







# Evaluating the impact of sling provision and training upon maternal mental health

<b>Submission date</b> 12/01/2023	<b>Recruitment status</b> No longer recruiting	 Retrospectively registered
<b>Registration date</b> 24/01/2023	<b>Overall study status</b> Completed	 Protocol added
<b>Last Edited</b> 13/11/2023	<b>Condition category</b> Mental and Behavioural Disorders	 SAP not yet added
		 Results added
		 Raw data not yet added
		 Study completed

## Plain English Summary

### Background and aims

This study aimed to examine whether providing new mothers with an infant carrier ('sling') and training in how to use it, would lead to mothers having lower postnatal depression symptoms, compared to not being provided with an infant carrier and associated training.

### Who can participate?

Expectant mothers

### What does the study involve?

Participation involves completing a questionnaire within 6 weeks of the birth of their baby, and subsequently being randomly allocated to receive the sling plus training intervention either as soon as was convenient after randomisation, or after a wait period of 3 months. Participants then either received the intervention or were added to the waiting list to receive the intervention after 3 months. Participants completed questionnaires 6 and 12 weeks after the first questionnaire.

### What are the possible benefits and risks of participating?

Direct benefits of this study include free sling hire where normally a charge would apply. While there may be no other immediate benefits for those participating in this study, it is hoped that this work will help improve our understanding of the impact of sling use on maternal mental health, well-being and parenting, and will inform future studies on this topic. The only disadvantage anticipated for taking part in this study is the time taken to complete the questionnaires. Otherwise, it is not anticipated that participating in this study will cause any disadvantage or discomfort. The potential physical and/or psychological harm or distress will be the same as any experienced in everyday life.

### Where is the study run from?

University of Sheffield, the intervention was provided by Sheffield Sling Surgery (UK)

### When is the study starting and how long is it expected to run?

June 2018 to November 2019

Who is funding this study?

University of Sheffield (UK), this study was conducted as part of a doctoral thesis in clinical psychology

Who is the main contact for this study?

Dr Abigail Millings (DCLinPsy supervisor), a.millings@shu.ac.uk

**Study website**

<https://osf.io/p23dw/>

## Contact information

**Type(s)**

Principal Investigator

**Contact name**

Dr Abigail Millings

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## **Additional identifiers**

**EudraCT/CTIS number**

Nil known

**IRAS number**

**ClinicalTrials.gov number**

Nil known

**Protocol/serial number**

Nil known

## **Study information**

**Scientific Title**

A randomised feasibility trial to evaluate the impact of the provision of an infant carrier and usage training to mothers of infants aged 0-6 weeks on maternal mental health and psychological wellbeing

**Study hypothesis**

The intervention will lead to lower postnatal depression scores, higher well-being scores, parenting self-efficacy and responsiveness, and breastfeeding frequency and duration, compared to the control group.

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Approved 27/02/2019, the University of Sheffield University Research Ethics Committee (UREC) (the University of Sheffield, Western Bank, Sheffield, S10 2TN; +44 (0)114 222 2000; psy-ethics@sheffield.ac.uk), ref: 024147

**Study design**

Single-centre randomized interventional study

**Primary study design**

Interventional

**Secondary study design**

Randomised controlled trial

**Study setting(s)**

Community

**Study type(s)**

Quality of life

**Participant information sheet**

Not available in web format

**Condition**

Maternal mental health in the postnatal period

**Interventions**

The intervention comprised the provision of free sling hire and training in how to use the sling from Sheffield Sling Library. Participation involves completing a questionnaire within 6 weeks of the birth of their baby, and subsequently being randomly allocated to receive the sling plus training intervention either as soon as was convenient after randomisation, or after a wait period of 3 months. Participants then either received the intervention or were added to the waiting list to receive the intervention after 3 months. Participants completed questionnaires 6 and 12 weeks after the first questionnaire. Randomisation was undertaken using a computer-generated random number sequence following a 1:1 randomisation ratio.

Upon completion of baseline measures, intervention participants are invited to attend a two-hour drop-in session at the sling library. These drop-in sessions are part of the sling library's usual provision at the time of the study. In this usual provision, parents are welcome to stay for as long as they wish within this time period. In usual provision, parents typically attend these sessions seeking advice and to try using a sling for the first time before buying or hiring, as well as seeking advice for slings that they are already using (e.g. through a previous purchase or hire). All contact between staff and parents takes place within one large room. As such, staff may sometimes demonstrate a sling to a group of interested parents, and parents are able to meet and chat with each other, offering opportunities for the development of social networks and social support.

To support the standardisation of session content and improve replicability, a checklist was created for use by sling library staff during interactions with study participants. Following the checklist, participants are offered sling training and advice, and a sling demonstration. Participants learn how to use one of two different types of sling: a 'Close Caboo' or buckle carrier, dependent on the needs and preferences of the mother and their infant. Participants are then given this sling, for free hire, for the duration of the study. Participants are invited to join an online sling community for further support and are given information about safe sling use and further sling library services. Throughout the study, participants are able to attend further

sling library sessions and swap their slings if they have any concerns or feel that another sling may be more suited to themselves and their infant. This flexibility was designed to replicate the responsive flexibility of usual provision by the sling library, but, unlike usual provision, at no cost to the participant.

## **Intervention Type**

Behavioural

## **Primary outcome measure**

Postnatal depression symptoms measured using the Edinburgh Postnatal Depression Scale at baseline, 6 weeks, and 12 weeks

## **Secondary outcome measures**

Outcomes are assessed at baseline and 12 weeks:

1. Maternal psychological well-being scores measured using the Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS)
2. Parenting self-efficacy and responsiveness measured using the Parenting Sense of Competency Scale (PSCS)
3. Caregiving behaviour measured using the Caregiving Experiences Questionnaire (CEQ)
4. Breastfeeding frequency and duration measured using bespoke questionnaire items

## **Overall study start date**

05/06/2018

## **Overall study end date**

19/11/2019

# **Eligibility**

## **Participant inclusion criteria**

1. Expectant mothers due to give birth within the baseline data collection period
2. Able to travel to the sling library
3. Not regularly used a sling previously
4. Mothers of twins were included in the study but completed measures based on one child only

## **Participant type(s)**

All

## **Age group**

Adult

## **Sex**

Female

## **Target number of participants**

Following the recommendations of the National Institute of Health Research for feasibility studies, a sample size of 50-60 participants (25-30 per condition) was selected.

## **Total final enrolment**

67

### **Participant exclusion criteria**

1. Had used a sling previously or attended an antenatal workshop at a sling library
2. Infants had a serious illness or disability

### **Recruitment start date**

01/04/2019

### **Recruitment end date**

19/11/2019

## **Locations**

### **Countries of recruitment**

England

United Kingdom

### **Study participating centre**

**University of Sheffield**

Western Bank

Sheffield

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## **Sponsor information**

### **Organisation**

University of Sheffield

### **Sponsor details**

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### **Sponsor type**

University/education

**Website**

<http://www.sheffield.ac.uk/>

**ROR**

<https://ror.org/05krs5044>

## Funder(s)

**Funder type**

University/education

**Funder Name**

University of Sheffield

**Alternative Name(s)**

sheffielduni, University of Sheffield UK, theuniversityofsheffield, University of Sheffield in United Kingdom, University of Sheffield, UK, The University of Sheffield, Sheffield University

**Funding Body Type**

Government organisation

**Funding Body Subtype**

Universities (academic only)

**Location**

United Kingdom

## Results and Publications

**Publication and dissemination plan**

Planned publication in a high-impact peer-reviewed journal

**Intention to publish date**

31/07/2023

**Individual participant data (IPD) sharing plan**

The datasets generated during and/or analysed during the current study will be stored in a publicly available repository. Anonymous data will be posted on the Open Science Framework here: <https://doi.org/10.17605/OSF.IO/P23DW> indefinitely, on an open-access basis (anyone can access it). The dataset is the raw data (scale scores) for the quantitative variables. Participants consented to anonymous data being used by other researchers after the trial.

**IPD sharing plan summary**

Stored in publicly available repository

## Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Protocol file</a>	version 3.0	22/02/2019	19/01/2023	No	No
<a href="#">Results article</a>		10/11/2023	13/11/2023	Yes	No