth	29	73 %
2. No information was provided by clinicians on potential postpartum pelvic floor morbidities. *'… I had never heard of vaginal prolapse or rectocele until I was diagnosed'*	36	90 %
3. Conflicting advice from clinicians before, during & after birth	35	88 %
4. Partners traumatized by unexpected birth events and sequelae	21	53 %
5. Long term sexual dysfunction & marital disharmony	27	68 %
6. Negligible postnatal assessment of pelvic floor or perineal injuries -*'I felt abandoned'*	36	90 %
7. Multiple symptoms of pelvic floor damage re pelvic organ prolapse, urinary & fecal incontinence, sexual dysfunction.	35	88 %
8. 'Putting up' with morbidities that had been dismissed as normal. '…*this is a hidden injury and I can't share it with anyone'.*	36	90 %
9. PTSD symptoms: re- experiencing traumatic birth events, flashbacks and nightmares during sex, detachment, avoidance of birth reminders, numbness,	27	68 %

Overarching themes after analysis

Theme 1:

Lack of accurate information about risk factors of vaginal birth & potential pelvic floor morbidities

- **Mothers had not understood what was happening to them** "…I felt brainwashed – classes were biased towards natural birth and romanticized delivery".
- **Conflicting advice that exacerbated the impact of traumatic intrapartum events** "…the doctor wanted to take me to theatre ...but the midwife wanted to wait."
- **Women were traumatized by unexpected injuries that lacked validation**"…no one checks you after birth in the hospital or later – it stays hidden- I was abandoned."
- **Assessment of somatic damage lacked therapeutic efficacy and resulted in unidentified impaired mental health**. "… I am traumatized, I do not have PND…that EPDS is useless"

"…My birth was a nightmare that lacked medical accountability, support and continuity ...my life has been severely affected by a terrible labour and delivery that left me with a blown out pelvic floor." [Skinner et al, 2018]

Theme 2:

Impact on partner and sexual relationships

- **Women reported anxiety, self blame & panic regarding sexual relations**
- **They felt "let down" by clinicians who told them sex would return to normal after birth.**
- **Many were unsure if partners understood the impact birth injuries had on sexual relations** … several suggested the interviewer talk to men
- **Women often avoided discussion about sex with partners**. This resulted in marital disharmony, maternal emotional detachment and men's distress re lack of intimacy.
- **Sexual contact was infrequent, emotional, invasive and initiated 'flashbacks' of traumatic delivery**.
- **Most said they had no sensation and just wanted sex over**… their prolapse was like a "…sausage between their legs and sex was impossible";

"…every aspect of my life has been affected including my relationship with the baby's father who has left me. How can I ever navigate sex with another partner?"

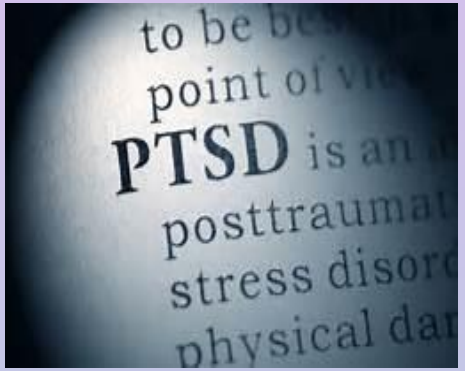
[Skinner et al, 2018]

Theme 3:

Somatic and psychological symptoms

- **Symptoms of prolapse that** included, vaginal bulge, dragging sensation, "…my vagina does not belong to me" triggered emotional trauma symptoms
- **Urinary incontinence** was isolating and triggered panic feelings due to total lack of control. "…after I change my baby's nappy I need to change mine."
- **Severe constipation** was common; **fecal incontinence** was rarely mentioned but evident in data assessments.
- **Over 2/3 of women disclosed 3-4 symptoms of PTSD** including: flashbacks, detachment, avoidance of birth reminders, numbness and severe anxiety. [DSM-IV- TR, 2000]
- **Many were still numb and detached at the time of ultrasound appointment 3-6 months after birth** and did not retain information or understand injuries
- **Others experienced poor bonding with their babies**.
- **A few women denied symptoms that were evident in assessments.**
- Mothers reported they were "…shell shocked," "…in a bad or terrible place," "…did not tell anyone," "… felt detached." I feel abandoned…is that because I am weak and do not measure up as a mother." "…this is a hidden injury; I cannot tell anyone."

[Skinner et al, 2018]



Theme 4

Dismissive reactions from postnatal clinicians

- **Women reported that clinicians typically dismissed birth damage symptoms and they became anxious, numb and isolated**.
- **Many exhibited 'shame and stigma' about injuries that were clinically viewed as** "…normal birth outcomes for other mothers".
- **Mothers reported that clinicians rarely allowed them to discuss sexual problems** and dismissed their concerns with comments like "…sex will make it get better."

  "…I was in shock and felt devastated that I was unable to get any health professional to understand

  …their unconcerned manner was overwhelming."

- **Women had hoped for more information** and reported that clinicians were "…always too busy."

"…I just put up with the horrible consequences – it is part of having a baby."

[Skinner et al, 2018]

Discussion

Somatic sequelae of vaginal birth regarding pelvic organ prolapse, fecal incontinence and sexual dysfunction **were strongly linked to symptoms of PTSD in this cohort.**

More than **2/3 of mothers disclosed 3-4 symptoms of postpartum PTSD** 1-4 years after birth, including:

- **Emotional detachment**
- **Re-experiencing birth events re nightmares/ flashbacks**
- **Numbness, estrangement from social network.**
- **Increased arousal re sleep problems, hypervigilance,**
- **Avoidance of birth reminders** [DSM-4 TR, 2000; Beinart et al, 2009]

Women felt **stigmatized, ashamed and weaker than other mother**s who did not sustain these injuries.

Reported emotional trauma symptoms, as per DSM criteria, demonstrated that postpartum PTSD was a consequence of unexpected major pelvic floor dysfunction.
Somatic and psychological trauma were both observed to be clinically unidentified.

[Skinner, Barnett et al, 2018]

This research supports vaginal birth that involves:

- **Antenatal informed consent** regarding risk factors of vaginal delivery
- **Uptake of research** findings into clinical practice re imaging and mental health research
- **Postnatal assessment of pelvic floor injuries** with accurate diagnostic measures
- **Clinical awareness & therapeutic efficacy of postpartum emotional trauma symptoms**

Although, many women have successful vaginal deliveries with minimal postnatal problems, these issues are integral
in facilitating better emotional and physical outcomes for mothers.

Findings of this study observed that substantial lifelong injuries and emotional distress are poorly identified despite a plethora of research on both morbidities since the early 21st Century and some as far back as 1907, 1943.

[Haliban, Tandler, 1907; Gainey, 1943; Ayers, 2001; Delancey et al 2003; Dietz & Lanzarone 2005]

The creation of the Australasian Birth Trauma Association [ABTA]

This doctoral research is very thankful to the 40 brave women and 7 male partners, who spoke honestly about their enduring trauma. These findings facilitated the creation of ABTA for other couples !

During interviews [2013-4] that resembled debriefing sessions many women reported:

- **Symptoms of post natal emotional distress differed to those of PND**
- **EPDS questions were not applicable to their symptoms**
- **Birth injuries had resulted in sexual dysfunction and marital disharmony**

In 2015, the author liaised with Professor Susan Ayers, expert research psychologist re postpartum PTSD, at City University of London and, was invited to present her findings that were observed to be **original risk factors of PTSD**

It seemed that Canada Trauma had been founded in 1998; UK Birth Trauma in 2003.

Hence **ABTA was created in 2017.**

The vision for ABTA was to give distressed postnatal women 'a voice' There are now 1000 members on a private Facebook page and board members that comprise: a mother, three midwives, two urogynecologists, a perinatal psychiatrist. In August 2019, we held our first national conference in Brisbane

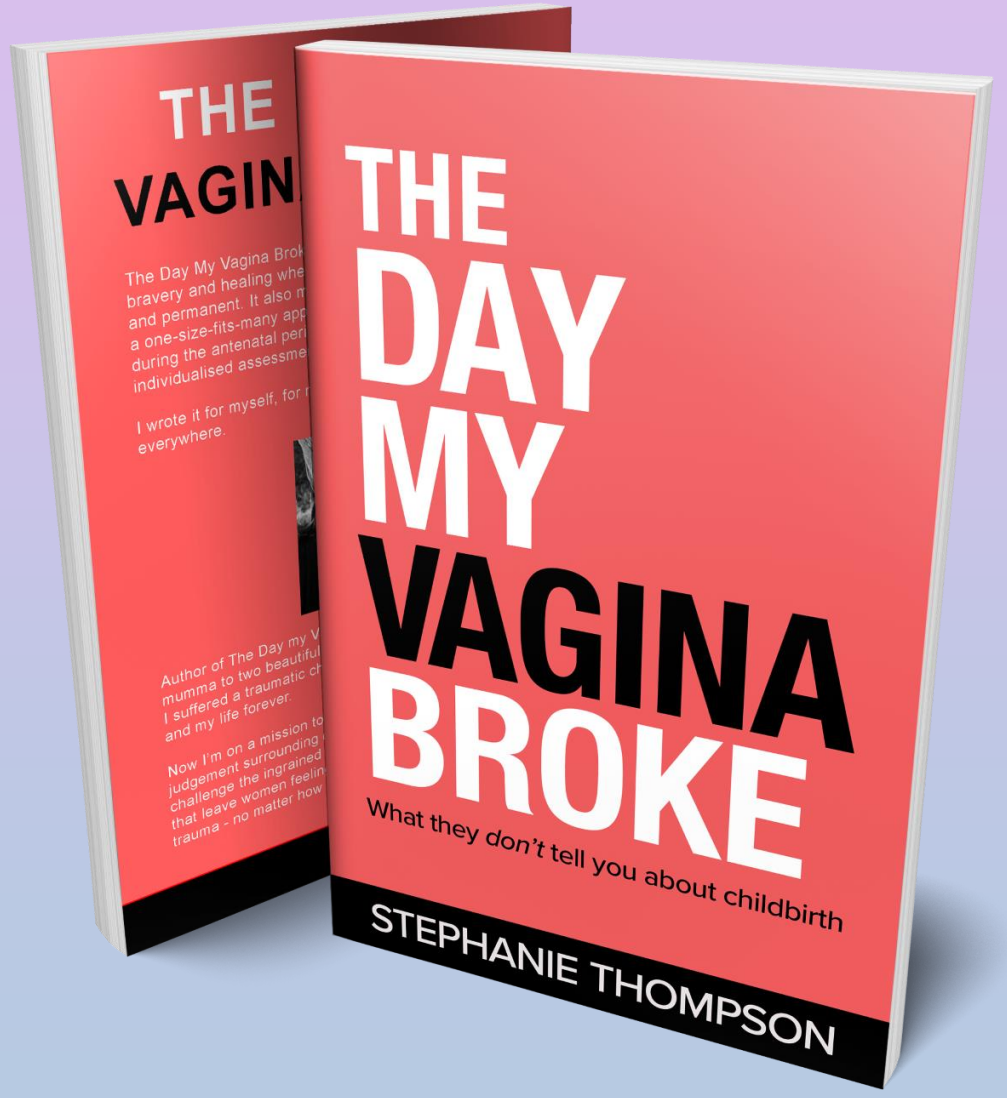
A member of ABTA wrote:

This book is a mother's journey in comprehending the adverse effects of somatic birth trauma. Stephanie encounters insurmountable health care obstacles in her attempts to navigate the current maternity system and observes that:

- 21st-century women still face barriers to postnatal care
- Vaginal birth is idealized as 'sacrosanct'
- The postnatal damaged vagina is a 'taboo' topic.
- Mothers face stigma and judgement.

Worryingly, the outcome was suboptimal and involved:

- Negligible physical assessment
- A likelihood of impaired lifestyle and mental health issues.
- Limited employment options
- Sexual dysfunction.



Why is pelvic floor birth damage so significant?

Etiology

- Damage occurs when a previously lesser known, **pelvic floor structure,** called the **levator ani muscle (LAM)** is 'torn' or avulsed from attachment site (s) on the pubic bone during vaginal delivery
- This damage is different to perineal injury e.g. 3rd and 4th degree tears
- Until the introduction of early 21st Century imaging technology, pelvic floor damage was poorly understood and often attributed to nerve injury
- Current studies show that obstetric variables increase the risk of these severe birth injuries e.g. forceps use during lengthy 2nd stages of labour, to deliver babies larger than 4kg
- MRI & 3D/4D imaging research has revealed that intrapartum damage to the LAM, is the 'missing link' between vaginal birth & pelvic organ prolapse

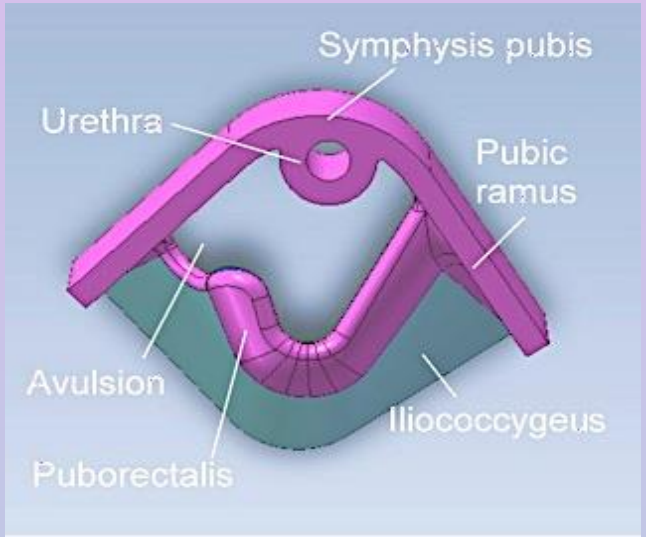
[Delancey 2003; Dietz, Lanzarone 2005; Dietz 2013; Dietz 2015]

Prevention

- A modifiable risk factor is for the decrease of forceps in labour wards [Dietz 2013]

Treatment

- Suboptimal surgical outcomes. Conservative treatment: vaginal pessaries and pelvic floor physiotherapy [Dietz 2013]



Avulsion model depicting right-sided *levator ani muscle* (LAM) avulsion.
[Permission from Dietz HP. Nepean Medical School, University of Sydney]

Postnatal pelvic floor dysfunction is a global problem

Prevalence

- 10-30 percent of first- time mothers sustain major pelvic floor damage [Dietz, 2013]
- Statistics are the same as breast cancer and twice those of prostate cancer [Delancey, 2016]

Sequelae

- Prolapse or herniation of bowel, bladder and/or uterus into the vagina, fecal incontinence, sexual dysfunction [Dietz, 2015]
- Postpartum PTSD
- Women suffer 'in silence' without accurate physical and mental health diagnosis or treatment options [Skinner et al, 2018]

International collaboration

Australian pelvic floor researchers work together with UK, Sweden, New Zealand, USA, Hong Kong, Malaysia, Chile & South Africa for better obstetric outcomes.

Pre-conceptions that adversely impact the outcomes of vaginal birth

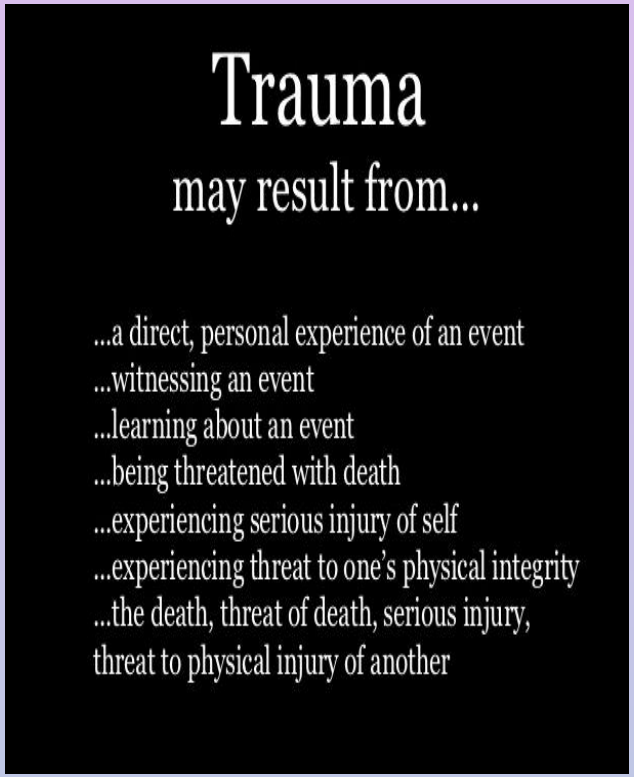
Fact or fiction?

- **Consequences of posttraumatic stress disorder (PTSD) only occur after wars and accidents and are not related to the predictability of birth. FICTION**
- **Vaginal birth is empowering and positive for ALL women. FICTION**
- **Pelvic floor injury is normal. FICTION**
- **All women get perineal tears, episiotomies and /or pelvic floor damage that heal within 6 weeks. FICTION**
- **Regular pelvic floor exercises help all mothers to resume sexual relations within a few months. FICTION**
- **Perineal muscles are the same as pelvic floor muscles. FICTION**

[Dietz, 2013, Ayers 2009]

Current research into postpartum PTSD

- **3-4% of women suffer from this disorder after birth events** [Ayers et al , 2018]
- **15 to 19%** sustain PTSD after high risk deliveries and birth complications
- Minimal studies exist on postpartum PTSD in men [Etheridge, Slade 2017].



Main risk factors

- Complications of pregnancy and delivery
- Perceived lack of support from maternity clinicians and partners "…I could have died and they weren't there to save me." [Ayers, McKenzie- McHarg & Eagle, 2007]
- Lack of validation, decreased social support and poor marital adjustment

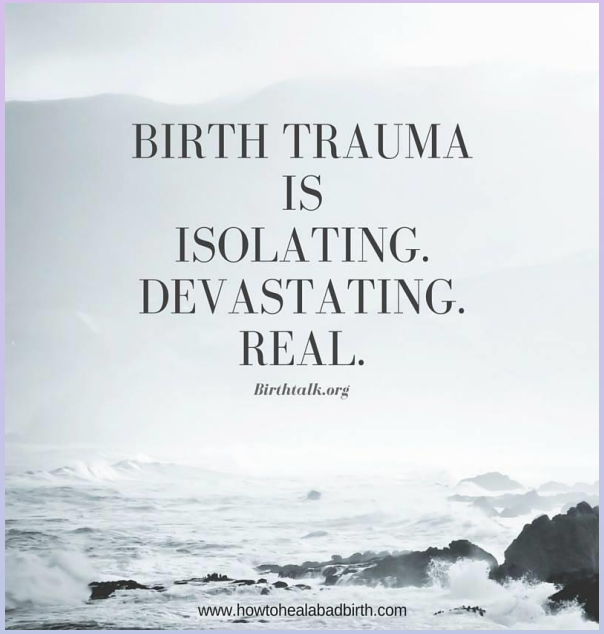
Postpartum PTSD is largely unrecognized in maternity facilities. **Unlike PND routine screening is not employed**. [Ayers et al, 2018]

Although LAM avulsion and related symptoms affect up to 30 % of first time mothers [Dietz, 2013], this risk factor is largely absent in the literature on postpartum PTSD.

Postpartum PTSD and non-obstetric PTSD

Culturally childbirth is purported to be:

- **Predictable**
- **Undertaken voluntarily**
- **A positive event**



Current research shows that ‘terrifying’ and unpredictable stressors of childbirth can result in psychological trauma that are applicable for diagnosis of PTSD as per Diagnostic and Statistical Manual of Mental Health Disorders (DSM) criteria. [Ayers, 2004; Ayers , 2009. Beinart et al, 2009; DSM-1V-TR]

It is well accepted that non-obstetric PTSD symptoms are a consequence of participation in unforeseen and frightening events attributed to wars, civilian accidents, terror attacks. [Andreasen, 2010]

Childbirth is no different !

Interviews with men who witnessed traumatic births

This research also interviewed men regarding their understanding of partners' physical vaginal injuries
and sexual dysfunction.

- Men noticed women were emotionally detached after birth with symptoms that lasted 1-4 years postpartum
- Men lacked medical information and were *"… in the dark*" with limited understanding of prolapses, maternal sexual dysfunction and lack of intimacy
- Men and women BOTH reported marital disharmony up to 4 years after delivery regarding sexual relationships and *"…had nowhere to turn"*

[Skinner, doctoral thesis 2019]

John : 3 years after his wife's traumatic birth

"…I tried to talk to other men about their experiences because I wanted to understand my wife's

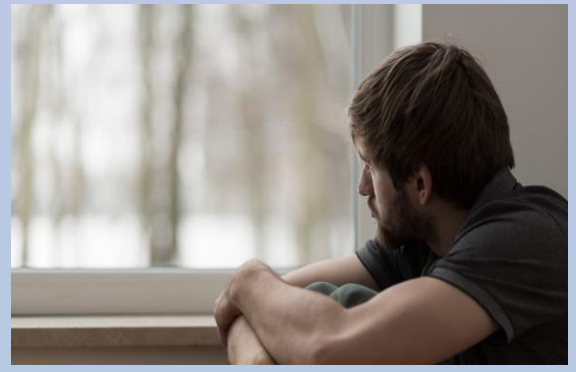
emotional state and the bad effects of birth.

….it was evident men demonstrated the bravado of 'everything was fine' but that was small consolation to me.

…some men felt the same helplessness as me… we seemed to be unable to get behind their wives' self-made walls.

….I had hoped for a better discussion to assist me to help my wife's state of mind and marital situation. I just want my wife back…"

[Skinner, doctoral thesis 2019]



James: 2 years after his partner's vaginal birth

"…I do not really understand the implications of a vaginal prolapse …but I know my partner was severely injured during birth…doctors just say it is normal…

….I did not expect my partner to be so different and unable to do normal activities like lifting baby, exercise or run, standing for long periods…

*… **after delivery I overheard a midwife say that she had a low threshold of pain. I was confused because my partner is a black belt in karate…***

….everything after the birth was altered – she was a different person to the one I knew before and still is not back to normal…I miss the intimacy… I am very concerned." [Skinner, doctoral thesis 2019]

Matthew: *"...after 12 months we saw a urogynaecologist together…we finally understood the effects of birth trauma*

"…for months my wife was very emotional and could not take in information about what was happening to her body.

…. After the birth she wanted to flee to the safety of home …so we left the hospital.

…She said she felt traumatized not depressed and, was unable to come to terms with these injuries until a urogynecologist really explained them to us 12 months after the birth.

…This helped her cry about the injuries…before that she was numb.

….She said that when she cried and was not dealing with it in silence anymore, she was taken seriously – before then no one believed her."

[Skinner, doctoral thesis, 2019]

Conclusion

This doctoral study presents significant knowledge and understanding of the **relationship between somatic and psychological sequelae of traumatic vaginal birth** that in the past was largely **unrecognized and dismissed**

Outcomes facilitated **the founding of ABTA as a means for women to be validated about debilitating and long term consequences of 'HIDDEN' birth trauma**

Results highlight **ineffective postnatal assessment for women with somatic and psychological trauma** after complicated vaginal births. Contributing factors reported by women and men included:

- **Lack of antenatal information on risk factors of vaginal birth**
- **Over- emphasis of natural birthing methods**
- **Routine use of EPDS without clinical consultation**
- **Suboptimal uptake of research regarding pelvic floor damage and postpartum PTSD in clinical practice.**

Findings aspire to inform future clinical strategies regarding more optimal maternal outcomes in **obstetrics, midwifery and perinatal mental health** and thus enable the family unit to function well.

REFERENCES

- **Andreasen NC.** Posttraumatic stress disorder: a history and a critique. Ann N Y Acad Sci 2010. 1208, pp.67-71
- Ayers S. and Pickering AD. Do women get posttraumatic stress disorder as a result of childbirth? A prospective study of incidence. *Birth 2001*: *28*(2):111-118
- **Ayers S**. Delivery as a traumatic event: Prevalence, risk factors, and treatment for postnatal posttraumatic stress disorder. *Clinical Obstetrics and Gynecology, 2004 47*, 552-567.
- **Ayers S, Ford E.** Birth Trauma: Widening our knowledge of postnatal mental health. *The European Psychologist. 2009; 11(16):* 1–4. [Cited 2018, Dec 18] Available from URL: www.ehps.net/ehp
- **Ayers S, Wright DB, Thornton A.** Development of a measure of postpartum PTSD: The City Birth Trauma Scale. *Frontiers In Psychiatry. 2018; Article 409:* 1-8. doi: 103389/fpsyt.2018.00409
- **Ayers S., McKenzie-McHarg K & Eagle A**. Cognitive behaviour therapy for postnatal posttraumatic stress disorder: case studies. *Journal Of Psychosomatic Obstetrics & Gynecology 2007, 28*, 177-184.
- **American Psychiatric Association** (2000): Diagnostic and statistical manual of mental disorders. 4th Ed. Text Revision Washington, DC: Author.
- **American Psychiatric Association** (2013). *Diagnostic and statistical manual of mental disorders* (5th Ed.). Washington, DC: Author
- **Bailham D, Joseph S.** Post-traumatic stress following childbirth: A review of the emerging literature and directions for research and practice. *Psychol Health Med. 2003; 8(2)*: 1-10.
  doi: 10.1080/1354850031000087537
- Beinart H. Kennedy P. & Llewelyn S. Clinical Psychology In Practice. Oxford 2009: Blackwell.
- **Coates R, De Visser RO, Ayers S.** Not Identifying With Postnatal Depression: A qualitative study of women's postnatal symptoms of distress and need for support. *J Psychosom Obstet & Gynaecol. 2015; 36(3):*114-21.

REFERENCES

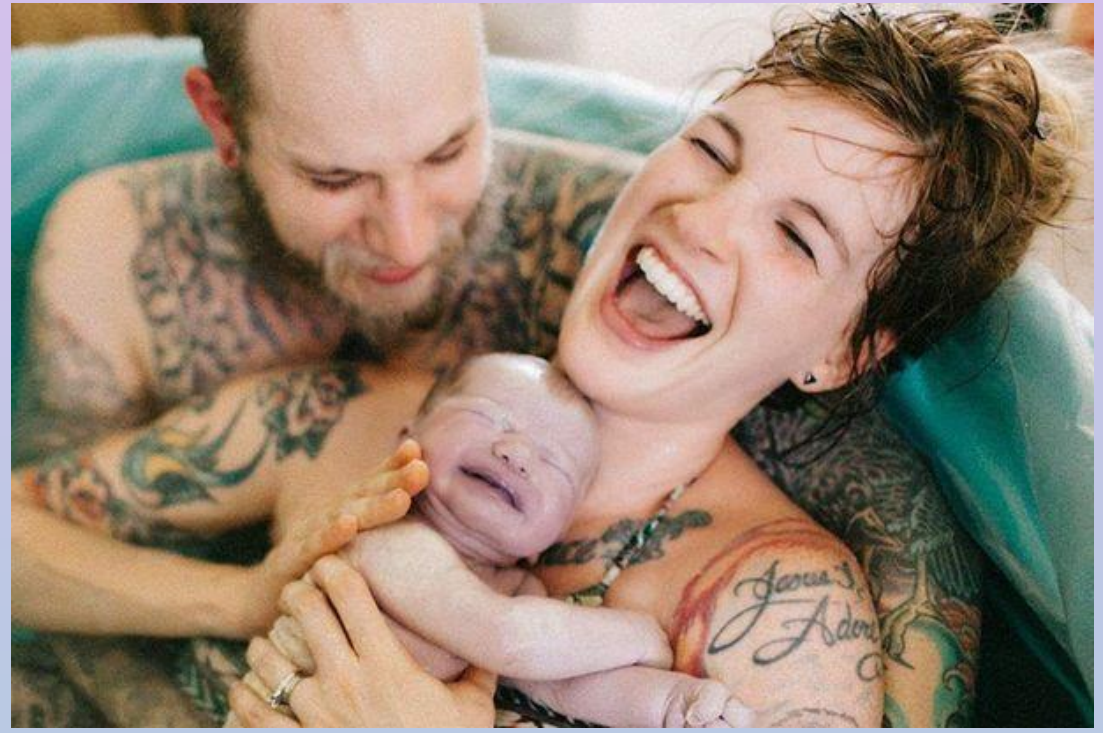
- Delancey JO, Kearney R, Chou Q et al. The appearance of levator ani muscle abnormalities in magnetic resonance images after vaginal delivery. *Obstet Gynecol. 2003*; *101 (1):* 46–53.
- Dietz HP, Lanzarone V. Levator trauma after vaginal delivery. *Obstet Gynecol. 2005; 106:* 707–712.
- **Dietz. HP.** (2007). Nepean Medical Research Foundation. The Epi-no Trial: Effect Of Intravaginal Balloon Device On Levator Trauma In Mothers Following Childbirth. [Cited 2018, March 5]. Available from URL: https://www.anzctr.org.au/trial/registration/trialreview.aspx?id=308224
- **Dietz HP.** Pelvic floor trauma in childbirth. *Aust N Z J Obstet Gynaecol*. 2013; 53:220– 230. doi: 10.1111/Ajo.12059
- **Dietz HP.** Pelvic organ prolapse: a review. *Aust Fam Physician. 2015; 44(7):* 446-452.
- **Etheridge J, Slade P.** "Nothing's actually happened to me.": The experiences of fathers who found childbirth traumatic. *BMC Pregnancy And Childbirth 2017;* 17:80 doi: 10.1186/S12884-017-1259-y
- **Gainey HL.** Post-partum observation of pelvic tissue damage. *Am J Obstet Gynecol. 1943; 46:* 457 – 466.
- **Halban J, Tandler J.** Anatomie und Aitologie der Genitalprolapse beim Weibe, Wilhelm Braumuller, Leipzig, Germany, 1907.
- **Poote A & McKenzie-McHarg K.** The experience of PTSD following childbirth. *Journal of Health Visiting.2015; 3(2):* 92-98. doi: 10.12968/bjmh.2015.4.3.122
- **Skinner EM, Barnett B, Dietz HP.** Psychological Consequences of pelvic floor trauma following vaginal birth: A qualitative study from two Australian tertiary maternity units. *Arch Womens Ment Health. 2018; 21(3):* 341-51.doi: 10.1007/S00737-017-0802-1

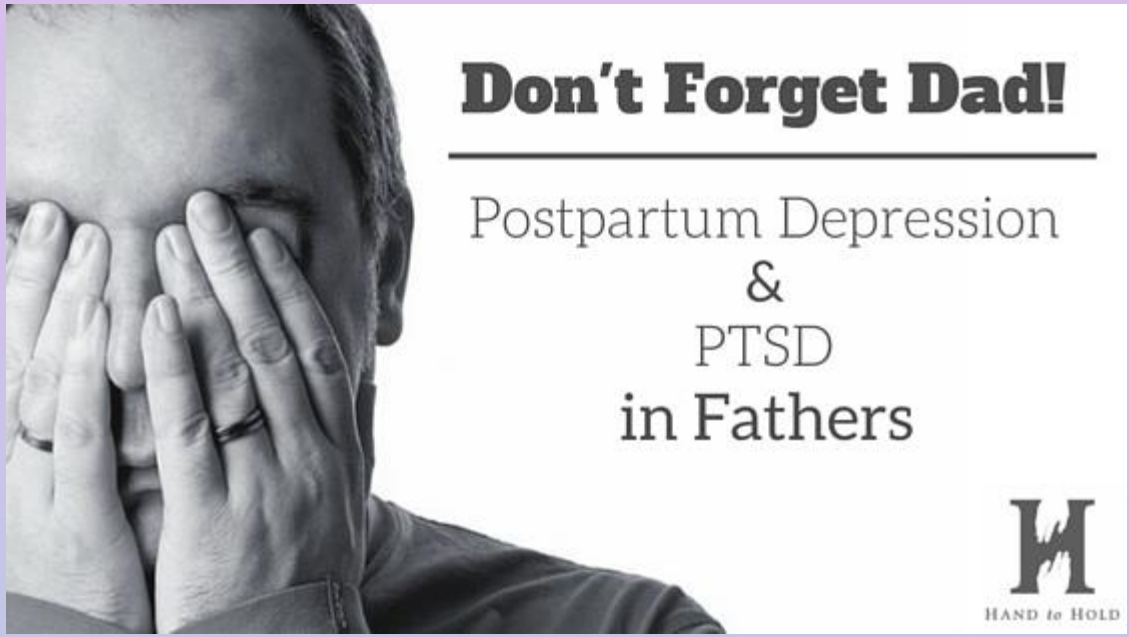
ETHICS APROVAL

- **Study 1:** Human Research Ethics Committee [HREC]: Nepean Blue Mountains Local Health District [NBMLHD] HREC, NSW, Australia. Protocol No. 07-022. Dated 30.4.2007. Sydney Local Health District [SLHD] HREC, RPAH Camperdown. NSW. Australia. Protocol No. X05-0241- “Epi- No System: Protection For The Pelvic Floor?” Dated 2.12.2005
- **Study 2:** NBMLHD HREC, NSW, Australia. Protocol No. 07-022. The Epi-no Study Updated Participant And Consent Sheets Version 9 Dated 22.03.2013; Updated Scientific Protocol Version 3 Dated 13.03.2013; Follow-up Letter To Study Participants Version 3 Dated 13.03.2013. Dr Jamshid Kalantar. Chair Of NBMLHD. HREC SLHD HREC, RPAH Camperdown. NSW. Australia :Protocol No. X09-384 “Epi-No System: Protection For The Pelvic Floor?” Dated 23.09.2013. HREC/09/RPAH/649 and SSA/09/RPAH/650. Lesley Townsend Research Governance Officer SLHD.

Childbirth can be wonderful…

Mums and dads remember the arrival of their baby with joy and ecstasy …




Don't Forget Dad!
Postpartum Depression
&
PTSD
in Fathers
HAND to HOLD