# Blood pressure in the postnatal period

| Submission date   | Recruitment status       | [X] Prospectively registered |  |  |
|-------------------|--------------------------|------------------------------|--|--|
| 04/02/2019        | No longer recruiting     | ☐ Protocol                   |  |  |
| Registration date | Overall study status     | Statistical analysis plan    |  |  |
| 06/02/2019        | Completed                | [X] Results                  |  |  |
| Last Edited       | Condition category       | Individual participant data  |  |  |
| 06/05/2022        | Pregnancy and Childbirth |                              |  |  |

### Plain English summary of protocol

Background and study aims

High blood pressure in pregnancy is an increasingly common complication that increases the risk of adverse pregnancy outcomes including maternal and infant death, damage to the mother's liver and kidneys, and premature birth. The impact of high blood pressure in pregnancy on women's health and wellbeing in the postnatal period is not well understood, along with the extent to which current postnatal services are evidence-informed and if they are meeting women's needs. This study aims to compare the postnatal health of, and the care provided to, women who had high blood pressure in pregnancy compared with women who had normal blood pressure in pregnancy.

## Who can participate?

Women aged 18 or above who gave birth in any of the participating NHS foundation trusts

## What does the study involve?

Eligible women are approached and provided with study information on the postnatal ward and those happy to participate are asked to complete a consent form and short (5 minute) questionnaire. Following this initial contact at about three months postnatal participating women are invited to complete a 15-minute questionnaire with questions on their physical health, mental health, their babies feeding habits and the postnatal care they received.

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

The study findings will be used to provide evidence on if, and how, postnatal health differs amongst women with more complex pregnancies, compared to lower risk pregnancies, and if care beyond birth is meeting these women's needs, with the view of informing revisions to current postnatal services.

## Where is the study run from?

- 1. King's College Hospital NHS Foundation Trust (UK)
- 2. Kingston Hospital NHS Foundation Trust (UK)
- 3. Ashford and St. Peter's Hospitals NHS Foundation Trust (UK)
- 4. Chelsea and Westminster Hospital NHS Foundation Trust (UK)
- 5. St George's University Hospitals NHS Foundation Trust (UK)
- 6. Manchester University NHS Foundation Trust (UK)
- 7. Salisbury NHS Foundation Trust (UK)

- 8. Lewisham and Greenwich NHS Trust (UK)
- 9. University Hospitals Coventry & Warwickshire NHS Trust (UK)
- 10. Western Sussex Hospitals NHS Foundation Trust (UK)
- 11. Croydon Health Services NHS Trust (UK)
- 12. Oxford University Hospitals NHS Foundation Trust (UK)

When is the study starting and how long is it expected to run for? June 2018 to September 2020

Who is funding the study?

- 1. NIHR CLAHRC South London (UK)
- 2. NIHR Academy (UK)

Who is the main contact?
Dr Danielle Ashworth
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## **Contact information**

### Type(s)

Scientific

#### Contact name

Dr Danielle Ashworth

#### Contact details

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## Additional identifiers

## **EudraCT/CTIS** number

Nil known

#### IRAS number

249428

#### ClinicalTrials.gov number

Nil known

## Secondary identifying numbers

40501

## Study information

#### Scientific Title

Postnatal health and care following hypertensive disorders in pregnancy: a prospective cohort study

#### **Acronym**

**BPiPP** 

## **Study objectives**

- 1. Do women with hypertensive disorders in pregnancy experience greater postnatal physical and psychological morbidity compared to women with normal blood pressure in pregnancy?
- 2. Does the extent and characterisation of postnatal morbidity differ between women with hypertensive disorders in pregnancy and women with normal blood pressure in pregnancy?
- 3. Do women with hypertensive disorders in pregnancy receive additional postnatal care (contacts and content in line with relevant NICE guidance) compared to women with normal blood pressure in pregnancy?

## Ethics approval required

Old ethics approval format

### Ethics approval(s)

London - South East Research Ethics Committee, Barlow House 3rd Floor 4 Minshull Street Manchester M1 3DZ, Tel: +44 (0)207 104 8014, +44 (0)207 104 8002, Email: nrescommittee. london-southeast@nhs.net, 21/12/2018, ref: 18/LO/2084

## Study design

Observational; Design type: Cohort study

## Primary study design

Observational

## Secondary study design

Cohort study

### Study setting(s)

Hospital

#### Study type(s)

Other

## Participant information sheet

Not available in web format, please use the contact details to request a patient information sheet

## Health condition(s) or problem(s) studied

Hypertension during pregnancy

#### **Interventions**

Eligible women will be approached and provided with study information on the postnatal ward and those happy to participate will be asked to complete a consent form and short (5 minute) questionnaire. Following this initial contact at approximately 3 months postnatal participating women will be invited to complete a 15 minute questionnaire, with questions included on their: physical health, mental health, their babies feeding habits and the postnatal care they received. BPiPP study findings will be used to provide evidence on if, and how, postnatal health differs amongst women with more complex pregnancies, compared to lower risk pregnancies, and if care beyond birth is meeting these women's needs, with the view of informing revisions to current postnatal services.

#### Intervention Type

Other

### Primary outcome measure

Co-primary outcomes for research question 1:

- 1. Depressive symptoms, measured using the Edinburgh Postnatal Depression Score (EPDS) questionnaire (mean and threshold scores ≥13 standard cut-off score recommended when screening for probable major depression), at 3 months postnatal
- 2. Health status, measured using the EuroQol Group five dimension (EQ-5D) questionnaire (mean score on the vertical visual analogue scale score), at 3 months postnatal

Primary outcomes for research question 2:

Presence and severity of morbidities measured from patient reported study survey responses at 3 months postnatal

Primary outcome for research question 3:

Women's opinion of their postnatal care contacts and content and measures of NICE guidance adherence measured from patient reported study survey responses at 3 months postnatal

## Secondary outcome measures

Patient reported study survey responses at 3 months postnatal will also capture:

- 1. Other physical and psychological morbidity outcomes (including EQ-5D level per domain)
- 2. Re-admission rates
- 3. Breastfeeding uptake and duration rates
- 4. Mean number of visits/contacts with NHS services

#### Overall study start date

01/06/2018

#### Completion date

30/09/2020

## **Eligibility**

## Key inclusion criteria

- 1. Women who gave birth in any of the participating NHS foundation trusts
- 2. Women who gave birth at > = 20+0 weeks gestation
- 3. Women aged 18 or above
- 4. Women able to provide informed consent
- 5. Study participants unable to compete questionnaires due to lack of English fluency will be

offered use of translation facilities used in clinical practice at each site
6. Study participants who experience a neonatal death between baseline and follow up
questionnaire completion will be contacted to ask if they would like to continue participating in
BPIPP or withdraw

## Participant type(s)

**Patient** 

#### Age group

Adult

#### Lower age limit

18 Years

#### Sex

Female

## Target number of participants

Planned Sample Size: 1000; UK Sample Size: 1000

#### Total final enrolment

1829

## Key exclusion criteria

- 1. Women who gave birth in any non-participating NHS foundation trusts
- 2. Women who gave birth at < 20+0 weeks gestation
- 3. Women under 18 years old
- 4. Women unable to provide informed consent

#### Date of first enrolment

06/02/2019

#### Date of final enrolment

31/03/2020

## Locations

#### Countries of recruitment

England

**United Kingdom** 

# Study participating centre Ashford and St. Peter's Hospitals NHS Foundation Trust

Chertsey United Kingdom KT16 0PZ

## Study participating centre King's College Hospital NHS Foundation Trust

King's College Hospital Denmark Hill London United Kingdom SE5 9RS

## Study participating centre Kingston Hospital NHS Foundation Trust

Kingston Hospital Galsworthy Road Kingston upon Thames United Kingdom KT2 7QB

## Study participating centre Chelsea and Westminster Hospital NHS Foundation Trust

London United Kingdom TW7 6AF

# Study participating centre St George's University Hospitals NHS Foundation Trust

Blackshaw Road London United Kingdom SW17 0QT

## Study participating centre Manchester University NHS Foundation Trust

Cobbett House Oxford Road Manchester United Kingdom M13 9WL

## Study participating centre Salisbury NHS Foundation Trust

Salisbury

United Kingdom SP2 8BJ

## Study participating centre Lewisham and Greenwich NHS Trust London United Kingdom SE18 4QH

Study participating centre
University Hospital of Coventry and Warwickshire NHS Trust
Clifford Bridge Road
Coventry
United Kingdom
CV2 2DX

Study participating centre
Western Sussex Hospitals NHS Foundation Trust
Chichester
United Kingdom
PO19 6SE

Study participating centre
Croydon Health Services NHS Trust
530 London Road
Croydon
Surrey
United Kingdom
CR7 7YE

Study participating centre
University of Oxford NHS Foundation Trust
John Radcliffe Hospital
Headley Way
Oxford
United Kingdom
OX3 9DU

# Sponsor information

## Organisation

King's College London

## Sponsor details

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### Sponsor type

University/education

#### Website

http://www.kcl.ac.uk/index.aspx

## Organisation

Guy's & St Thomas' Foundation NHS Trust

#### Sponsor details

c/o Jennifer Boston R&D Department 16th Floor Tower Wing Great Maze Pond London England United Kingdom SE1 9RT +44 (0)2071885733 R&D@gstt.nhs.uk

## Sponsor type

Hospital/treatment centre

# Funder(s)

## Funder type

Government

#### **Funder Name**

NIHR CLAHRC South London

#### Funder Name

NIHR Academy

## **Results and Publications**

## Publication and dissemination plan

Planned dissemination of study findings through conventional academic outputs including publication in peer reviewed journals and academic conferences in addition to via websites of collaborating hospitals and appropriate groups such as support groups and charities. Study participants requesting a copy of the study results will be provided with a summary report.

## Intention to publish date

01/12/2021

## Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study will be stored in a non-publically available repository MedSciNet. CI, study coordinator, PIs and recruiting research staff will have access to the BPiPP database. Consent from participants will be obtained and all participants will be identified by a unique study ID.

## IPD sharing plan summary

Stored in repository

#### **Study outputs**

| Output type          | Details | Date created | Date added | Peer reviewed? | Patient-facing? |
|----------------------|---------|--------------|------------|----------------|-----------------|
| Results article      |         | 05/04/2022   | 05/05/2022 | Yes            | No              |
| HRA research summary |         |              | 28/06/2023 | No             | No              |