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# Student midwives' awareness, knowledge, and experiences of antenatal anxiety within clinical practice

## Abstract

**Objective:** The current study aimed to explore student midwives' awareness, knowledge, and experiences of supporting women with antenatal anxiety (ANA) within clinical practice.

**Background:** ANA is associated with negative outcomes for mother and baby. Midwives play a key role in the screening of antenatal mental health and care of women suffering from ANA.

**Methods:** This study was conducted with student midwives at one UK University in the North West of England. Twenty-five midwifery students completed a brief online survey informed by National Institute of Health and Care Excellence (NICE) guidelines. Of these, seven volunteered to participate in semi-structured interviews exploring the survey data. The interview topic guide was designed based on the findings of the survey.

**Results:** Thematic analysis of the seven interviews revealed four overarching themes: *Perpetuating factors, Barriers to care, Skills required in role, and Suggestions for future directions*. Midwives had a varied knowledge and understanding of ANA and expressed a desire to learn more about their role in supporting women with ANA.

**Conclusion:** Although a small study, the results highlight the need for education to be improved in order to best prepare student midwives for cases of ANA, with emphasis on integrating psychology and mental health information into teaching as well as time spent in clinical practice. Midwives are key in the screening of women for ANA and are in an ideal position to signpost for specialist care.

**Keywords:** Antenatal anxiety, screening, mental health

For some women, underlying mental health disorders can surface during pregnancy (Hogg, 2013). Between 15-25% of pregnant women are likely to be diagnosed with an antenatal mental health disorder (Priest, Austin, & Sullivan, 2005), with anxiety and depression being the most widely reported (Austin et al., 2010). It has been suggested that this increased vulnerability to mental health disorders is due to the physiological and psychological changes associated with pregnancy (Buist et al., 2007), such as changes in body image due to weight gain and becoming a parent (Hodgkinson, Smith & Wittkowski, 2014).

Antenatal anxiety (ANA) is defined as fears about the health and well-being of one's baby and self, the birth, the hospital environment, and the maternal role (Dunkel Schetter, 2011). All women express a level of fear in pregnancy but extreme fears (i.e. anxiety) can have a negative impact on their behaviours and prevent them from having a healthy pregnancy. There is no agreed consensus on prevalence rates of ANA due to its co-morbidity with antenatal depression (AND: NICE, 2007) and the focus on AND in the literature (Coelho, Murray, Royal-Lawson, & Cooper, 2011). Reported rates range from 6.6% (Andersson et al., 2003) to 24.5% (Reid, Power, & Cheshire (2009). ANA is associated with negative expectations about motherhood, difficulties adjusting to the demands of the maternal role, increased health care use during pregnancy, and anxiety and behavioural-emotional problems in children (Andersson, Sundström-Poromaa, Wulff, Åström, & Bixo, 2004; Hart & McMahon, 2006; O'Connor, Heron, Golding, & Glover, 2003; Talge, Neal, & Glover 2007; Van den Bergh, Mulder, Mennes, & Glover, 2005).

It is recommended that all UK maternity services screen for mental health symptoms (Wood, 2003). The Whooley questions, for example, are recommended for use during a woman's first contact with antenatal and postnatal services (Whooley, Avins, & Browner, 1997). This brief questionnaire does not identify a specific mental health disorder and thus the Confidential Enquiries into Maternal and Child Health (CEMACH) report called for the development of improved screening procedures for mental health carried out by midwives during the booking appointment (Lewis, 2007). It has been suggested that midwives who are in a prime position to assess women's mental health during the antenatal booking appointment should possess the knowledge of appropriate treatment and act as gatekeepers to specialist care pathways (Bowden & Manning, 2006; Gamble, et al., 2005). Consequently, the revised National Institute for Health and Clinical Excellence (NICE, 2014) guidelines recommend that all pregnant women should be screened for anxiety and suggest consideration of the Generalised Anxiety Disorder Scale version 2 (GAD-2) during the booking

appointment and at the first postnatal contact (NICE, 2014). This highlights the important role of the midwife in screening for anxiety during routine maternity care.

A positive relationship between mother and midwife enables knowledge sharing and has a positive impact on future parenting practices (Byrom & Gaudion, 2010). However, women have been shown to be critical of the emotional care provided by midwives and other health professionals (Rudman, El-Khoury, & Waldenström, 2007). One possible reason for this may be that midwives lack confidence in caring for women with mental health symptoms (Jarrett 2015). Indeed, Ross-Davies, Elliott, Sarkar, and Green (2006) found midwives were concerned that if they offered ineffective emotional support, this may exacerbate mothers' emotional distress. Jarrett (2015) also found that third year student midwives lacked awareness of how existing current mental health problems may be exacerbated during childbearing, with many reporting that they had received inadequate education in mental health care. Educating midwives during their pre-qualification training and professional development about mental health will enhance their knowledge and understanding which underpins their care of women with mental health problems (Currid, 2004; Department of Health 2014).

Research has concluded that non-mental health specialist health professionals, such as midwives, need to both be aware of the risk factors for mental health problems and have knowledge of how to identify and manage them effectively (Cantwell & Smith, 2006; Rothera & Oates, 2011). Thus, research is needed to understand midwives' knowledge of ANA and the education they receive to determine whether the NICE recommendations of mental health screening will be met in practice. The current study aimed to explore student midwives' awareness, knowledge, and experiences of supporting women with ANA within clinical practice, in order to support the development of midwifery education regarding learning in ANA.

## **Methodology**

### **Design and sample**

Little is understood about what student midwives know about ANA and thus a two-staged cross-sectional design was used. The first stage of the study used a quantitative (online survey) study to explore this in one student group. This approach was adopted to produce numerical findings and give some indication of any patterns in the students' experience of ANA, according to the knowledge and skills listed in NICE guidance. The second stage of the study explored the key findings in greater

depth in a qualitative (semi-structured interviews) study. A purposive sample of student midwives from all three years of the degree programme was recruited.

### **Procedure**

The study was comprised of two stages; 1) an online survey producing quantitative data, and 2) semi-structured interviews producing qualitative data. Ethical approval was granted from the University research ethics committee (REF: 12430).

#### **Stage 1 – online survey**

An initial e-mail and one reminder e-mail containing information about the study and a hyperlink to the survey were sent to all student midwives on a three-year pre-registration midwifery education programme attending one UK University. Students who were currently pregnant were excluded to ensure that they do not reflect on their own experiences of ANA. The survey was available for a period of five weeks. The email was sent via the University email system and was addressed to the students from the lead researcher so they felt no pressure to complete the survey from their lecturers. The 17-item survey was designed based on the NICE (2007) guideline recommendations and contained three sections of questions; awareness of ANA, knowledge of ANA management, and experience of ANA management. The questions contained a number of open questions and closed questions that were based on the content of the NICE guidelines (see box 1). The survey was not piloted directly with students but was subject to review by a midwife involved in the midwifery BSc programme. The only changes made to the survey as a result of this review were related to the terminology used in the questions.

#### **Stage 2 – semi-structured interview**

Upon completion of the survey, participants were asked to provide an email contact if they wanted to take part in a semi-structured interview. Those who volunteered were contacted by the lead researcher, with written consent obtained before the interview. Interviews were conducted in a private room at the University at a time that was convenient for the participant. The topic guide of the interviews was designed from the findings of the survey in Stage 1 and remained focused on participants' awareness, knowledge, and experiences of supporting women with ANA within clinical practice with the aim of expanding upon the survey data. A set of questions and prompts were designed for use in this semi-structured interviews (see box 2). Interviews were audio recorded and transcribed verbatim by the lead researcher. Pseudonyms were selected by the interviewee to be used in the transcripts.

## **Analysis**

Quantitative data were presented as descriptive statistics and qualitative data were analysed using thematic analysis (Boyatzis, 1998; Braun & Clarke, 2006). Thematic analysis was deemed most appropriate to examine the experiences of student midwives and open coding was used to develop themes from the transcripts (Maguire & Delahunt, 2009). Similar codes were then grouped together in order to generate themes (Buetow, 2010). The lead researcher conducted the initial analysis with themes being agreed in discussion with the rest of the research team, one of whom had analysed the data independently. No member-checking with participants was used as the research team represented both midwifery (understanding of curriculum and clinical role) and psychology (understanding of anxiety) which authors felt was ample for this small exploratory study.

## **Results**

### ***Stage 1 - online survey (quantitative data)***

One hundred and fifty eight midwifery students registered on a three-year pre-registration midwifery education programme were invited to take part in the study (nine students were excluded due to pregnancy). Of these, 42 completed the online survey (27% response rate). However, 17 only part-completed the survey resulting in 25 complete surveys (16% completion rate). The main purpose of the survey was to inform the interview topic guide and due to the small sample size no inferential statistics were conducted. The key findings of the survey and the impact on the interview topic guide can be seen in Table 1.

### ***Stage 2 - semi-structured interviews (qualitative data)***

Seven female participants were interviewed across the three years of study; two first year, two second year and three third year. All interviews lasted between 19 and 30 minutes. The thematic analysis of the data revealed four core themes; *Perpetuating factors*, *Barriers to care*, *Skills required in role*, and *Suggestions for future directions*. These themes are outlined, while illustrative examples from the data are presented in Table 2 (pseudonyms selected by interviewees).

#### ***Perpetuating factors (theme 1)***

Participants discussed the role of psychosocial factors that perpetuate the high levels of anxiety felt by women in pregnancy. The participants talked about their awareness of these factors and the impact on their ability to both identify and help women manage the symptoms of ANA. The

participants view their role as very important as these factors can often be changed through intervention. Four sub-themes were found and represented factors which increased anxiety among women: *social support, comparison to an ideal, past experience* and *medical care*.

*Social support:* The participants discussed the amount of social support women received from partners, friends, and families. They believed that too little or too much could have a negative impact on the women and increase their level of anxiety. Not being socially mobile resulted in a lack of social support for women.

*Comparison to an ideal:* It was reported that ANA may be maintained by women comparing themselves to an 'ideal' which caused them to feel negatively about their behaviour as it was different to the 'ideal'.

*Past experience:* The impact of past experiences of pregnancy and mental health were discussed. In particular, parity was identified as negatively impacting on women's antenatal anxiety in terms of their expectations (e.g. nulliparous women had no past experience so had little idea of what to expect compared to parous women, so were more anxious).

*Medical care:* The type of medical care offered to women with ANA was highlighted as perpetuating women's anxiety. Participants felt that more scheduled appointments and consultant-led care as opposed to midwifery-led care as a result of a mental health diagnosis, may increase women's levels of anxiety.

### *Barriers to care (theme 2)*

This second theme concerned participants' insight into factors that might impede their ability to care for women with ANA. There were two sub-themes under this heading; *screening in the antenatal clinic* and *diverse circumstances*.

*Screening in the antenatal clinic:* Participants reported that ANA was not a priority in the antenatal clinic. It was often not measured appropriately as anxiety was reported to be a normal process in the pregnancy experience, unlike depression which was screened for. Reduced appointment times and shortage of specialist midwives were also reported as reasons for not screening for ANA. Finally, student midwives' behaviour regarding ANA screening is heavily influenced by their confidence in their own knowledge and abilities. It was evident that their lack of confidence stemmed from a lack of exposure to cases of ANA.

*Diverse circumstances:* Participants identified that women had diverse circumstances, including differences in financial background, physical health, and mental health. Barriers preventing

midwives from fully understanding the impact of these diverse circumstances on women's mental health included short appointment times, stigma of mental health, and a lack of continuity of care.

### *Skills required in midwives role (theme 3)*

Although participants identified a number of barriers in their care for women with ANA, they were also aware of ways to overcome these barriers - as demonstrated in this third theme outlining skills required. Three sub-themes were identified; *communication, including the family*, and *knowledge of the referral pathway*.

*Communication:* Good communication skills were discussed as being very important when engaging with a woman with ANA. Many participants believed it was the responsibility of the midwife to ensure that women felt that the appointment environment was a safe place to talk and provided privacy and confidentiality. Having this environment was deemed essential for women to disclose mental health concerns. The ability to reassure the woman was identified as being one of the three core communication skills that midwives need to possess, along with honesty, and using non-clinical language.

*Including the family:* The ability to think beyond the woman and consider including the family during care was identified by participants as being an important skill that was shaped by observing mentors in practice. The family may have a positive or negative impact on women so therefore this may not involve direct involvement of the family but rather discussion with the woman about the role of the family and the impact on her mental health. The more student midwives are exposed to instances where their mentor includes the family, the more likely that they are to then embrace this in their own practice. Antenatal classes offer an opportunity to adopt a more inclusive perspective which allowed extended family members to be more involved. Participants endorsed such classes to a high degree as they believed that, in particular, they allowed the partner to voice any worries that they may have. Furthermore, not only does this relationship between the midwife and the family allow cases of ANA to be identified more readily, but the midwife is also able to provide care for the family if it is needed.

*Knowledge of the referral pathway:* Possessing the knowledge of the referral pathway was identified by participants from all three years of the course as being a necessary skill. Knowledge of the referral pathway (e.g. to a specialist midwife) was high and was reported as a necessary skill. Part of this key skill is their ability to liaise with other health professionals who are separate from

traditional care pathways. Participants also demonstrated a high standard of knowledge regarding current policy and screening of ANA.

#### *Suggestions for future directions (theme 4)*

The final theme concerned participants' views on how their teaching and learning experiences within practice can be improved to meet the needs of women with ANA. Two sub-themes were identified; *teaching improvements* and *placement suggestions*.

*Teaching improvements:* A suggestion made by participants was that mental health knowledge needs to be better integrated in the curriculum on their University courses. The participants shared the opinion that they wanted to be taught more about the role of the midwife in managing ANA as opposed to a greater knowledge of the disorder. To do this, multiple perspectives might be taught including that of the women and that of the specialist midwife with expertise in supporting women who are vulnerable, and wider health care team

*Placement suggestions:* Direct exposure in clinical placements to women with ANA was expressed as the best way to learn about ANA. One way of achieving this was to work more closely with specialist mental health midwives. The need for integration follows the view that antenatal mental health specialist care pathways exist within a separate domain to standard midwifery care. This shows an eagerness amongst participants to improve their understanding of how to support women with ANA.

#### **Discussion**

The current study aimed to understand student midwives' awareness, knowledge, and experiences of caring for women with ANA. This study found that student midwives' awareness of ANA was varied, however, they were all well aware of the important role that they played in terms of being able to detect ANA. This was to be expected as ANA has been largely overlooked as greater attention has been paid to antenatal and postnatal depression (Coelho, Murray, Royal-Lawson, & Cooper, 2011). As midwives are in a prime position to identify and manage antenatal mental health issues (Bowden & Manning, 2006), it is important to identify current levels of ANA understanding in studies such as this to enable tailored education.

The current findings support past research in highlighting that the quality of the interaction between mother and midwife can impact upon the amount of information shared (Byrom & Gaudion, 2010). Therefore, midwives should strive to create an environment that fosters both openness and trust with women. They can learn to do this through observing clinicians in practice and learning

psychological theories of communication in the classroom. This can be supported with practical considerations such as the length of appointments and continuity of care.

A lack of integration between mental health and midwifery services was identified in the current study as a potential explanation of why student midwives may not be aware of, be knowledgeable about, or have experienced how to care for women with ANA. There was a definite eagerness amongst students to gain greater awareness, knowledge, and experiences of ANA both within their theoretical teaching and clinical placement. These findings are significant given that The Department of Health (2014) has specified that all pre-registration midwifery education programmes should have integrated core education on perinatal mental health by September 2015. This education should inform midwives about distinct mental health conditions such as anxiety, depression, and stress as well as the measurement of these in antenatal and postnatal settings.

The current findings make several possible suggestions regarding how the content and delivery of education and practice could increase ANA knowledge, which could help midwifery educators. With past research indicating that the majority of midwives' understanding of antenatal mental health issues is derived from their time spent in practice (Jones, Creedy, & Gamble, 2011), a possible implication of this research could be that midwifery educators make attempts to relate theoretical teaching to clinical experiences and vice versa (e.g. using real life examples and discussing current issues such as challenges screening for mental health disorders). In addition, teaching of ANA could cover the role of the midwife in screening and treating women with ANA as this is the information that student midwives identified as being what they would like to learn and would help them most in clinical practice. This is especially relevant now that NICE (2014) guidance has suggested the introduction of screening for anxiety during pregnancy. As stated above, it is important that students are taught about anxiety in addition to depression which dominates the literature. Finally, the students highlighted the need for a more integrated approach to mental health. This supports the recommendation that in order to provide holistic care, maternity care must be able to identify and support women's psychological needs (O'Loughlin, 2003). To do so, it is recommended that psychology and mental health need be further integrated into midwifery education.

The main limitation of this study is the small sample size due to a lower response rate than anticipated. The lack of engagement of the student midwives in both stages of the study could be the result of either students' lack of knowledge of ANA or a lack of understanding of the relevance of research (or even busy student work lives). In addition, it could be suggested that students who had a greater understanding and experience of ANA were more likely to volunteer for interviews,

providing a more informed sample. The study was conducted in one University at a time when the midwifery pre-regulation standards did not stipulate the inclusion of mental health. Further research should be conducted with students at a number of Universities to explore how whether the HEE mandate of HEE has increased student's teaching and thus understanding of ANA. Finally, the sample could have been biased by the two-staged approach as students knew what to expect in the interview as it was informed by their online survey responses. Therefore, they had the opportunity to pre-empt questions and prepare answers for the interview (e.g. research areas where their knowledge was identified as low in the survey, such as prevalence rates), potentially providing an inaccurate picture of student knowledge of ANA. Despite the limitations outlined, the current study fulfilled its primary aim and offers an exploration of student midwives' awareness, knowledge, and experiences of supporting women with ANA within clinical practice.

In conclusion, student midwives demonstrate varied levels of understanding of how to support women with ANA in terms of their awareness, knowledge, and experiences within clinical practice. However, there was a desire amongst students to learn more about ANA and mental health issues as they believed it would improve the care that they are able to offer women. Midwifery care and specialist mental health care were seen as existing on two separate pathways by the student midwives, which reiterates the call for a more integrated approach to the theoretical and practical education of mental health. This research gives us a basic knowledge of student midwives' understanding of ANA and the care pathway for women with ANA. However, more research is needed to further understand how we can support midwives in the screening and care of women with ANA.

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Table 1. *Summary of online survey findings and the impact on interview topic guide (quantitative data).*

<b>Section</b>	<b>Key findings</b>	<b>Impact upon interview topic guide</b>
<i>Awareness of ANA</i>	Good awareness of the existence of the NICE guidelines but varied awareness of ANA as a mental health condition	Students' low knowledge of when anxiety becomes a problem and awareness of specific anxieties was explored.
	Majority of students unaware of prevalence of ANA.	Students informed of the prevalence rate and then asked their views about these rates.
Knowledge of ANA	Very few students knew the NICE recommended psychological therapy for pregnant women.	Students asked what they knew about the care pathway and treatment for ANA.
	Majority of students incorrectly reported women requiring psychological treatment should be seen within one week of their booking appointment.	Students were informed of the NICE recommendations and then asked what they thought about these in terms of their practice. Also asked about impact of timeframe on skills required and availability of referral.

Experiences of  
caring for women  
with ANA

Students believed preparation for ANA best achieved  
through combination of course-based methods and  
improvement of clinic-based skills.

Suggestions of ways to teach ANA from the survey were offered  
to students as follow-up questions in order to determine most  
effective methods (e.g., talks from specialists or case studies  
and scenario-based learning).

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Table 2. Themes and example quotes from the semi-structured interviews (qualitative data).

Theme	Subtheme	Example quote
<i>Perpetuating factors</i>	<i>Social support</i>	<p><i>"...in practice you see the more affluent areas sometimes have a high rate of postnatal depression because they don't have as much of a support network, especially the women who have moved around and away from their families and they've not got that same support network..." (Katie, 2nd year student midwife)</i></p> <p><i>"...having too much social support could lead to a feeling of 'Am I gonna be as good as my mum?'" (Emma, 3rd year student midwife)</i></p>
	<i>Comparison to an ideal</i>	<p><i>"...'Am I doing this right, am I doing that right, should I be doing that, should I not be doing that, is this normal?' It's almost like an obsession with are they doing things right or wrong." (Sarah, 1st year student midwife)</i></p>
	<i>Past experience</i>	<p><i>"...women who have had miscarriages before, they are particularly anxious, or women who have had some sort of emotional disruption in their life, like breaking up with their partner, or there's problems with their other kids." (Sandeep, 1st year student midwife)</i></p> <p><i>"...if they've never had a baby before they really don't know what to expect either, and that can be quite nerve-wracking because it's the unknown and I think that's a lot of people's anxiety to begin with - the unknown." (Charlotte, 3rd year student midwife)</i></p>

*Medical care*      *"...the women who are depressed or anxious, are put under obstetric-led care rather than midwifery-led care and then that brings in loads in more monitoring." (Sandeep, 1st year student midwife)*  
*"...when there's more involvement of doctors, they tend to get more worried." (Sandeep, 1st year student midwife)*

## Barriers to care

*Screening in clinic*      *"Umm, I don't think appointments are long enough. Yeah. Because you get a ten minute appointment...There's so much to get done at an antenatal appointment, so to get a sit-down and have a proper chat with the women, there's just not the chance." (Beth, 2nd year student midwife)*  
*"...I think sometimes people just think it's people getting anxious about the birth and things so it's sometimes overlooked..." (Charlotte, 3rd year student midwife)*  
*"...in practice I don't feel like I come across it that often enough to think of it as a, as a big disorder..." (Sally, 3rd year student midwife)*

*Diverse circumstances*      *"...mental health is obviously quite a taboo subject..." (Emma, 3rd year student midwife)*  
*"...often, women will not see the same midwife at every clinic appointment so it's very difficult to pick up on changes in the levels of anxiety throughout the pregnancy and, quite often, it's more of a case of them disclosing to you if they feel anxious rather than us picking up on it 'cos you just, more often than not, don't have that relationship with the woman because you don't see them regularly." (Katie, 2nd year student midwife)*

*Skills required in  
role*

*Communication*    *“You’ve just got to try and be as approachable as you can I suppose, and give people the opportunity to talk and know they’re gonna be listened to and not judged.” (Charlotte, 3rd year student midwife)*

*“Well...I have to reassure them I suppose. I think being honest with them is quite important, especially if they are particularly anxious. But then, not going too clinical, using language in terminology they can understand. And, like, offering them extra support if they need it or asking them about the support they have at home.” (Sandeep, 1st year student midwife)*

*Including the family*

*“So you’re learning from your mentors in practice, about how they address, you know, how they speak to different women with different situations, and then I think it’s about learning how you manage that throughout your training.” (Katie, 2nd year student midwife)*

*“I think more and more now, antenatal classes are being tailored towards the whole family rather than just the woman...asking men and other family members what they’re worried about, what they want to talk about in the sessions...” (Charlotte, 3rd year student midwife)*

*“...we are always mindful of the family, the other children, the partners, and we are encouraged as student midwives to think about the holistic picture and the family. We’re not just looking after the woman, we’re looking after the whole family.” (Katie, 2nd year student midwife)*

*Knowledge of referral pathway*      *“...she’s referred to a specialist midwife who then tends to deal with that side of it...”* (Sally, 3rd year student midwife)  
*“...it’s almost like another side to the maternity care that’s not actually in maternity care. It’s almost like it’s put into another pathway that isn’t linked to maternity. It’s like they’re on two different roads and the two don’t meet.”* (Katie, 2nd year student midwife)  
*“Well, in terms of assessing mental health, the NICE guidelines say that we ask the three questions...”* (Emma, 3rd year student midwife)

*Suggestions for  
future directions*

*Teaching  
suggestions*

*"...I just think it should maybe be more, sort of, interwoven throughout the whole curriculum because it does affect, you know...and it's complex as it's all intertwined at some point..." (Katie, 2nd year student midwife)*

*"...I'd like something a bit more in-depth, just a bit more like focused on the midwife's role." (Beth, 2nd year student midwife)*

*"Yeah, I think it would be useful to see it from the perspective of a pregnant woman or not necessarily pregnant when she speaks to us but, you know, someone who has experienced it because then you can kind of know what is effective in what you're saying to them..." (Sandeep, 1st year student midwife)*

*Placement  
suggestions*

*"...it is down to seeing it and experiencing it, and that's why we do the practical side of the course 'cos it's such a real-life thing, they can't teach you it in the classroom..." (Beth, 2nd year student midwife)*

*"...I think as we get further down the course, we should be encouraged to spoke out and to spend time with the specialist midwives, the children's centre midwives that work with the vulnerable families, where there is more women with, you know, anxiety." (Katie, 2nd year student midwife)*

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Box 1: example questions from the online survey.

Section	Example questions
Awareness	<p><i>Open question:</i></p> <p><b>How would you define ‘antenatal anxiety’?</b></p> <p><i>Closed question:</i></p> <p><b>How many women giving birth per year are estimated to be suffering from an anxiety disorder?</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> 9,000 (15 per 1,000 live births)</li> <li><input type="checkbox"/> 15,000 (25 per 1,000 live births)</li> <li><input type="checkbox"/> 30,000 (50 per 1,000 live births)</li> <li><input type="checkbox"/> Don’t know</li> </ul>
Knowledge	<p><i>Closed question:</i></p> <p><b>Women requiring psychological treatment should be seen for treatment...</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Within 1 week of initial assessment, and no longer than 3 weeks afterwards</li> <li><input type="checkbox"/> Within 1 month of initial assessment, and no longer than 3 months afterwards</li> <li><input type="checkbox"/> Within 2 months of initial assessment, and no longer than 6 months afterwards</li> <li><input type="checkbox"/> Don’t know</li> </ul>
Experience	<p><i>Open and closed question:</i></p> <p><b>Did you have any experience working with pregnant women or those with mental health difficulties before starting the midwifery course? (If yes, please provide details below)</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Yes</li> <li><input type="checkbox"/> No</li> </ul>

Box 2. The interview questions and suggested prompts.

Section in interview	Questions and prompts
<b>AWARENESS</b>	<p>Being slightly anxious is quite normal for pregnant mothers. In your opinion, when do you think being anxious can become a problem within antenatal care?  <i>- How does this anxiety impact upon your role as a midwife?</i></p> <p>With regards to specific anxieties that mothers might have, you and your fellow student midwives seemed to believe that the most common anxiety revolved around anticipated pain as well as the wellbeing of the baby - why do you think these were the most common beliefs?  <i>- What other specific anxieties might mothers have?</i></p> <p><i>The survey asked about your awareness of potential risk factors for the onset of Postnatal Depression. Do you know how these might be linked to PND?</i>  <i>- For example, poor social support?</i>  <i>- How about recent life events?</i>  <i>- How about antenatal anxiety?</i></p> <p>How do you think your role as a midwife can help in such instances?</p> <p>30,000 (50 per 1,000 live births) women giving birth per year are estimated to be suffering from an anxiety disorder. Does this figure surprise you?  <i>- Did you think it was higher/lower?</i>  <i>- What impact do you think statistic might have on care?</i></p>
<b><u>Knowledge</u></b>	<p>Do you think your teaching provides you with an appropriate level of understanding about mental health during pregnancy?  <i>- How has your knowledge/lack of knowledge affected your time in clinical practice?</i></p> <p>When women are first seen by midwives, they are usually asked about past or present mental illness, whether they have been treated by mental health services, and whether they have a family history of mental illness. How do you think cases of antenatal anxiety might be spotted at this early stage?  <i>- What kind of questions do you think should be asked by midwives when they first see a woman in order to determine likelihood of antenatal anxiety?</i>  <i>- How should this be adapted to find out more about AA?</i></p>

	<p>NICE guidelines suggest that women requiring psychological treatment should be seen for treatment within 1 month of initial assessment, and no longer than 3 weeks afterwards. However, many of your fellow midwives believed that they should be seen sooner. Do you agree?</p> <ul style="list-style-type: none"> <li>- <i>Can you explain your answer?</i></li> <li>- <i>How might the time at when women should be seen impact upon your training and the care of pregnant women?</i></li> </ul> <p>What, if any, psychological interventions have you come across (either in your teaching or in clinical practice)?</p> <ul style="list-style-type: none"> <li>- <i>Do you think that the stage of pregnancy should be considered when delivering an intervention?</i></li> <li>- <i>How do you then refer the women on?</i></li> <li>- <i>How would you bring it up/How have you brought it up?</i></li> </ul> <p>General advice about sleep hygiene was identified as a recommendation for pregnant women with a mental disorder who have sleep problems. How often do you talk to women about their sleeping habits?</p> <ul style="list-style-type: none"> <li>- <i>Are you expected to know how sleep is affected by mental health and vice versa?</i></li> <li>- <i>What kind of advice do you usually give?</i></li> </ul>
<b><u>Experiences</u></b>	<p>What role do you think the partner and the family play during pregnancy?</p> <ul style="list-style-type: none"> <li>- <i>In your experience within clinical practice, do you think enough attention is given to the needs of the family in addition to the woman?</i></li> <li>- <i>How might the partner and the family be helpful in cases of antenatal anxiety?</i></li> </ul> <p>In the survey, there appeared to be a split between students who had encountered cases of antenatal anxiety/witnessed other midwives' experiences within clinical practice, and those who had not. Have you encountered or witnessed any cases?</p> <ul style="list-style-type: none"> <li>- <i>Can you expand upon your role as a student midwife in such cases? / What skills do you think you would need in such situations?</i></li> <li>- <i>Do you think first time mothers are more likely to express anxiety than mothers who have given birth before?</i></li> </ul> <p>A recurring suggestion made by midwives in the online survey was the need for course instructors and supervising midwives to better prepare you for cases of antenatal anxiety and other mental health problems. If such a suggestion was taken on board, what would you like to see in...</p> <ul style="list-style-type: none"> <li>- <i>Scenarios and case studies?</i></li> <li>- <i>Lectures on what symptoms/warning signs to look out for?</i></li> <li>- <i>Lectures on how to communicate with women with antenatal anxiety?</i></li> <li>- <i>Lectures on referral pathways?</i></li> <li>- <i>Talks from specialists?</i></li> <li>- <i>Training sessions and patient observations?</i></li> </ul>