

# Exploring the experiences of student midwives completing the newborn infant physical examination

**T**he newborn and infant physical examination (NIPE) is a screening programme delivered by Public Health England ([PHE], 2019), consisting of screening of the eyes, heart, hips, and testes (in male infants), as part of a holistic physical examination of the newborn and infant. The NIPE is carried out by specially trained medical practitioners, nurses, health visitors and midwives following completion of a university-accredited programme of study (PHE, 2019).

The physical examination of the newborn has traditionally been considered a part of routine care of the newborn following birth since the 1960s and is still today regarded as the gold standard of care for all babies (Hall, 1999; National Institute for Health and Care Excellence [NICE], 2006; UK National Screening Committee, 2008; PHE, 2019). Current national standards require all infants within the UK to have a detailed physical examination within 72 hours of birth (Hall and Elliman, 2003; NICE, 2006; National Screening Committee, 2008; PHE, 2019), allowing for early identification of issues, prompt referral and judicious treatment of the neonate.

Historically the NIPE role was not previously considered part of the midwifery scope of practice until the findings of EMREN (Thompson et al, 2004) demonstrated midwives were as effective as paediatricians when undertaking the NIPE, and additional benefits, such as increased maternal satisfaction could be gained, by developing midwifery-led NIPE services. The findings of this work led to a shift within midwifery practice, as midwives began to adopt the NIPE role and reported increased satisfaction with the autonomy this afforded them (Rogers et al, 2003; Mitchell, 2003a; Lumsden, 2005; McDonald, 2008; Rogers et al, 2015). However, the numbers of midwife NIPE practitioners remain low (Stanyer and Hopper, 2019).

There have been numerous calls for the NIPE to be included within pre-registration midwifery educational programmes in order to enhance the midwifery role and encourage autonomous midwifery practice at

## Abstract

**Background** The newborn and infant physical examination (NIPE) is a screening programme now undertaken by specially trained midwives. It is increasingly a feature within pre-registration midwifery educational programmes.

**Objectives** To explore the experiences of student midwives completing the theory and practice aspects of the NIPE within a pre-registration midwifery programme.

**Design** A qualitative design was utilised to analyse data collected by semi-structured interviews.

**Method** This study was conducted using interpretative phenomenological analysis (IPA).

**Findings** Three superordinate themes were generated: learning by doing, mentorship and transition to qualification. The findings demonstrate the benefits of student midwife exposure to practical aspects of NIPE.

**Conclusions** Findings indicate that standardisation is required with NIPE education and clinical practice. Preceptorship programmes must effectively prepare newly qualified midwives to undertake the NIPE role. Higher educational institutes must provide greater support to the midwives providing mentorship of student midwife NIPE practitioners. Further research should examine the maintenance of the NIPE role following qualification as a midwife.

## Keywords

Pre-registration | Midwifery | Education | Newborn examination

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The holistic examination of the baby is now frequently undertaken by specially trained midwives within clinical practice

an early-career stage (Bloomfield et al, 2003; Hayes et al, 2003; Rogers et al, 2003; Townsend et al, 2004; Baker, 2010; Blake, 2012, Council of Deans of Health, 2017). Pre-registration NIPE is an emerging area within midwifery practice, as to date, limited numbers of approved higher educational institutes include the NIPE programme components within their pre-registration midwifery programmes (Yearley et al, 2017; PHE, 2017).

At present, the ability for all midwives to undertake the NIPE within their sphere of practice is not a mandatory requirement from the Nursing and Midwifery Council ([NMC], 2009; 2019), within the standards of proficiencies for midwives, although within the updated standards the ability to undertake a full systematic physical examination of the newborn infant is explicit.

Standards for pre-registration midwifery education have been updated by the NMC (2019) and are due to be in circulation from 2020–2021 onwards, but it is not anticipated that the ability to formally undertake the NIPE will be included within this. Student midwives are, therefore, only exposed to the additional skills required for the NIPE if they study a pre-registration midwifery curriculum which includes NIPE.

There are two models that incorporate the NIPE within pre-registration midwifery curriculums. The first is that higher educational institutes can opt to provide a theoretical only element of the NIPE; requiring students to achieve the practical component later during their preceptorship period in order to ultimately be deemed competent to undertake the NIPE role within practice. This model has been adopted by some higher educational institutes and has evaluated well (Jones and Furber, 2017); however, it has the potential to reduce the number of newly qualified midwives achieving the practical requirements of the NIPE at a later date which impacts on the number of midwives qualified in the NIPE role.

Alternatively, higher educational institutes can opt to provide both theoretical and practical components of the NIPE within the pre-registration midwifery curriculum. This leads to midwifery students being deemed as qualified to undertake the NIPE at the point of registration on completion of their midwifery educational programme, once this has been assessed by their employing trust during their preceptorship period. This is the educational model of the NIPE training utilised at the site where the study described in part two of this series was carried out.

The lack of data relating to student midwives and the NIPE role may be attributed to the fact that there

are a small number of approved higher educational institutes which provide both practice and theoretical elements of the NIPE programme within their pre-registration midwifery programmes ( $n=11$ ) (Yearley et al, 2017).

A survey of higher educational institutes carried out by PHE estimates similarly low numbers ( $n=13$ ) of universities currently providing pre-registration midwifery NIPE training (PHE, 2017). However, what is not clear is how this training is delivered, and whether it incorporates both theoretical and practical components of the NIPE programme which are needed for the student to be able to conduct the NIPE examination following registration as a midwife.

Numbers of institutions providing pre-registration NIPE training to student midwives are likely to increase within the near future. Several higher educational institutes state an intention to include the NIPE within their future pre-registration courses within the next five years (Yearley et al, 2017). NHS Trusts are extending their midwifery-led NIPE services in order to provide greater continuity of care for women and their families (Cumberledge, 2016); however, the current levels of suitably-trained staff remain low (Stanyer and Hopper, 2019).

Consequently, as there are limited numbers of student midwives undergoing the NIPE training, there is little known about their experiences of the NIPE (Osborne, 2017). Part two outlines the findings of a study designed to develop the current knowledge base within this area of practice by exploring the subjective, lived experiences of senior student midwives who are immersed within both the theoretical and practical elements of the NIPE; using interpretative phenomenological analysis (IPA).

## Aim

To explore the subjective, lived experiences of senior student midwives who are immersed within both the theoretical and practical elements of the NIPE using IPA.

## Objectives

The study objectives were:

1. To understand student midwives' lived experiences of completing the NIPE requirements of their pre-registration curriculum, considering the personal impact of the NIPE elements of the programme
2. To have a clearer understanding of whether student midwives feel they are competent and prepared to be able to take on the role of the NIPE within their practice at the point of registration and to identify their understanding of what the role of the NIPE entails for them

3. To identify whether students feel adequately prepared by the higher educational institute and practice settings to achieve the NIPE requirements of their midwifery programme

## Design

A qualitative design was selected as the basis for the study due to the alignment with the research aims. Qualitative research paradigms require the measurement of social phenomena from data collected in the form of language and researcher observations (Green and Thorogood, 2018).

The underpinning assumption is that every individual is unique, having their own experience of the world (Willig, 2008). As the study scrutinises how an event is experienced by individuals, phenomenology was selected as the most appropriate qualitative philosophy to address the research question. The rationale for why interpretative phenomenological analysis was adopted is explored in the discussion below.

## IPA

IPA is a specific methodology drawing on the principles above to explore how people make sense of their experiences (Smith et al, 2009). A key characteristic of IPA is that a double hermeneutic is adopted in which the researcher makes sense of the participant making sense of their experience (Smith and Osborn, 2003; Smith et al, 2009). The theoretical underpinnings of IPA are routed within both phenomenology and hermeneutics, coupled with an idiographic perspective focusing on individuals (Shinebourne 2011).

IPA (Smith and Osborn, 2003; Smith et al, 2009) was selected for this study for the following reasons. Firstly, the philosophy of IPA aligns well with the study aim and objectives in that it enables scrutiny of how sense is made by people of their major life experiences from their own perspectives (Smith et al, 2009). It is an exploratory method devised to understand in fine detail how an individual experiences a phenomenon from a particular perspective within a particular context, drawing attention to ways in which people make sense of their experience and how they attach meaning to these events (Smith et al, 2009). IPA results in a subjective and reflective interpretation; any inferences that are drawn from the data are cautious, within situational and cultural contexts (Smith and Osbourne, 2003; Smith, 2015).

Secondly, the idiographic nature of IPA relate to the aims of this study. IPA is concerned with the particular, highlighting what is unique to individuals, as well as providing an opportunity to analyse collective details

## Key points

- Some pre-registration midwifery curriculums have been developed to include the elements of the newborn infant physical examination (NIPE) screening programme within midwife training however, there are only a few of these programmes available
- Little is known to date about the experiences of midwifery students undertaking the NIPE role in clinical practice
- Interpretative phenomenological analysis is a methodology used to explore novel and interesting topics, and can provide rich detail from study participants

from a group (Smythe, 2011). The aim of IPA is not to generalise to larger populations but to meticulously analyse individual cases to arrive at more general claims cautiously (Smith and Osborn, 2003; Smith et al, 2009).

Finally, IPA is useful to develop understanding of under-examined or hard-to-explain phenomena (Osborne and Smith, 2003). Other approaches to qualitative research lack the depth that IPA can offer in relation to the data analysis aspect of a study; as other methods may be too focused on creating generic codes or themes from the findings (Moustakas, 1994; Creswell, 2013). IPA allows detailed examination of individual accounts to be carried out, simultaneously exploring the sense each participant has made of their experience within the double hermeneutic circle, while remaining true to each account (Creswell, 2013; Smith, 2015).

### Quality and validity

General quality principles within qualitative research analysis, including sensitivity to context, commitment and rigour, transparency and coherence, and, finally, the impact and importance of the study were acknowledged during the study conduct, as recommended by Yardley (2000). Smith et al (2009) place particular value on these within IPA. These factors are briefly explored below.

### Sensitivity to context

This is the process of researchers demonstrating an awareness of the existing body of literature, the cultural contexts of data and study participants (Yardley, 2000; Smith et al, 2009). This was achieved by conducting a sound review of the literature relating to the NIPE. Any potential conflict arising between the researcher and study participants, as well as the researcher's role throughout the data collection phase of the project, was reflected on by the use of a diary in order to enhance research reflexivity.

### Commitment and rigour

During the study, the researcher immersed herself within the area of interest in order to enhance her knowledge within the chosen methodology as advised by Yardley (2000). In order for the principles of IPA to be fully respected, the study was supervised by a senior midwife with expertise within IPA. To facilitate this, an interview schedule was prepared to allow open-ended discussion of topics. Study findings using participants' own words are presented within part two of this series of papers.

Rigour is applied through sound data collection techniques and a comprehensive yet broad level of analysis (Yardley, 2000). Rigour is achieved by peer review (Smith, 2015), and, in this case, themes were discussed with the researcher's supervisor so that it could be visualised how they had originated from the raw data. Member checking of transcripts allowed participants to view the transcripts arising from their original data, checking for accuracy and resonance with the experience they reported.

### Transparency and coherence

In order to enhance the transparency of the analysis of this work, an audit trail of emergent and superordinate themes was produced during the analysis. Participants' voices have been used to present the study findings within part two of this series. In order to develop further transparency, researcher reflexivity was also considered throughout the conduct of the study.

### Reflexivity

Reflexivity requires the researcher to reflect on the impact they have made during the research process (Yardley, 2000; Braun and Clarke, 2013; Silverman, 2015). Interpretative phenomenological research holds the central view that the researcher is part of the data collection and analysis due to pre-held assumptions and beliefs; therefore, these need to be transparent to the reader for the research to be trustworthy (Smith, 2015).

During data collection, the researcher reflected on the potential for conflict between her usual role as a midwifery educator and that of researcher by use of a reflective diary to note any relevant thoughts. This ensured the focus was purely on information from the participants during the collection and analysis of data. **BJM**

*Part two of this series discusses the study in more detail and presents the study findings. Recommendations for midwifery practice are made following a discussion of the findings in the second part of this paper.*

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## CPD reflective questions

- Consider how the revised Nursing and Midwifery Council (2019) proficiencies for the future midwife may impact on the evolution of the midwifery role in the context of newborn examination
- Explore your local trust guidance around midwife-led NIPE services. How can student midwives be supported to achieve their course requirements within existing frameworks?
- Reflect on the issues student midwives may encounter while developing this area of their practice during their training

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