**Abstract**

Objective: to explore student midwives’ experiences of postnatal genital tract assessment within midwifery preregistration curricula.

Design: a single, instrumental case study design was employed involving final year student midwives. Ethical approval was gained from the Higher Education Institution at the data collection site. Sampling was purposeful and data were collected using a survey (n=25); narrative style in depth interviews (n=11), review of programme documentation and a student midwife / researcher data workshop.

Setting: one Higher Education Institution in the north of England.

Findings: three themes were identified from the data analysis, awareness of assessment methods, accessing learning opportunities and actualisation of learning. The awareness theme highlights that most students were aware of potential signs and symptoms associated with genital tract assessment and health however; difficulties were identified concerning assessment of lochia, encountering sequential assessments and recognising potential for deterioration. This awareness was influenced by access to practice based learning opportunities. Access differed due to variation in postnatal provision, service pressures and variety in mentor practices regarding selecting and creating learning opportunities. This study suggests actualisation of learning and confidence in genital tract assessment was achieved when opportunities to integrate theory and practice occurred. Actualisation was hindered by limited allocation of curriculum time specifically for postnatal maternal assessment content and assessment strategies in comparison to other aspects of midwifery knowledge.

Conclusions: student midwives’ experiences, awareness and learning actualisation varied in relation to the development of knowledge and confidence in maternal postnatal genital tract assessment. While clinical and theoretical learning opportunities were available, access and experience varied and limitations were identified. A number of recommendations are outlined to enhance the students learning experiences in practice and HEI settings, which address placement planning, mentor preparation, the student voice and supporting curricula documentation.

**Introduction**

Student midwives are required to participate in sufficient theoretical and practical experiences to enable development of the professional skills required for entry to the midwifery register (NMC, 2009; NMC, 2012; DH, 2014). This includes responding to the health needs of women during the postnatal period, necessitating students attain competence in the assessment, prevention, identification and prompt treatment of genital tract morbidity, including uterine bleeding, infection and perineal morbidity (Bick et al. 2009; East et al. 2011; MBRRACE, 2014). However, in the United Kingdom (UK) the context in which this experience is realised has changed significantly for midwives, women and students.

Resource pressures have affected postnatal service provision, including a reduction in the number and length of contacts between midwives and women, in both hospital and community settings (Wray and Bick, 2012; RCM, 2014a). This limits the time midwives have to identify individual health needs and provide appropriate care (Khan and McIntyre, 2016). In a recent UK survey, when asked “are you able to provide clinical postnatal care to a standard you are personally pleased with” over 50% of midwives reported they “would like to be able to do more” (RCM, 2014b p.8). Women have also voiced their concerns regarding the quantity and quality of postnatal care. A UK survey reflecting 2,500 women’s experiences, highlighted that 1 in 5 women did not see a midwife as often as they would have liked following birth, with a third of these women reporting this resulted in a delay in a health problem being identified (National Federation of Women’s Institute, 2017). In a Royal College of Midwives (RCM) survey 47% of the women respondents identified they had not been told about signs and symptoms of conditions that may necessitate emergency help following childbirth (RCM, 2013).

Midwives have expressed concern that limited postnatal experience and assessments of maternal wellbeing, may impact upon the skill development of student midwives and their subsequent practice (RCM, 2010; RCM, 2014a; Larkin, 2015; Marsh et al 2015). The process and content of pre-registration midwifery programmes is fundamental to developing the professional skills and attributes of the future midwifery workforce. However, student midwives, who responded to a RCM national survey, suggested a “low point” of their midwifery pre-registration programme was “lack of postnatal experience” (RCM, 2011). Failure to attend to student learning may ultimately jeopardise women’s experiences and health outcomes following childbirth.

In response this study aimed to: -

**Aim**

To explore student midwives’ experiences of postnatal genital tract assessment (GTA) within midwifery preregistration curricula.

**Objectives**

1. To critique learning opportunities within pre-registration midwifery curriculum, in both university and practice setting.
2. To explore student midwives’ perceptions of their abilities to select and undertake a range of maternal postnatal genital tract assessments.
3. To consider factors potentially impacting upon students’ ability to engage in appropriate opportunities and experiences.
4. To identify areas for development, with the potential to enhance student experiences and satisfaction within pre-registration midwifery curriculum.

**Research Design**

Atchan et al. (2016) suggest that a multi-faceted exploration of an issue may aid the translation of knowledge into practice, but highlight that the potential of appropriate approaches such as Case Study research (CSR) have not yet been grasped in midwifery. CSR focuses upon phenomena in context and acknowledges multiple interpretations, therefore developing a naturalistic and relativist understanding of the research focus (Simons, 2009; Crowe et al. 2011). There are differing formats of CSR, dependent upon the research intention (Yin, 2014). Defining the ‘case’ and research aims helps clarify the appropriate type of CSR, thus facilitating the authenticity of the research design (Baxter and Jack, 2008). This case involved all final year student midwives in one UK Higher Education Institution (HEI), a single, instrumental case study design, in which the case is selected to enable the exploration of a particular phenomenon (Simons, 2009; Crowe et al. 2011).

**Data Collection Methods**

CSR employs multiple embedded units of data from several sources of evidence to illuminate the variables of interest, facilitating in depth insights and increasing the potential to triangulate data (Crowe et al. 2011; Yin, 2014). Therefore, to explore the experiences student midwives encounter regarding GTA, four data sources were accessed; curriculum documentation; a survey; semi-structured one to one interviews and a student midwife data workshop (table 1).

The review of documentary evidence examined programme and module learning outcomes, placement plans and assessment documentation, noting potential theoretical and clinical exposure for students to maternal postnatal GTA. The survey provided numerical data and an overview of the students’ experiences and consisted of four sections; theoretical and clinical learning opportunities, confidence levels, factors effecting performance and potential areas for improvement (Yin 2014). By encouraging students to give narratives of their experiences of GTA, the interviews enabled collection of rich, detailed illuminations (Ritchie and Lewis, 2003). A loose semi-structured interview guide was developed drawing on sensitising concepts such as those identified in the background literature and those developed from curriculum document review and the survey (Yin 2014). The interview dialogue, lasted from 30 to 60 minutes and was recorded and later transcribed and field notes were made of non-verbal responses. Finally, a student midwife / researcher workshop was offered to all participants, involving group discussion to challenge, refine and confirm data findings and discuss opportunities for curriculum enhancement.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Data Source** | **Objective 1** | **Objective 2** | **Objective 3** | **Objective 4** |
| **Review of Programme Documentary evidence** | X  Curricula intentions |  |  |  |
| **Survey of all final year student midwives.**  **25 completed from potential of 44 students** | X  Perceptions, views, experiences of what’s happening, when and where. | X  Descriptive summary of how skills and knowledge are used, and confidence levels | X  Summary of potential opportunities and barriers |  |
| **11 in depth semi structured narrative interviews of final year student midwives.** | X  Perceptions, views, experiences of what’s happening, when and where. | X  Detailed and contextualised illumination of how skills and knowledge are used, and confidence levels | X  Detailed and contextualised illumination of potential opportunities and barriers to appropriate and effective learning opportunities | X  Perceptions of areas for development |
| **Student midwife workshop involving 14 students to challenge, confirm and refine findings and highlight opportunities for enhancement** | X  Clarification and verification | X  Clarification and verification | X  Clarification and verification | X  Clarification, verification  and prioritisation.  Develop action plan for curricula enhancement. |

**Table 1: Data Method & Alignment with Research Objectives**

**Ethical Considerations and Recruitment**

Ethical approval for the study was obtained from the University Ethics Committee. Due ethical processes and activities e.g. maintaining confidentiality, consent, protecting the participants and acting with good faith and integrity, were considered and adhered to across all research areas, including the research intentions, methodology and methods (Department of Health, 2005; Health Research Authority, 2014). Anthony and Jack (2009) highlight that credibility and rigour of case study research rests upon the authenticity of methodological processes and data sources. Thus, all processes and data within this study were detailed and transparent to provide an audit trail of reasoning and are supported by triangulation of data to enable convergence and confirmation of findings.

Sampling was purposeful and participation voluntary. Recruitment targeted final year student midwives undertaking pre-registration midwifery programmes at the case study site, as they had experienced most of the theoretical and practice components within the midwifery programme. Information about the study was provided via a range of mediums including face to face, electronic media and leaflets. All final year student midwives (n = 44) were invited to complete the on line survey which included instructions and requirements for consent. A total of 25 completed surveys were returned.

The interviews were conducted by one of three members of the research team (VL., GS., JT.) all of which have experience of research data collection and interview technique. As the interviewers contribute to the midwifery pre-registration programmes, they were known to the student participants. The research team were mindful of the potential ethical issues such familiarity may provoke, including perceived power, participants feeling coerced to participate, and ‘identity work’ in which the interviewee presents a particular persona to fit with expectations of interviewer expectations (Silverman, 2006 p.137; Larkin, 2013). In response, the voluntary nature of participation was emphasised. Students who expressed an interest in participating in interviews were asked to contact the research team, who then discussed the requirements of the study with them and made arrangements for an interview later, thus allowing participants decision-making time. Prior to interview, researchers again discussed the research and ensured written informed consent (n=11).

**Data analysis**

All data was analysed in accordance with the study objectives and drawing upon case study principles. Analysis was iterative and on-going throughout the study, facilitating the development and triangulation of findings as appropriate for multiple embedded data in single case study research (Simons, 2009). Nominal data from the survey provided an overview of students’ views and experiences of GTA. All qualitative data (survey and interviews) were transcribed, anonymised and analysed using thematic analysis (Crowe et al. 2011). Each theme consisted of a number of related subthemes, which reflected the coding and grouping of data findings. To facilitate searching for patterns, insights and themes across all data, the research findings were summarised in a matrix of developing categories and data source, evidencing data saturation, table 2 (Yin, 2014).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Theme** | **Subtheme** | **Survey** | **Interviews** | **Programme Documentation** | **Validation workshop** |
| **Awareness of assessment Methods** | Range of methods | X | X | X | X |
| Focus on perineal assessment | X | X | X | X |
| Feeling Unsure | X | X |  | X |
| **Access to learning opportunities** | Service Provision & Pressures | X | X |  | X |
| Mentoring practices | X | X | X | X |
| **Actualisation of potential** | Knowing and doing | X | X | X | X |
| Learning from and through experience | X | X | X | X |

**Table 2 Integrated Data findings**

Team meetings were held regularly during the project and involved all research team members. These were used to discuss, debate, challenge and agree analysis, emerging findings and interpretations, thus bringing to bear multiple perspectives on the data and enhancing the rigour and quality of the process. In addition, on completion of the questionnaire and interview data collection, a student midwife / researcher workshop was held involving 14 student midwives and the 4 members of the research team. The intentions of the workshop were to; -

* Challenge, refine and confirm data findings
* Highlight opportunities for curriculum enhancement.

The workshop participants unanimously agreed with the themes emerging from the research data, with consensus within groups and amongst groups.

**Findings & Discussion**

The quantitative survey data is presented first to orientate the reader, contextualise the study and provide a snapshot of the frequency and cohesiveness of the student responses. This is followed by an analysis of the qualitative data and programme documentation, which provides detail and illumination of the students learning journey. Following the presentation of each research theme, the issues raised are discussed and critiqued in light of the contemporary evidence base.

**The Survey**

Tables 3 and 4 presents student responses concerning clinical and theoretical learning opportunities pertaining to most aspects of GTA. The numbers highlighted in red identify aspects in which students identified limited learning opportunities and factors they perceived affected their ability to undertake GTA.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Area of Practice | Sufficient Practice Opportunities | | | | Sufficient Theoretical Opportunities | | | | I feel confident | | | |
| Strongly  Agree | Agree | Disagree | Strongly  Disagree | Strongly  Agree | Agree | Disagree | Strongly  Disagree | Strongly  Agree | Agree | Disagree | Strongly  Disagree |
| Identifying risk factors which may predispose the woman to genital tract (GT) morbidity. Risk factors include things like; operative birth, perineal trauma, throat infections and multiple pregnancy. | 18 | 7 | 0 | 0 | 16 | 5 | 1 | 0 | 14 | 7 | 0 | 0 |
| Undertaking general clinical observations pertinent to maternal postnatal genital tract assessment (GTA), (E.g. malaise, vital signs, pain and diarrhoea.) | 13 | 9 | 3 | 0 | 12 | 10 | 0 | 0 | 9 | 12 | 0 | 0 |
| Using communication skills to obtain pertinent information about the woman’s GT health (E.g. questioning & listening) | 16 | 9 | 0 | 0 | 11 | 11 | 0 | 0 | 17 | 4 | 0 | 0 |
| Undertaking clinical observations of the woman’s perineum during the postnatal period | 8 | 15 | 2 | 0 | 6 | 11 | 5 | 0 | 7 | 10 | 4 | 0 |
| Undertaking clinical observations of the woman’s lochia | 4 | 12 | 8 | 1 | 6 | 9 | 6 | 1 | 5 | 11 | 5 | 0 |
| Undertaking clinical observations of the woman’s abdomen during the postnatal period including palpation of the uterus. | 20 | 5 | 0 | 0 | 12 | 9 | 1 | 0 | 14 | 7 | 0 | 0 |
| Using clinical observations selectively when assessing maternal postnatal GT, (E.g. deciding when and if to use observation of the perineum or palpation of the uterus.) | 16 | 9 | 0 | 0 | 9 | 11 | 2 | 0 | 12 | 9 | 0 | 0 |
| Reviewing the genital tract assessment (GTA) of an individual woman on more than one occasion.(E.g. repeat postnatal visits) | 7 | 9 | 8 | 1 | 7 | 9 | 5 | 1 | 9 | 10 | 2 | 0 |
| Sharing information with women regarding their current and on-going GT health  (E.g. advice regarding analgesia and hygiene, what to report to health professionals). | 16 | 8 | 1 | 0 | 11 | 10 | 1 | 0 | 11 | 9 | 1 | 0 |

**Table 3 Student Learning Opportunites and Confidence in GTA**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| I feel the following factors have **positively** influenced my ability to undertake maternal genital tract assessment: | Strongly agree | Agree | Disagree | Strongly disagree |
| The location of postnatal service delivery (E.g. hospital, clinic, home visiting) | 5 | 11 | 4 | 1 |
| The schedule of postnatal assessments (E.g. 3 visits versus 5 visits over a 10 day period.) | 2 | 9 | 9 | 1 |
| The time available for postnatal assessments for individual women | 2 | 6 | 12 | 1 |
| The emphasis placed on postnatal genital tract assessment by practice mentors | 3 | 11 | 5 | 2 |
| The emphasis placed on postnatal genital tract assessment by university lecturers | 7 | 12 | 1 | 1 |
| My personal time planning and prioritisation of GTA as a subject area. | 5 | 13 | 3 | 0 |
| My confidence to undertake GTA. | 6 | 12 | 3 | 0 |

**Table 4 Factors Affecting Performance in GTA**

**Qualitative Data**

Three themes were identified from the analysis of the data (Table 2):

* Awareness of assessment methods
* Accessing learning opportunities
* Actualisation of learning

**Awareness**

Students identified an awareness of a range of potential assessment methods in relation to GTA which included questioning the woman, using maternal self-assessment, assessing behavioural cues and performing clinical observations.

*“there’s your observation and then there’s your communications, so asking her how she feels, asking if she’s looked at it* [perineum], *how it feels to her, rather than going straight into “can I have a look?”* ST/M D L 32.

In addition, most students also identified awareness of potential signs and symptoms of genital tract sepsis.

*“All the evidence from MBRRACE that have highlighted the problems of sepsis post natally . . . midwives need to be mindful of looking for symptoms”* ST/M I L 191

However, the students’ awareness of the content of their GTA more frequently focused on perineal assessment compared with that of the uterus and lochia.

*“I have not had any experience of personally assessing blood loss aside from the immediate hours following delivery, this had only ever been discussed verbally.”* Survey Student Number (SSN):15

In addition, some students revealed feeling unsure regarding GTA methods and associated actions. The students appeared to be aware of signs and symptoms which may indicate clearly delineated normal or abnormal genital tract health. However, the identification of signs and symptoms with the potential to become more severe was more problematic for the students.

*“Oh, I feel like they* [assessment skills] *could be better, I think I would be confident if I thought: Oh yeah, that’s healing well. Or yeah, that’s infected. But I think it’s sort of the middle ground, say it’s sort of was swollen, or sort of red, you know, it’s like the middle ground. I think I would be like unsure.” STM C L286*

It was reassuring to note the student midwives in this study were aware of a range of GTA methods which could be employed depending upon the individual needs of the woman, reflecting contemporary best practice (NICE, 2006; Bick et al. 2011). In addition, most of the students were aware of high profile campaigns concerning sepsis including potential signs and symptoms and midwifery actions (MBRRACE, 2014; RCM, 2014b; MBRRACE, 2015; NICE, 2016). However, they appeared less aware of how to identify minor concerns which had the potential to become severe and had reduced awareness of specific GTA assessment concerning the uterus and lochia. Early identification of health related needs and concerns are an important component of midwifery postnatal care, to ensure issues are responded to promptly, reducing the potential for minor morbidity to develop into severe or long term morbidity (NICE, 2006; Dudley et al. 2013; Woolhouse et al. 2014). The MBRRACE (2014) report, acknowledges early symptoms of potential morbidity may be non-specific, requiring effective assessment to differentiate minor and self-limiting concerns from potentially more severe morbidity. NICE (2006) suggest postnatal symptoms warranting further investigations should include assessment of the perineum if the woman has pain or discomfort; and vaginal loss and uterine involution and position assessed in women with excessive or offensive vaginal loss, abdominal tenderness or fever. However, a recent qualitative study exploring potential reasons for non completion of maternal observations, suggests that postnatal observations were perceived as a low priority, particularly amongst newly qualified midwives who felt their normality focused midwifery pre-registration programme had not prepared them for women with more complex health needs (Jeffery et al. 2017).

Bick et al. (2012) introduced a symptom checklist to prompt early identification of maternal morbidity including the genital tract, which resulted in fewer women reporting heavy or offensive blood loss and a more positive view of the care they had received, suggesting such approaches, are of benefit. Students in this study did not report having encountered symptom checklists, which may have provided a framework, to enhance early and detailed identification of maternal genital tract health.

**Access.**

The students’ ability to experience and subsequently use a particular GTA assessment method was influenced by their access to associated learning opportunities in the practice setting. Data subthemes emerged concerning service provision and pressures, and mentoring practices.

**Service Provision and Pressures**

Whilst undertaking their midwifery programme, students in a cohort group are allocated to and provided with practice placements across a number of local NHS Trusts. The maternity services within these Trusts, have differing approaches to service provision which can impact on where, when and how students encounter practice experiences. The review of programme documents including placement plans, affirmed that postnatal experiences were explicitly identified, however such experiences varied. For example, in one local area the ‘postnatal ward’ includes a birth triage service; early pregnancy assessment unit and women and babies receiving postnatal care, whilst another service organised care around a Labour, Delivery, Recovery and Postpartum Room (LDRP).

Some students suggested experience on a postnatal ward was useful for their developing skills.

*“I know with post natal ward, we inspect* [the woman’s perineum].”, *but not everyone. It just depends. But you’re more inclined to inspect* [on the postnatal ward] *ST/M J L 245*

Other students suggested local service provision factors, including the demise of the postnatal ward, a reduction in postnatal length of stay and numbers of community postnatal visits, reduced their opportunities to be involved in GTA. This included a lack of opportunity to gain experience of reviewing the woman’s genital tract on more than one occasion.

*“The reduced visits and limited visit times makes it difficult to build a relationship with women and make them feel confident enough to report any problems or get their GT assessed.” SSN 10*

Some students highlighted how non midwifery placements can provide access to transferable learning concerning sepsis and wound healing.

*“There has been a strong emphasis on the deteriorating patient which the non-midwifery placement helped to put into practice. This has been linked to sepsis and has increased my knowledge greatly.” SSN 7*

The data also provided examples of service pressures which created tension and competition between care priorities, which in turn impacted upon the students’ exposure and engagement in learning experiences: -

*“I don’t think I saw a single person’s perineum in eight weeks and I was on there* [postnatal ward] *for that amount of time . . . We had a post natal ward mixed with an ante natal bay and the ante natal bay was where the majority of midwives’ energy was spent, because we’d have really sick women in the ante natal bay, so I remember thinking: a lot of the time, I’d be in there stopping people’s IVs beeping and putting them on CTGs and doing all of that stuff”* STM A L 604

These competing priorities were exacerbated when students were used as ‘extra hands’ to meet workplace demands.

*“I’m more used as an extra pair of hands to cut time short in all aspects, so it’s “*[Name], *can you do the baby and I’ll do the mum”, so then I kind of miss out on the mum.”* STM E L 247

Underpinning these workplace pressures the students perceived the lack of time as a key component both in the community and hospital setting.

*“There simply is not enough time to assess and question women in the post-natal period”.* SSN:23

This study suggests that for some students access to GTA was limited by the reduction of postnatal service provision. These changes, their intentions and impacts are documented and discussed widely within the professional literature. Schmied and Bick (2014) suggest changes to postnatal service provision are based on limited evidence and driven by the needs of service providers rather than those of the women. This is corroborated by the findings of a UK survey of midwives, with two-thirds of midwives stating the greatest influence on the number of postnatal visits a woman received was the pressure on the service including staff shortages (RCM, 2014b). Simultaneously, there has been an increase in student numbers and higher practice hour requirements placing pressure on limited practice placements (Marsh et al. 2015). Shorter placements can leave mentors insufficient time to facilitate and assess learning (National Nursing Research Unit, 2014). These national findings reflect the curricula in this study, with the reviewed curricula documentation reflecting difficulties in reduced provision of postnatal experience compared to an increasing number of students.

Access to postnatal learning experiences for students in this study were also hampered by competing demands upon their time. This resonates with a recent mixed methods study by Khan & McIntyre (2016 p. 348) exploring the postnatal experiences of women and midwives, in which midwives identified staffing levels and lack of time as barriers to providing postnatal women with appropriate support, with the midwives suggesting postnatal care is still seen as “the poor relation”. Women have repeatedly voiced concerns citing insufficient staff to provide the care and support they needed postnatally, to the detriment of focus upon their health needs (Rudman and Waldenstrom, 2007; Beake et al. 2010; Khan and McIntyre, 2016). It appears that students’ access to postnatal experience is also compromised when the service is pressured, with less focus given to postnatal care.

**Mentoring Practices**

One of the most frequently cited influences’ regarding access to learning was the mentor. Students suggested some mentors had practice routines that they would continue whilst working with a student.

*“I think it’s actually so mentor-specific sometimes, because the mentor I’ve just had on post natal was really good at that sort of assessment and that’s the first time I’ve come across somebody who’s so like… Open with like asking questions and particularly going through things with the woman as to what to look out for and what we want to see and that sort of thing.”* ST/M K L 319

This meant that some students experienced repeated exposure to a range of GTA methods and practices or conversely very little.

*“I feel mentor[s] build students’ hands on confidence in practice and if they do not assess genital tracts or teach you to, how are you expected to learn?”* SSN:14

Some students suggested in order to facilitate learning experiences their practice mentors adapted their usual practice regarding GTA.

*“So I feel like it* [palpating the woman’s uterus] *probably was done for my benefit because I was there as a first year student”* STM F L 128

This included mentors sharing their clinical reasoning processes regarding GTA methods with students.

*“She was so logical about it and she knew why we were doing it* [GTA] *and she could explain to me”* STM A L 188

But this did not happen consistently.

*“my first mentor that I ever had was very big on genital tract trauma and feeling people’s fundus and sepsis, she was very like, I don’t know if clued up is the right word but she like knew a lot of the research and she’d encourage me to go and look at the research, even at first year . . . other mentors that I have had have just sort of said ‘oh well we do it this way and that’s how we do it’.”* STM B L 275

These findings suggest students encountered a range of GTA approaches, which could vary depending upon individual maternal need. However, there were inconsistencies in the mentoring approach that resulted in varied access and opportunity to develop practice skills associated with GTA. Limited opportunities to rehearse skills in practice can be problematic, with 58% of the student midwives in a study by Longworth (2013) stating they had not had the opportunity to undertake skills as often as they would have liked or receive support and feedback from their mentor. The student midwives involved in the research by Hughes and Fraser (2011) identified a key quality of an effective mentor was being conscious of student learning needs and helping achievement; being an effective role model and taking time to discuss and reflect with students on experiences and care.

Cioffi (1998) discusses the potential of think aloud techniques as a means to enable student midwives to develop and rehearse their reasoning abilities. Some of the students in this study identified mentors utilising such strategies and highlighted the value of accessing the clinical reasoning processes, which informed the mentors practice actions. This, however, did not happen consistently. If students are not provided access to clinical reasoning processes and opportunities to rehearse these skills, this may affect their ability to comprehend why GTAs are undertaken (or not) and the development of reasoning skills.

In response to concerns about the quality of mentorship on a postnatal ward in England, Kroll et al. (2009) undertook a mixed methods study involving student midwives, midwives and care assistants. The study highlighted that students felt there were opportunities to learn on the ward, but at times, they felt unwelcome. Heavy workloads reportedly impacted upon the midwives ability to identify learning opportunities and teach students, with some students left to work alone (Kroll et al 2009), these themes are also present within the study reported in this paper. The Nursing and Midwifery Council identify a key mentoring role as the facilitation and assessment of student learning within the practice context and recommend protected time to undertake this activity (NMC, 2008). However, the National Nursing Research Unit (2014) exploring the quality of mentorshiphighlight staff have little reduction in their workload to facilitate student / mentor time. This resonates with the findings of this study, with some students describing staff as too busy to facilitate their learning experiences.

**Actualisation**

Actualisation is when potential is realised and within this study describes how the students assimilated, integrated and applied theory and practice learning experiences into new clinical situations and developed confidence in their GTA. This process appeared to create movement from superficial learning, which is task orientated, utilises memorising and meets minimum programme and learning requirements; to deep learning, which is holistic, integrates ideas and develops personal understanding through active learning enabling knowledge transformation (Entwhistle, 2000).

**Knowing and doing**

Many students recalled specific programme content and sessions they felt had contributed to their understanding of GTA: -

*“In university we had like anatomy and physiology seminar . . . And then we actually had a practical with the sim-mum doll and we could feel it* [uterus] *there. And in our OSCE’S as well, one of my OSCE’S was a post-natal discharge check from mother and baby and so I automatically just felt the uterus.”* STM G L 297

However, some students suggested the curricula content was broad and there was less curricula time and resources spent upon postnatal care including GTA than on other midwifery issues.

*“I do remember covering it and we 100% will have done, because I have knowledge about it that I haven’t got just from placement. But I don’t remember it being very large. You know, there’s some areas that I feel like we’ve come back to lots, whereas that’s not one of them.” STM E L 377*

The review of programme and module documentation affirmed that theoretical content related to maternal postnatal assessment and care were explicitly identified and occurred in each year of the 3 year and shortened programmes. However, the content tended to be a much smaller component of the module compared to other topic areas and the assessments tended not to focus upon maternal postnatal midwifery care. Where GTA was included in assessments it was as an option; one of a selection of essay titles from which students could choose. Therefore, the potential exists in summative assessment activities that for the duration of the programme some students could choose not to focus on maternal postnatal assessment and care

The Midwives in Teaching (MINT) report suggests that a range of practice and higher education based learning opportunities are valued by students (Fraser et al. 2010). However, the report also acknowledged that the midwifery curriculum is overcrowded, resulting in curriculum deficits (Fraser er al. 2010; Skirton et al. 2012). The findings from this study suggest theory overcrowding may result in maternal postnatal assessment and care becoming marginalised. This may be intensified by limited associated summatively assessed work, for as Carter et al. (2014) suggest assessment can drive student learning and influence their behaviour, prompting them to engage more deeply with the content and therefore enhance learning.

**Learning from and through Experience**

Although the majority of participants felt prepared for practice most identified that their learning became really meaningful when it was encountered within their clinical midwifery practice.

*“It’s only words on the paper until you actually go out on placement and you actually see the things, isn’t it?”* STM B L 227

This was reflected in the survey where 19 students commented on factors positively influencing their confidence, with 16 highlighting the significance of the amount and variety of practice experience. Case loading emerged favourably as this provided students with repeated contact with the woman during the childbirth continuum and enabled a reciprocal trusting relationship to develop.

*“from the point of view of good learning opportunities, certainly, case load, . . . provided a good opportunity to get to know someone . . . so I think the fact that they know you and they have built a bit of trust and a built a relationship with the women they are more comfortable maybe with you” STM H244*

Conversely those students who felt less confident in their assimilation and actualisation of GTA learning, tended to highlight concerns regarding access to relevant midwifery experiences. Five students in the survey who commented on why they felt they lacked confidence, all mentioned insufficient practice experience as a factor.

*“I do not have enough practical experience in assessing women’s perineum’s”.* SSN:4

The review of practice guidance and assessment documentation, affirmed that postnatal experiences were explicit, however criteria were articulated in broad statements, for example, “undertakes a postnatal assessment which includes physical, social and mental well-being”. This was in contrast with practice documentation concerning other aspects of midwifery care, such as labour, birth and breastfeeding support, where more detailed criteria were provided. This lack of detailed guidance could perhaps result in less emphasis on maternal postnatal assessment by both student and mentor.

Learning from and through practice is an important component of professional skill acquisition (Eraut, 2004; Longworth, 2013). Health Education England emphasises the importance of practice experience for student learning concluding *“there is significant evidence that students trying out in practice and assimilating what works in the real world is the fundamental mechanism that embeds theoretical learning into practical expertise”* (Devlin et al. 2014 p.6). Transformative learning theory suggests it is important that students are provided with experiences to test and explore new perspectives, to move from a state of awareness, superficial learning, to actualisation, deep learning and confidence (Mezirow and Talyor 2009). Barnfather (2013) proposes that students need more than theoretical knowledge to develop the range of midwifery sub-skills necessary for effective clinical reasoning; intuitive or tacit knowledge is required and can be honed within their practice experiences. This tacit knowledge can enable the midwife to undertake sensitive and holistic assessments, which utilise overt and covert observations and “make safe clinical judgements” (Barnfather, 2013p.132). The students in this study perceived their GTA confidence and skills were honed and actualised if they had accessed sufficient and varied practice experience of GTA.

**Recommendations**

In the survey and individual interviews, students were asked to consider potential ways to enhance learning experiences concerning maternal postnatal GTA. The tentative ideas, developed from all of the research data were presented to, and developed with, the students during the final student / researcher workshop. This form of student engagement not only enabled participant validation but facilitated meaningful involvement in curriculum development which may lessen the dissonance between what students suggest they need from midwifery education programmes and what the programmes offer (Silverman, 2006; McIntosh et al. 2013). As a result of this process recommendations were identified relating to learning experiences in both practice and HEI settings.

* Creative exploration of where and how students can access GTA, including non-midwifery placements and ‘caseloading’ opportunities.
* Maximise opportunities for students within the HEI setting to share and learn from their collective practice experiences.
* Support mentors to engage students in clinical reasoning processes and GTA skills.
* Facilitate supernumerary status for students and protected time for mentoring activity.
* Specific and detailed guidance in practice documentation to students and mentors, regarding necessary GTA experiences for students, with emphasis on lochial and uterine assessment and early warning indictors for development of genital tract morbidity.
* Curricula documentation should ensure maternal postnatal health assessments and needs are given equal status in summative assessment processes.
* Promote skills rehearsal within HEI’s, with emphasis on use of visual aids encompassing the full range of physiological and pathological genital tract conditions and adaptations.

**Conclusion**

This study explored student midwives’ experiences of postnatal GTA within midwifery preregistration curricula in one UK HEI, utilising case study methodology. The intention of single case study research is to illuminate detail and not to provide findings which are generalizable, however the findings may be transferable (Anthony and Jack 2009). To maximise transferability, quality parameters including credibility, dependability and confirmability guided the design and implementation of this study, with detailed explanations provided to enable the reader to decide if the findings may be transferable to their particular context (Houghton et al. 2013).

The student midwives’ experiences in relation to assessment of maternal postnatal genital tract health are that, the clinical and theoretical learning opportunities available throughout their programme may develop their confidence in GTA, but have limitations. Most of the students were aware of potential signs and symptoms associated with GTA health however, difficulties were identified concerning assessment of lochia, encountering sequential assessments and recognising conditions that could deteriorate. This awareness was effected by access issues to learning opportunities within practice due to variation in postnatal provision, service pressures and variety in mentor practices regarding selecting and creating learning opportunities. This study suggests actualisation of learning and confidence in GTA was achieved when opportunities to integrate theory and practice occurred. However, actualisation was hindered by less time specifically for postnatal maternal assessment content and assessment strategies in comparison to other aspects of midwifery knowledge. Such limited postnatal experience and associated GTA skill development has the potential to impact upon the workforce skills of the next generation of midwifery practitioners. This would hamper the ability of midwives to respond effectively to the dynamic and evolving needs of childbearing women, professional requirements and societal expectations.

In response recommendations have been identified to enhance the students learning experiences in practice and HEI settings to help contribute to the achievement of *“better postnatal and perinatal mental health care…..which can have a significant impact on the life chances and wellbeing of the woman, baby and family”* (National Maternity Review, 2016 p.10).