Midwifery one-to-one support in labour: More than a ratio.

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Abstract

Objective: To explore midwifery one-to-one support in labour in a real world context of midwife-led birth environments.

Design: Ethnographic study. Data was collected from 30 observations inside and outside the birth environments in three different birth settings. Semi-structured interviews were completed following the births with 29 low-risk women and 30 midwives with at least one year labour support experience to gain their perspectives. Twenty-seven maternity records were also analysed.

Setting: An alongside midwife-led unit, freestanding midwife-led unit and women's homes in England.

Findings: Six components of care were identified that required balance inside midwife-led birth environments: (1) presence, (2) midwife-woman relationships, (3) coping strategies, (4) labour progress, (5) birthing partners and (6) midwifery support. Midwives used their knowledge, experience and intuitive skills to synchronise their care for the six components to work in balance. Balancing of the six components have been translated into continuums representing the labour care and requirements.

Conclusion and implications for practice: Midwifery one-to-one support in labour is more than a ratio when translated into clinical practice. When the balance of the six components were tuned into the needs of women, women were satisfied with their labour and birth experience, even when it did not go to plan. A one midwife to one woman ratio should be available for all women in labour.

Keywords: One-to-one; 1:1; Midwifery; Labour support; Continuous support; Ethnographic

Introduction

Increased clarity on the meaning of midwifery one-to-one support in labour is vital as it is associated with improved birth outcomes (Bohren et al., 2017), but it is unclear why and how

better birth outcomes occur. Midwifery one-to-one support is a complex concept to translate into clinical practice. There are disparities in the literature regarding the level of presence, who should perform it, when and where it should happen, and what type of model of care should be applied (Sosa et al., 2012). Although research studies include ratio, presence, exclusive focus, continuous support, equal midwife-woman relationship as attributes of midwifery one-to-one support in labour, the connections between these attributes are not understood.

In the global literature midwifery one-to-one support in labour is most commonly described as a ratio of one midwife to one woman:

> '*One-to-one care … means that each midwife cares for one woman in labour' (Gu et al., 2011: 245).*

In the United Kingdom (U.K.), there has been no research specifically looking at one-to-one support in labour. However, the midwifery professional bodies (RCOG et al., 2007; RCM, 2010), government policies (Department of Health, 2004) and the guideline group representing NICE (2015) describe midwifery one-to-one support in labour as a ratio of one midwife to one woman in labour. The clearest practice standard available to date for U.K. maternity care providers regarding midwifery one-to-one support in labour stated that:

> *'Maternity services develop the capacity for every woman to have a designated midwife to provide care for them when in established labour for 100% of the time'* (Department of Health, 2004: 28).

This definition has been used to audit midwifery one-to-one support in labour within NHS Trusts (Sosa, 2017). A survey by the Comptroller and Auditor General (2013) reported that only seventy-eight percent of maternity units were achieving midwifery one-to-one support in labour. Surveys (National Federation of Women's Institutes and National Child birth Trust, 2013; Care Quality Commission, 2015) show that women have been left alone during labour or shortly after giving birth. It is unclear if the results are associated with staffing levels or working practises.

Ball and Washbrook (2003, 2010) have designed workforce analysis tools (Birthrate, Birthrate plus, Birthrate Plus Acuity) to calculate the number of midwives required in an NHS organisation to meet the midwifery one-to-one standard in labour that reflects clinical need. There is no evidence however, that current staffing levels provided by these workforce analysis tools have enabled NHS Trusts in the UK to achieve midwifery one-to-one support to all women in labour (NICE, 2014).

The consistent stipulation for a ratio of one midwife to one woman, however, is to ensure that a midwife can exclusively focus their attention on one woman in labour and have no external obligations. Randomised trials in the meta-analysis by Bohren et al. (2017) indicated that midwives and student midwives have additional duties and are constrained by institutional policies and routine practices. Hodnett et al. (2013) has previously argued that such constraints affect the ability of midwives and student midwives to exclusively focus on providing labour support to women. The studies included in the meta-analysis by Hodnett et al. (2013) and Bohren et al. (2017) however, were completed in hospital environments. A knowledge gap existed concerning how midwifery one-to-one support in labour translated into practice within midwife–led environments. The aim of this study was to explore midwifery one-to-one support in labour in a real world context of midwife-led birth environments.

Methods

Design

An ethnographic approach was used to learn about the culture of midwife-led birth environments where midwifery one-to-one support in labour was achieved. Direct observations were used to identify and understand the activities inside and outside the birth environments. Inside the birth environment the researcher observed labour and birth until one hour postpartum. This was unless the researcher was asked to leave, or once over eight hours of observations had been completed. Outside the birth environment observations were performed inside the staff room. In relation to home births, observations were limited outside the birth environment as there were no areas such as a staff room to observe activities. While observing, the researcher attempted to blend into the background to achieve a balance so that normal activities were not disrupted (Bonner and Tolhurst, 2002). Fieldnotes and drawings were completed using a touchscreen tablet while observing the activities, interactions and events inside and outside the birth environments.

Setting

The study settings included three midwife-led birth environments: Alongside midwife-led unit (AMU), freestanding midwife-led unit (FMU) and women's homes in England. Ten observations were completed within the birth environment at each of the three study sites (165 hours). 616 hours of observations were also completed outside the birth environments.

Sample

Purposive sampling was utilised to determine the geographical sites, midwives and women to target specific characteristics. Using 'Dr Foster' website (2007: accessed 12/02/11) hospitals and midwife-led units were identified that provided midwifery one-to-one support in labour. Midwives had to have at least one year experience providing labour support, band 6 or over and not under supervised practice. Women participants had to be low-risk, under midwife–led care, over eighteen years old and able to speak English.

Data collection

The fieldwork for the three study sites was completed over 39 weeks between October 2011 and December 2012. Midwives introduced the research within antenatal clinics providing invitation letter, participant information leaflet, and consent forms. Women were asked to bring consent forms with them when they presented in labour. The consent of midwives was considered in the absence of the researcher and discussed with their peer midwives. When consent was provided by a woman and midwife the researcher was contacted to observe the labour. Following a labour observation the midwife approached the woman prior to discharge and checked if consent was provided for a postnatal formal interview. Women who consented were interviewed two weeks postpartum. The interviews included those partners of women who were keen to contribute.

Rigour

Reflexivity was an integral part of the study as *'every ethnographic description is a translation'* (Spradley, 1979:22). Ethnography is not a straightforward process of observing and documenting. The researcher is required to directly participate to some degree in the social action in a setting and this work in the field requires the continuous reflection on the action of the social world under observation. In this study the assumptions that come with a background in midwifery meant that, while in the field, there needed to be an internal interplay considering whether observations were being made in the role of researcher or being accepted as face value based on midwifery knowledge. This insider/outsider consideration (Allen, 2004) was discussed as part of the process of analysis between the researcher and supervisors, checking and rechecking assumptions. The process of reflexivity was part of data gathering field note memos and formed part of the consideration of analysis. Reflexivity allowed the researcher to capture and document their cultural assumptions, values and emotions within a reflective diary and all the fieldnotes collected. Atkinson (2015) points out that ethnographic data collection and analysis is complex and needs to do justice to the complexity of social worlds which it attempts to capture. The reflexivity is a genuine attempt to ensure that justice is done to the complexity of data

collected within the complex social world that involves women, midwives and other actors within the birth settings observed.

Reflexivity is an important element of ensuring the rigour of the ethnographic approach. Alongside this, the data trail as illustrated by the use of quotes and extracts from field notes and the analysis of the policies and guidelines that underpinned midwifery one-to-one support in labour all contribute to the thick description of the ethnography. This audit trail, the prolonged engagement in the fieldwork and the scrutiny of peer review of the analysis process by supervisors underwrites the validity of the qualitative method (Sarantakos, 2013).

Using three study sites also provided an opportunity to make a comparative analysis of three types of midwife-led care birth environments. Multiple study sites increase the transferability of findings. Transferability implies that the findings from this study can be transferred to a similar context, situation and participants (Yin, 2016). The atmosphere created and the activities performed by midwives inside the birth environments were found to be very similar within all three study sites.

Data analysis

Interviews were audio recorded and transcribed by the researcher, with data organised and categorised using the software program NVivo 10. All data was anonymised and pseudonyms are used to present the report. Thematic analysis enabled the different data sources and different study sites to be compared. The guidance from Braun and Clarke (2006) included familiarising the researcher with the data, generating initial codes, searching for themes; and reviewing, refining and naming themes until data saturation. The theoretical stance evolved from choosing ethnography as the methodology. Symbolic interactionism (Goffman, 1990; Blumer, 1986) was used as the analytical lens to interpret the meaning of interactions, relationships, situations and birthing environments. The researcher developed an understanding of the attributes of midwifery one-to-one support in labour through observing the actions of midwives and their interactions with women. Analysis revealed the way in which midwives synchronised their activities to provide care dependent on how the woman was coping and how labour was progressing, how the partner was contributing, and the quality of the midwife-woman relationship and how the midwife used her presence in relation to interaction and proximity with the woman. This reflected what Goffman (1990) explained as individuals oscillating their conduct to correspond with the perceived self that is expected for each interaction.

The study was approved by a London NHS Ethics committee. Written consent was gained for all participants.

Findings and Discussion

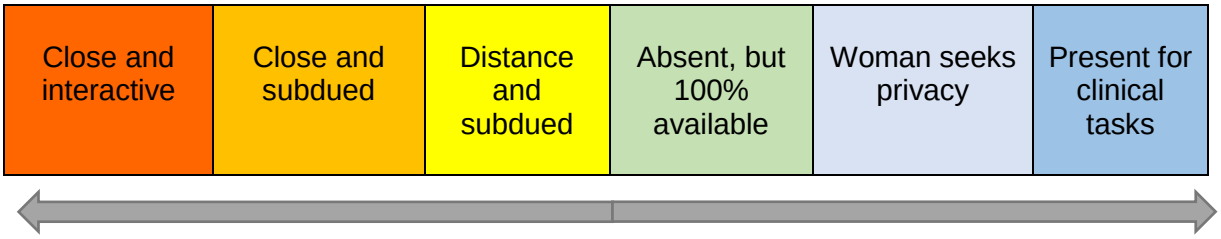
In total 30 labours were observed, twenty-seven maternity records analysed (There were two maternity records at study site three that were not located) and 59 interviews (29 women and 30 midwives) audio recorded. In addition 10 partners accompanied the women in the interviews. Nine women were primigravida and 21 were multigravida. All women received a ratio of one midwife to one woman in established labour. Established labour was defined in this research as '*regular and painful contractions and there is progressive cervical effacement and dilatation beyond 4cm'* (NICE 2014:773). Although all women received a ratio of one midwife to one woman in established labour, it was at times delayed at the FMU while they waited for support staff to arrive. Otherwise, the philosophy of care, atmosphere and activities inside the birth environments were very similar within the AMU, FMU and home births. The findings showed that midwifery one-to-one support in labour is more than a ratio, it is a balance.

Balance

Balance was a state of care that was sensitive to the needs of a woman. There were vital prerequisites that led to the balance. If even one prerequisite was missing, midwifery one-to-one support in labour was not possible. The prerequisites of midwifery one-to-one support in labour (Figure 1) started with a ratio of one midwife to one woman. This one-to-one ratio enabled a midwife to be present with a woman inside the birth environment, which then allowed the midwife to focus, tune into the needs of a woman in labour and balance six components identified: presence, midwife-woman relationships, coping strategies, labour progress, birthing partners and midwifery support. These six components of care are each represented by a continuum within the birth environment (Tables 1- 6). This paper presents how midwives synchronised their care to balance these six components to meet the needs of each woman in labour. Midwives required knowledge, experience, skills, intuition and motivation to assess the changing conditions of labour as it played out and have insight into the needs of a woman and her baby. The processes of midwifery one-to-one support in labour did not guarantee that midwives would always balance every component correctly. Sometimes women needed to readdress the balance of one component or more for themselves. This was part of an equal midwife-woman relationship. When the balance of the six components were tuned into the needs of women, women were satisfied with their labour and birth experience, even when it did not go to plan (Figure 2).

Gauging midwifery presence

Table 1: Continuum for midwifery presence



Each midwife gauged whether their presence needed to be interactive and within close proximity with the woman, subdued, in the background while remaining within the birthing environment or whether privacy was required (Table 1). Interviews supported the observations that some women such as Connie wanted frequent interaction with their midwife:

> *The midwife knelt down next to Connie quietly repeating 'well done' during the contractions …* (Fieldnotes from Connie's Labour, AMU)
>
> *"I kind of almost waited for her voice, because I then had a system going as I breathed through every contraction..."* (Connie, AMU)

In contrast, Terri explained how she needed to focus inward and therefore wanted the midwife to have a quiet presence until interaction was needed:

> *"… I was dealing with it myself … … It was nice to know she was there and she made her presence felt every so often by helping me through the more painful contractions … I was so into my own little world …"* (Terri, AMU)

If the midwife was present when the woman required privacy, women such as Hilda explained how they readdressed the balance by taking themselves away from the gaze of the midwife:

> *"… sometimes you need a wee bit of alone time as well … […] I just cheated and used the bathroom." (Laughing and gesturing as if she has done something crafty)* (Hilda, AMU)

For women such as Connie, constant midwifery presence was required as the thought of being alone caused anxiety:

> *"… that would have been an awful experience for me if I had been left, … it would have been a nightmare for me.... I would have got myself worked up…"* (Connie, AMU).

Midwives also described in the interviews about being available to women within the AMU and FMU, as privacy for women was difficult to achieve within one labour room with

an en-suite shower and toilet. Being available meant that the midwife would intermittently leave the birth environment, but could be present when required. Midwife Maureen explained the translation of availability in clinical practice:

> *"... the lady has access to call you quickly and you can be there in 30 seconds ... that means that you are almost kind of there if she is coping…"* (Maureen, AMU midwife)

In contrast, women at home often took the lead and created balance by finding privacy in another room when needed.

At the FMU, one-to-one support in labour was sometimes not achievable when a midwife was balancing caring for a woman in labour and continuing an antenatal clinic. Each midwife had to determine if intermittent assessments were adequate if the woman was coping well. The intermittent assessments continued until either the on-call midwife took over the care of the woman in labour, or the FMU midwife delayed the antenatal clinic and stayed with the woman. Midwife Yani reflected on her considerations when making an assessment:

> *"the reality is there are other things that need to be done, and as long as you are going back and giving her the support and listening to the fetal heart every fifteen minutes, as long as she is coping and happy … that is still acceptable care..."* (Yani, FMU midwife)

None of the women in this study said that they required more presence. Midwives generally were successful in their attempts to gauge presence:

> *"…I don't know how they knew …but … they were there when they needed to be and weren't when I didn't want them."* (Mira, FMU)

The subdued presence resembled what exemplary midwives have referred to as 'the art of doing nothing' in the Delphi study by Kennedy (2000:12).

Midwife-woman relationship

Table 2: Continuum for the midwife-woman relationship

Commitment	Professional friendship	Mutual trust	Taking a break	Loss of trust	Closure

The midwife-woman relationship is defined by the level of connection (Table 2). There was a degree of interpretation on the part of the woman and midwife when achieving a balance, as the types of connections were subjective.

The relationships between midwives and women were mostly formed when meeting for the first time in labour as the majority had not met in the pregnancy. Nevertheless, both midwives and women in this study showed a commitment to establish a relationship. Women in the interviews described their midwives as friends and part of the family:

> *"…* [Midwife Diana] *became my friend ... I felt like I had known her for ages and we found out all about her…"* (Connie, AMU).
>
> *"…they [midwives] are just part of the family for a few hours." (*Rita, Home birth)

The same descriptions were reported by women in the study by Walsh (1999) when describing the midwife-woman relationship, but the caseload model of care was thought to have provoked this relationship. The study reported in this paper showed that such friendships also developed in a short space of time.

Friendship alone was not enough for women within a one-to-one relationship. Trust was also an essential component of the midwife-women connection. Trust from women was earned from the confidence in the midwives' professional knowledge and skills. Equality in the relationship also evolved when midwives trusted the women to follow their body in labour. Again trust developed within a very short space of time. When a trusting relationship was made, women and midwives such as Kenda and Diana conveyed how the connection was equal as the expertise of the woman and midwife was acknowledged and trusted:

> *"…I trusted that they … knew what they were doing …it's amazing, how in a very short space of time you immediately, if you have the right midwives … can build a rapport…. It is powerful…." (laughing)* (Kenda, AMU)
>
> *"…they [women] are the ones that lead the labour not me …I have … skills to understand if the progress is going on or not, but … they can feel it …"* (Diana, AMU midwife)

The equal relationship described here reflects the reciprocity defined by Hunter (2006:315) where there is '*give and take'* from both the midwife and woman. The shared power dynamics also identified closely to what Fahy and Parrett (2006: 47) describe as '*integrative power '* as the midwifery labour support showed evidence of integration of the women's mind and body to follow women's instincts.

Trust earned could be lost if women did not continue to connect with midwives as labour progressed. The contribution of Cindy's partner to an interview described how a trusting relationship built in pregnancy was lost in labour when they doubted their midwife's findings that Cindy was in established labour. The doubts increased as Cindy's contractions became less frequent and the intensity reduced. Cindy and her partner did not communicate their concerns until their doubts were confirmed by the next midwife when the shifts were changed:

> *"I felt confident, but it got to a certain point … in the early hours of the morning … we didn't really want her [midwife] to be here,… the confidence just went and I just sort of felt … I am glad she is going in a few hours*." (Cindy's Partner, Home birth)

The midwife in this situation was unaware that the woman had lost trust in her. Although the midwife continued to encourage Cindy to follow her body, Cindy felt confused as she did not feel her mind, body and instincts were corresponding to the clinical findings of the midwife.

In contrast, midwife Lorna revealed the emotional hurt felt when tension was felt within the midwife-woman relationship:

> *"… sometimes I feel numbed … when it has gone pear shaped and I had to transfer someone and there is a bad feeling at the end … it's really deep because you are giving a lot … You end up absolutely drained by it."* (Lorna, AMU midwife)

Corresponding to this study, the phenomenological study by Gu et al. (2011) showed that midwives sometimes felt the distrust from women and their partners particularly when the labour did not go to plan. Interviews with women in Australia (Hauck et al., 2007) concerning expectations in labour also found that once women lost trust in their midwives, they questioned the midwives' judgment and were reluctant to accept their advice.

Similar to women, midwives also at times needed space away from the birthing environment. Midwife Daisy described the rational for seeking space away from the birth environment:

> *"I will take myself out of it … go to another room … for a little bit. Otherwise … I would be dehydrated. I would be lagging … and my mind wouldn't be fresh…"* (Daisy, Home birth midwife)

The closure of the midwife-woman relationship was difficult for some women during labour or immediately following birth. Midwives sometimes readdressed the balance by staying after their shift and visiting women postnatally to enable women to reflect on their birth. Midwife Diana explained her rationale for staying after her shift:

> *"I wasn't sure that was the right thing to stay over the time … these are the kind of things that ... you don't have answers you just do what you feel … I know that this is not only a job for me ... there is something more* … but I am not sure that is always good." [very gentle laugh] (Diana, AMU midwife)

Jasmine described the feelings provoked when the midwife who provided one-to-one support in her labour took time to visit her postnatally:

> *"…[the midwife] popped in [to the postnatal ward] … to see how we were, … it felt really nice, almost like a special little follow up, which she didn't have to do it…* (Jasmine, FMU)

Midwives who did stay following their shift when supporting women in labour often found themselves exhausted and scrutinising their course of action. Many women begged midwives to stay which made it more challenging for midwives to leave.

> *Connie noted the time and realised the midwife should be going home. Connie said to the midwife "Please stay" …* (Fieldnotes from Connie's labour, AMU)

Such a situation could be translated as an '*unsustainable exchange*' when using the model of reciprocity from Hunter (2006:316) regarding midwife-woman relationships. '*Unsustainable exchange'* occurs when both a midwife and woman are giving, but the woman wants more practical and/or emotional support, which causes some midwives to cross professional boundaries to accommodate. In addition, studies exploring the views of mothers about their care in labour (Janssen and Wiegers, 2006; Aune et al., 2011) have shown that women want the opportunity to prolong the midwife-woman relationship to the postnatal period so that they can talk through their labour with someone who was present and have the opportunity to thank their midwives.

Coping strategies

Table 3: Continuum for coping strategies

Interactive reassurance	Subdued reassurance	Woman requesting assurance	Woman's self-assurance	Woman requesting interventions	Outside assistance requested

Coping was a feeling of control experienced by women when working with the sensations and unpredictable nature of labour and birth (Table 3). Midwifery muttering was a tool used by all midwives to give reassurance that the physiological changes occurring were normal.

'M*idwifery muttering'* from Leap (2010:24) provided the message that '*you can do it.*' Hilda gave examples of the words used by the midwife to reassure her during labour and the effect:

> *"[Maureen the midwife was saying] 'you are doing well … keep breathing, yes go with it' … but it was quiet … it almost felt like they were inside my head …"* (Hilda, AMU)

When reassurance was no longer effective, women attempted to readdress their coping abilities by seeking assurance that birth was imminent. Midwifery muttering came naturally to midwives, but observations illustrated that providing assurance to women was more challenging as midwives were reluctant to give calculated guesses regarding the timing of birth:

Isabelle	*I know all must ask this, but how long will it [labour] go on for?*
Midwife Megan	*How long is a piece of string?*
	(Fieldnotes from Isabelle's labour, FMU)

For most women the lack of assurance did not cause a negative impact as birth was imminent. When birth was not imminent, and if midwives did not readdress the balance so that women felt they were coping, women sometimes gave themselves a talking to when they were on the brink of panic to provide self-assurance. Women appeared to be able to reason with themselves that panicking or losing control would not help the situation. Cecelia described how she gave herself a '*talking to'* when she was on the brink of panic:

> *"… there was a moment where I … could have … lost it ... It was literally, a second in my head and I … said to myself '… this is what you have got to do, so nothing you can [do]', you know getting upset about it is not going to make a difference."* (Cecelia, AMU)

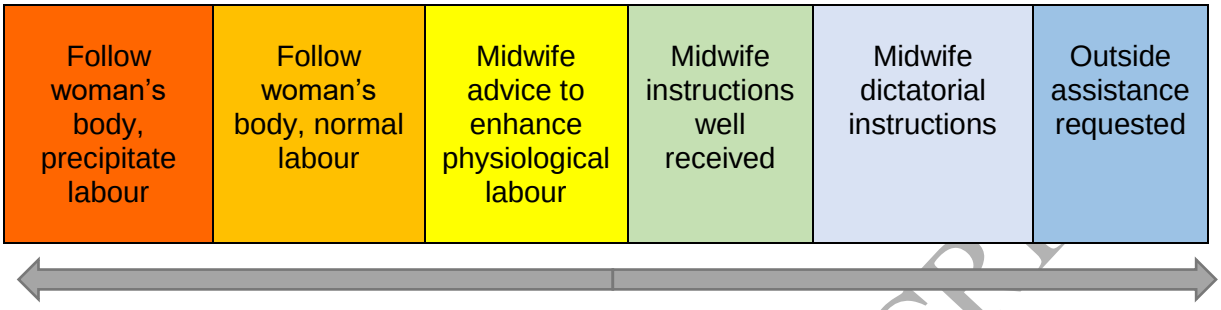
If assurance was not accomplished, women continued their attempt to re-address the balance themselves, by requesting interventions that they thought would help them estimate a timeline to birth and/or accelerate labour. Similar to the women in this research, Bluff and Holloway (1994) found that some women thought breaking the waters was a necessary intervention. Midwives in this study had to decide whether the intervention would help address the balance. Women expressed within the interviews the impact of the decision making process around interventions:

> *"…I could … say I wanted one [vaginal examination], rather than a midwife going 'we are only going to check you every four hours' which they do in hospital …"* (Fiona, Home birth)

"What I didn't realise is that they don't break your waters for you, do they? … I found that hard … I was begging, please break my waters." (Lena, FMU)

Labour progress

Table 4: Continuum for labour progress



Labour progress is a physiology process from established labour to birth. Midwives considered the supportive activities required to address the needs of women while also considering the labour progress. The supportive activities either followed the woman's body in normal labour, or followed the midwives' instructions when the labour progress was deemed abnormal (Table 4). Labour progress was determined by local clinical guidelines and abnormality was perceived to indicate a potential poor outcome for the woman or/and her baby.

The supportive activities for all women started with following the woman's body in normal labour (Table 4). Kenda shared the consequences of having a midwife who believed in her body during labour and birth:

"… both midwives made me feel that I was doing a good job … they were there in case any problems arose, but they weren't taking over. It was very much … led by me and what my body was doing at the time … I could do it by myself which is amazing." (Kenda, AMU)

When the labour was perceived by the midwife to be borderline abnormal, women were advised to change positions, be mobile, eat and drink. Midwife Terri explained the rationale for such endeavours:

"…obviously we want to keep women low-risk, so we know it is essential … to maintain good contractions. It is not like on … [labour ward] where if we become dehydrated we put up a drip …" (Terri, AMU midwife)

Midway on the continuum, some midwives changed their stance from following the woman's body to following the midwife's instructions. Midwives' instructions started with an

attempt to enhance the physiological labour process, but subsequently changed to a medicalised approach when concerns regarding the labour progress continued. The instructions were a last attempt by the midwife to readdress the balance of normality to avoid transfer to the labour ward. Observations revealed directed pushing and lithotomy as examples of medicalised and dictatorial instructions:

> *"Put your chin on your chest and push like you are doing a big poo" … "Push into bottom. Hold behind your legs." … "We need this baby out ..."* (Fieldnotes from Tess's Labour, AMU)

Midwife Mildred explained in which circumstances she used lithotomy which was echoed by other midwives:

> "*I would use it [lithotomy] as a last resort if I knew that would get the baby out and have a vaginal birth."* (Mildred, AMU midwife)

Some women welcomed the midwives' instructions, which in their minds led to a normal birth. Tess felt without the midwife's instructions she would not have known what to do:

> *"I remember saying at one point I am really scared, I don't know what to do and that's when the midwife said to me 'you need to take deep breaths before your contractions' and then 'push down and hold it for a long time.' … those instructions really helped ..."* (Tess, AMU)

Simkin (2002) produced guidance referred to as the 'take charge routine' which supports midwifery instructions to help women to regain control to cope with their contractions. However, other women such as Isabelle and her partner in the study presented in this paper, recognised a change in the dynamics when midwives gave instructions and this sometimes created anxiety that something bad was going to occur if they did not follow the midwife instructions:

> *"… in the pool, I was kind of allowed to do what I wanted within reason ... I felt like when I got out [of the birthing pool] there was like this urgency, I had to have the baby within the next hour and if I didn't, something bad was going to happen. So I felt like there was some huge risk … my husband was scared for me. So I think he just didn't say what we wanted to do, so we just went along at that point …"* (low voice) (Isabelle, FMU)

This situation, was a last attempt by the midwife to try and readdress the balance to achieve labour progress. However, Fahy and Parratt (2006:47) described such situations when women follow the midwives' instructions rather than their body as '*midwifery domination'*

because women give up their own '*knowledge and power*.' Isabelle's account also described how her partner did not act as an advocate in her labour. The observations and interviews suggest that the latter was due to the partners feeling anxious, which made them follow the instructions of the midwives.

Following the birth Isabelle questioned whether she should have followed the midwife's instructions rather than following her body while also acknowledging that her labour and birth did not go as she wanted:

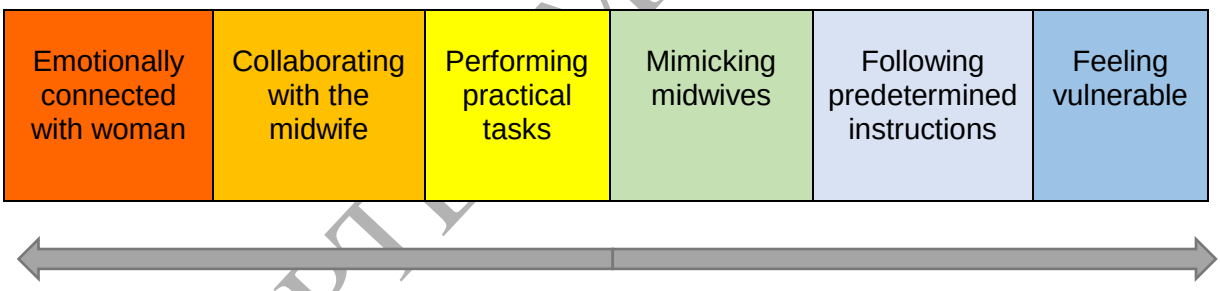
> *"… even now my husband and I are like 'Oh should you have pushed, shouldn't you have'…" (Isabelle, FMU)*

> *"…all I could think of that day was that I did not get the birth that I wanted … (tears start to fall)." (Isabelle, FMU)*

This study raises questions regarding the long-term impact for women and their relationships with their baby and partner after following the midwives' instructions.

Birthing partners

Table 5: Continuum for birthing partners



A birthing partner is chosen by a woman to support her in labour. The contribution of the birthing partner was determined by their emotional connection to the woman and their self-confidence (Table 5). All women in this study were supported by their partner. Midwives balanced their care by understanding the role of each birthing partner. Connie's partner and midwife understood the significance of working together to support her in labour:

> *"... she [midwife] encouraged me to get involved... I didn't know what my role was going to be."* (Connie's Partner, AMU)

> *"I think it is important to involve him ... It is not only the woman that is delivering, it is also part of his life…."* (Diana, AMU Midwife)

Many birthing partners had knowledge and an emotional connection with a woman that a midwife would not be able to develop within their short relationship. It was important for midwives to create a balance that enhanced this emotional connection: Hilda described her relationship with her husband:

> *"… we have just done so much together that I think … he* [partner] *knows when I am getting panicked … he knows me and I know him without having to communicate verbally really."* (Hilda, AMU)

Sometimes a balance was created so that a partner and midwife worked in collaboration to support a woman in labour. The observations showed that collaboration was enhanced when partners had previous labour support experience. Michelle's partner for example, recognised some signs of labour progress as he was present for her two previous labours and births:

> *Midwife Betty said she can see a bag of water. Partner added "it's [referring to baby] coming sweet heart if you could see it darling you would know you can do it." Betty repeatedly said "well done*." (Fieldnotes of Michelle's labour, FMU)

An earlier study from Johansson et al. (2015) also found that partners with previous birth experience usually felt more prepared to support women in labour.

Observations revealed that within the home environment partners completed more practical tasks when compared to the AMU and FMU. This was connected to being in their own environment. During the interviews, many women such as Rita, also described their partners as 'practical men':

> *"His role … is a practical role rather than anything else … my husband is not, generally speaking … not one to … mop my brow and, you know, fuss over me. He's much better in those situations being practical... "* (Rita, Home birth)

Birthing partners at all three study sites mimicked midwives by replicating their advice regarding supportive activities. One partner was surprised to hear that the reassurance he provided was not considered as reliable and trustworthy as the midwife:

> Robert *… We [birthing partners] were reassuring you, but you had no idea ...*
> Terri *No I do remember you saying it. I wasn't going to say It, but …when you and mum said it … it was meaningless (guilty gesture) to be honest*
> (nervous laugh)

Some women pre-empted certain activities from their birthing partners which could cause agitation. Terri provided examples of behaviours she discussed with her birthing partners prior to labour which she considered unhelpful:

> "…*I had severe words with both of them … [I said] 'if you are going to be in there getting upset or panicking … I am not going to want you fussing around me, talking to me, just sit there' … "* (Terri, AMU)

At the far end of the continuum, partners became vulnerable at times when they were tired or when they had lost trust in the midwife. Such vulnerability was observed and shared within the interviews:

> *Frank [partner] asked the midwife if he could lay on the sofa for half an hour.* (Fieldnotes from Linzi's labour, Home birth)

> *"… I was slightly nervous … the confidence just went and ... I kind of, sort of felt a bit on edge …"* (Steve, partner of Cindy, Home birth)

This finding supports the research from Tarlazziet et al. (2015:192) which found that partners need time out during the labour to '*recharge their batteries.'* Bäckström et al. (2011) also found that partners became vulnerable and anxious when they lost trust in the competence of midwives.

Midwives balancing support for partners sometimes encouraged other family members or/and friends to be present so that the focus was not solely on the partner. Mira's perception of her experience showed that she appreciated the extra support:

> *"… my husband was like 'you don't need me to be here', because … both my sisters came … they were wicked."* (Mira, FMU)

Midwifery support

Table 6: Continuum for midwifery support

Affirmation	Advice	Guidance	Unwelcomed support	Unpredictable support	Conditional support

Midwifery support was any external assistance provided by peers who were trained midwives (Table 6). When midwifery support was accessible, familiar and shared similar philosophies, midwives at all three study sites frequently left the birth environment to seek

affirmation, advice and guidance from colleagues. Midwife Diana provided an example of affirmation when accessing midwifery support:

> *"… I am just thinking … if someone else would have done something different."* (Diana, AMU midwife)

Midwives also requested advice including specific questions about medical, pregnancy and labour issues. An example was observed when midwife Megan became concerned about labour progress. Megan asked her midwifery colleague to help her assess a woman in her care:

> *Midwife Megan asked her midwifery colleague to accompany her into the birthing room to re-assess and help provide suggestions to aid labour progress if appropriate … Following assessment, the midwifery colleague advised all fours position on the bed.* (Fieldnotes from Isabelle's labour, FMU)

Advice re-balanced midwives with a fresh perspective when midwives had exhausted their own clinical resources inside the birth environment. Midwife Megan drew attention to one-to-one support being exhausting at times, therefore seeking advice provided assistance with their decision making:

> *"… when you have been looking after somebody for that many hours … there's no denying that you do get tired, and you just think 'did I miss something?" … I talked to my colleagues, I find them a great source …"* (Megan, FMU midwife)

Similar to Bedwell et al. (2015), this study found that midwives' confidence inside the birth environment increased with midwifery support, as this support reassured midwives of their own abilities. Such trusting relationships have been referred to as '*mutually supportive'* and '*reciprocal*' and important for building midwifery resilience (Hunter and Warren 2014:930).

Guidance was observed sharing best practice from more experienced midwives to a less experienced midwives:

> *One community midwife gave …their telephone numbers so that the FMU midwife could call them for midwifery support if required … One community midwife asked if this was the FMU midwife's first day. The maternity support worker (MSW) informed them that … the FMU midwife lacked experience … "That is bad" said the community midwives …* (Fieldnotes, FMU)

Women such as Jasmine also recognised the experience of midwives:

> *"I was glad that change happened (shift change] when it did … I felt the second one [midwife] was more experienced …"* (Jasmine, FMU)

Unwelcome support occurred when the midwifery assistance hindered the care of the midwife inside the birth environment. When two midwives were inside the birth environment together, due to one midwife staying after her shift, the autonomy of one midwife was sometimes reduced:

> "I would have taken over … but as the midwife hadn't gone ... It made it very difficult … because the woman was still hearing her voice and still knew she was there and still depended on her..." (Heather, AMU midwife)

Unpredictable midwifery support caused anxiety and was only observed at the FMU. Midwives at the FMU explained that historically midwifery support was provided by a community team who were in close proximity. This meant that midwifery support was familiar and they arrived mostly within thirty minutes. During the fieldwork at the FMU, midwifery support was provided by a centralised on-call team. This meant that the on-call midwives worked over large geographical areas. This caused variations concerning arrival times, level of experience, and familiarity with the FMU. When the arrival of the midwifery support was uncertain, midwife Betty shared an example of how she readdressed the balance by altering her usual practice and calling the midwifery support earlier, to ensure they arrived on time for the birth:

> *"… before, when I knew that midwives were coming from locally, I would probably leave it until … second stage … however now because we have on-calls from further away I probably do call them in a little bit earlier … for a MULTIP [multigravida]… I would call them even if I thought she was coming into established labour ..."* (Betty, FMU midwife)

The study by Hunter and Warren (2014), explains that changes in practises happen at critical moments such as adverse incidents, which cause midwives to feel the constraints of organisational systems more intensely. In this study one of the constraints, was unpredictable midwifery support.

At the far end of the continuum, conditional midwifery support meant that midwives sometimes played the role of 'gatekeeper' for their requested support. Such a situation could potentially de-stabilise the balance inside the birth environment due to the midwife changing her behaviour and requiring confirmation of labour progress, rather than trusting the woman's body and her own midwifery skills. Midwife Gladys reflected on the consequences

of conditional midwifery:

> *"… sometimes you … know that she is in strong labour, and the midwife is saying 'I am not coming in until you tell me how many centimetres dilated she is' … really … you are being bullied to do an internal quickly, just because she wants to know… "*
> (Gladys, FMU Midwife)

Kirkham (2007) explained that bullying behaviours in midwifery are a coping mechanism resulting in frustration, desperation and misdirected envy. In addition the midwifery support may have felt these actions were a form of '*self-protection'* (Hunter and Warren, 2014:931).

The adaptable skills of the midwives reported in this study when attempting to achieve a balance of six components that reflected the needs of women, supports other research analysing the activities of midwives when caring for women in labour (Kennedy et al., 2004, Borrelli et al., 2016). Borrelli et al. (2016:107) described a midwife with such adaptable characteristics as a '*kaleidoscopic midwife*' as they constantly changed their care in the light of the women's individual needs, expectations and labour journeys. Similarly, Kennedy et al. (2004) described midwives with such adaptable attributes as a '*conductor*' when orchestrating their care within the birth environment. The common goal was to work with women to provide care that reflected their needs.

Implications for practice

A one midwife to one woman ratio should be available for all women. The findings presented show that midwives are very skilled within midwife-led birth environments to synchronise their care to achieve a balance that is sensitive to women's needs. Midwives' skills are enhanced with the support of midwifery colleagues. Access to midwifery support should therefore be available within thirty minutes, familiar, and that they have experience working with a midwife-led philosophy within a midwife-led birth environment. The processes of midwifery one-to-one support in labour identified in this study, did not guarantee that midwives would always synchronise their care for every component correctly to achieve balance. As part of a collaborative midwife-woman relationship built on mutual respect and trust, women also readdressed the balance of one or more components that worked best for them when needed.

Partners are also a vital asset to midwives when synchronising their care to achieve a balance. Midwives should, therefore, acknowledge partners' previous labour support experience and assess if partners need to be available at times rather than constantly present. Additionally, midwifery support should be provided to assist and encourage partners to carry out practical tasks as part of their support role if they feel more confident and

competent providing such support. Midwives should also allow more than one birthing partner to support each woman and their partner. To allow midwives to use their skills and knowledge, maternity services need to encourage a working culture where midwifery presence inside the birth environment is the normal practice and valued by all maternity staff and the NHS organisation.

Limitations

The limitations in this study included recruitment bias due to the stipulation for English speaking which may have influenced the ethnic diversity of women in this study (Five out of thirty women were not Caucasian). However, the third study site did include diversity as five out of ten women were not Caucasian. As this study used more than one geographical site, it is important to note that the findings show that the activities inside the birth environment were very similar across the three study sites. Additionally, the findings including the theoretical framework and the balancing of the six components shared in this paper included all women in this study. Ethnicity did not appear to have an impact on the findings.

The reason for choosing English-speaking women was to prevent the need for an interpreter. Future research is necessary to explore if the inclusion of an interpreter creates a seventh component for the midwife and woman to synchronise within the birth environment.

Additionally, the limitations included the unknown effects of the observer on the environment. This study would have gained more cultural information if midwifery managers and partners were interviewed. Unlike the AMU and the FMU there were no observations outside the birth environment at case study site two.

Conclusion

This is the first study in the UK which has explored how midwifery one-to-one support in labour translates into clinical practice and has therefore addressed a research gap in the literature. The activities identified inside the birth environment, highlight that midwifery one-to-one support in labour is more than a ratio, it is a balance. The balancing of the six components is not a chance occurrence. The process relies on midwives' skills, knowledge, experience and intuition and their ability to focus on one woman and tune into their needs. The balancing of six components in this study, their continuums, and the way they are interconnected within a theoretical framework offer new knowledge about midwifery one-to-one support in labour.

The new insights presented provide a language within the U.K. and internationally for midwives practising within midwife-led births environments to describe their activities, knowledge, skills and intuition to colleagues who work in other maternity areas, management

and policy makers. The theoretical framework and the balancing of the six components could also be added to the educational curriculum for student midwives to understand the requirements when providing midwifery one-to-one support in labour. Lastly, the balancing of the six components could be used as part of pre-birth education for women and their partners to understand the dynamics that occur within the birth environment in labour to help women and their partners consider their choices.

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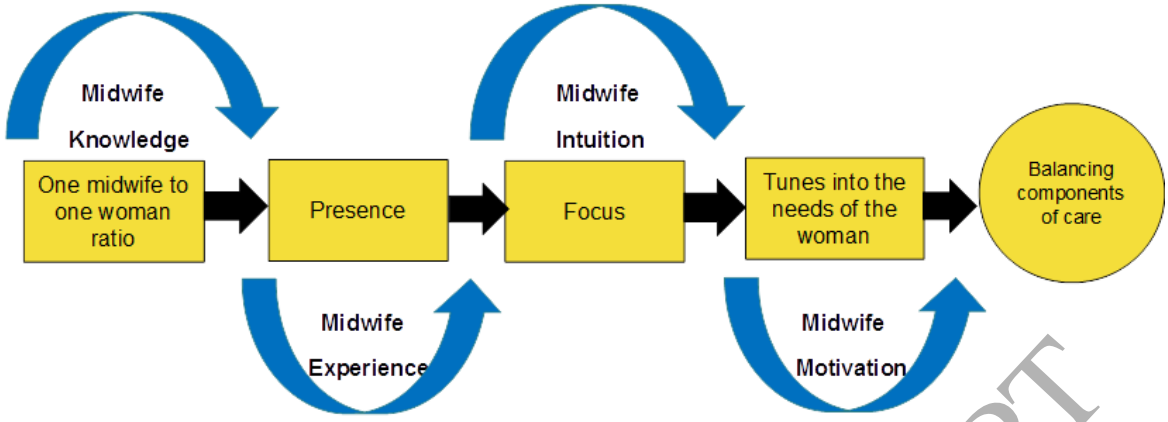

Figure 1. A theoretical framework showing the prerequisites of midwifery one-to-one support in labour

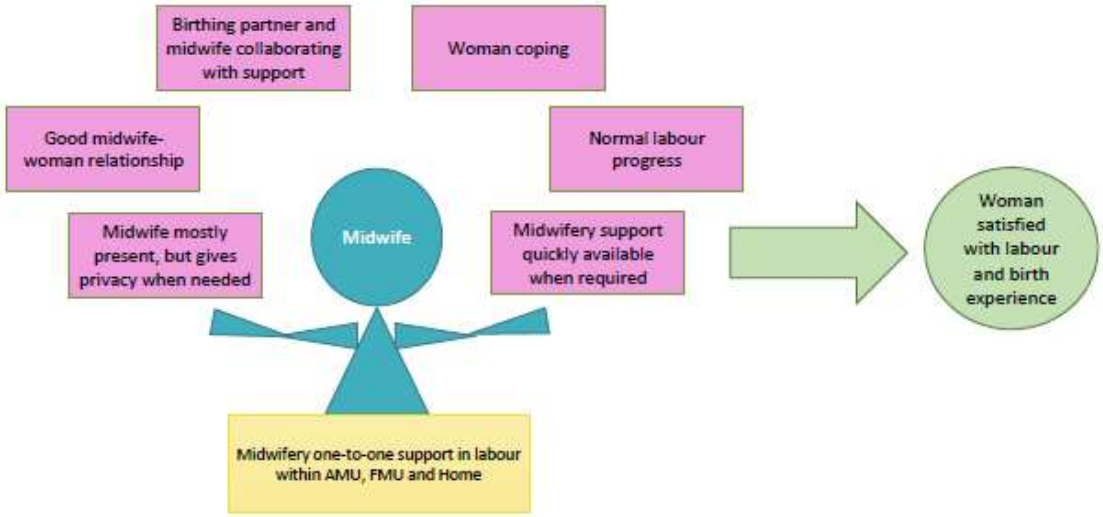

Figure 2. Balanced care that is sensitive to the needs of a woman