# Capacity building programme in perinatal mental health Feasibility trial of a midwifery guided early online EMDR group intervention following perinatal trauma

P.G. Taylor Miller, Prof M. Sinclair, Prof P.W. Miller, Prof D.P. Farrell, Dr P. Gillen, Dr J.E.M. McCullough, P. Klaus



Faculty of Life and Health Sciences

Ulster

University



Southern Health and Social Care Trust





ulster.ac.uk

### Background

The World Health organisation has reported an ongoing shortage of health professionals worldwide (WHO, 2021), with recommendation of all nations to implement long term strategies for addressing staff shortages and improving accessibility to mental health treatment within seven years (WHO, 2022).

This study implements a task-shifted programme of capacity building in perinatal mental health of an innovative, low intensity, trauma informed, digital EMDR group intervention (EMDRm-VGTEP). The intervention was task-shifted from mental health professionals to midwives for women in the perinatal period (the time before, during and following childbirth).

#### **Global Mean Prevalence of PTSD**

- 4% women in community samples and 18.5% of women in higher risk samples develop PTSD in the postpartum period (Yildiz, 2017).
- There is a high co morbidity between post partum PTSD and post partum depression, as evident in up to 71.54% of cases of post partum women with PTSD (Yildiz et al 2017).

#### Proposition: Early EMDRm intervention for perinatal trauma

 Early, low intensity intervention with task shifted, midwifery led psychological support (EMDRm-VGTEP) guided by AIP theory (Soloman & Shapiro, 2008) may prevent the sequalae of post traumatic stress and depression symptoms experienced by women following perinatal trauma.

#### **Quantitative Results**

Recruitment rate: 70 women were pre-screened with a 32% uptake.

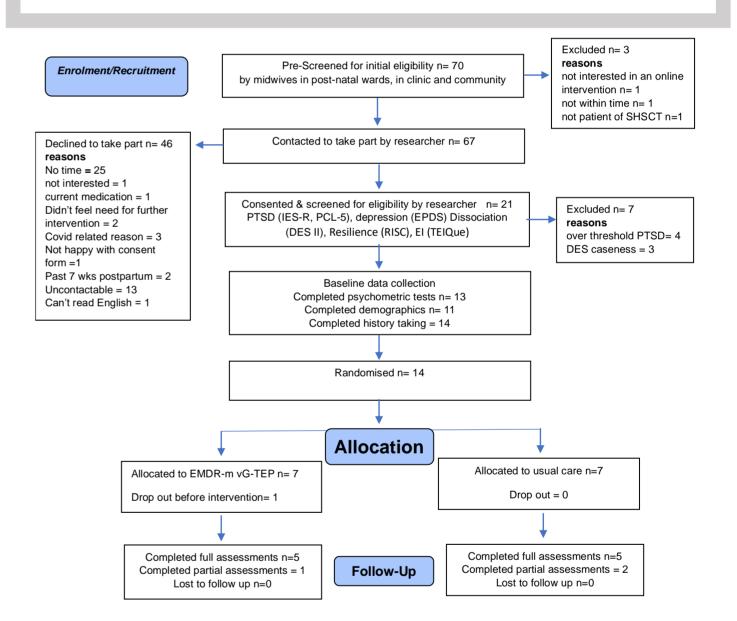
- 33% of screened women were not eligible and were referred to GP.
- A total 14 Women were randomised to either receive the EMDRm-vGTEP intervention + usual care or usual care alone by a unique computer-generated random number table.

Attrition: One woman (7%) dropped out following randomisation. Fidelity: The intervention was delivered with fidelity to the intervention protocol rated as highest satisfaction level [3] on the GTEP fidelity scale (Shapiro, 2020) by an independent EMDR Europe consultant.

**Safety:** No critical incidents were reported and there were no participant crises during intervention delivery.

**Preliminary effects**: Women who received the EMDRm vGTEP intervention reported strengthened resilience (M=30.6 sd=9) when compared with women who received usual care alone (M22.5 sd=3.44). The effect of the intervention on resilience was considered large according to Cohen's d=1.236

For more detail please refer to the Consort diagram in Figure 1.



### Aim

The aim was to test the safety and feasibility of the task-shifted EMDRm-vGTEP intervention.

### Method

**Design:** Single blind two-armed randomised controlled parallel design pilot feasibility trial with an allocation ratio of 1:1 comparing a midwifery led early online EMDR intervention with care as usual in prevention of post traumatic stress and depression symptoms with qualitative components.

**Population:** Women who had a recent caesarean section.

**Setting:** The study was conducted in a Health and Social Care Trust (HSCT) in Northern Ireland during the COIVD-19 pandemic.

**Ethics:** The trial protocol was approved by the Office of Research Ethics Committees Northern Ireland (ORECNI) (REC A, ref: 21/NI/0067)

#### Quality

• The study has been reported according to the CONSORT extension for randomised pilot and feasibility trials (Eldridge et al., 2016).

#### Analysis

- Quantitative: Descriptive statistics, mean, standard deviations and effect sizes (Cohen, 1988) were calculated using the SPSS (IBM Corp, 2020) statistical package for pilot feasibility data.
- Stopping guidelines included drop out >20% (Jarero & Lee, EMDR Council of Scholars Research Group, 2022)
- Qualitative: A focus group exploring women's experiences of the EMDRm VGTEP intervention was conducted with three women. Coding and themes were developed from women's verbatim. Brauna and Clarke's (2013) 6 step method of thematic analysis was applied to the data; [1] familiarisation with the data, [2] coding, [3] searching for themes, [4] reviewing themes, [5] defining and naming themes, and [5] writing up.

## **Qualitative Findings: Focus Group**

All women reported they would recommend the intervention to a friend. Three sub themes relating to intervention programme theory were; a reported **dose response**, **adaptive response** as postulated in the adaptive information processing theory, **and intervention accessibility**.

<sup>Dose</sup> response "It helped me digest it all...every time I finished I felt more at ease" P16

"I liked the online aspect...just the handiness of being able to set it up and not having to pack a bag and baby and make a journey" P17

Adaptive "It was nice to break it down...you do have to get on with it but you also have to find ways to cope with it" P15



### Conclusions

This study is in alignment with the World Health Organisation's (WHO, 2021) Mental Health Action Plan of preventing mental health conditions of those "at risk" of developing PTSD by building capacity and task shifting trauma focused mental health provision to non mental health professionals in a real world setting.

- Women reportedly found the intervention effective and acceptable.
- Attrition rate was acceptable (Viswanathan et al. 2017)
- Preliminary results support a strengthening of resilience and adaptive response when compared with reported scores in the care as usual group.

The EMDRm-VGTEP is a safe and feasible preventative intervention, boosting the protective factor of resilience in women experiencing distress in the early weeks following recent perinatal trauma when task shifted to midwives.

#### References

Clarke, V. and Braun, V., 2013. Teaching thematic analysis: Overcoming challenges and developing strategies for effective learning. *The psychologist*, 26(2). Cohen, J., 1988. The effect size. *Statistical power analysis for the behavioral sciences*, pp.77-83.

Eldridge, S.M., Chan, C.L., Campbell, M.J., Bond, C.M., Hopewell, S., Thabane, L. and Lancaster, G.A., 2016. CONSORT 2010 statement: extension to randomised pilot and feasibility trials. *bmj*, 355.

IBM Corp., 2020. IBM SPSS Statistics for Windows (Version 27.0) [Computer software]. IBM Corp.

Jarero, I. and Lee, C., accessed 2022. Important Considerations for PTSD Research. Council of Scholars Research Group. www.emdrcouncilofscholars.org Shapiro, E., 2020. Fidelity Scale for the Group Traumatic Episode (G-TEP). Unpublished.

Solomon, R.M. and Shapiro, F., 2008. EMDR and the adaptive information processing model: potential mechanisms of change. Journal of EMDR practice and Research, 2(4), pp.315-325.

Viswanathan M, Patnode CD, Berkman ND, et al., 2017. Methods Guide for Comparative Effectiveness Reviews. AHRQ Publication No. 17(18)-EHC036- EF. Rockville, MD: Agency for Healthcare Research and Quality.

World Health Organization, 2021. Comprehensive mental health action plan 2013–2030. Geneva: WHO

World Health Organization, 2022. World mental health report: transforming mental health for all. Geneva: WHO

Yildiz, P.D., Ayers, S. and Phillips, L., 2017. The prevalence of posttraumatic stress disorder in pregnancy and after birth: A systematic review and meta-analysis Journal of affective disorders, 208, pp.634-645.

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