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Midwives' perspectives of continuity based working in the UK: A cross-sectional survey

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ABSTRACT

Objective: UK policy is advocating continuity of midwife throughout the antenatal, intrapartum and postnatal period in order to improve outcomes. We explored the working patterns that midwives are willing and able to adopt, barriers to change, and what would help midwives to work in continuity models of care.

Design: A cross-sectional survey.

Setting: 27 English maternity providers in the seven geographically-based 'Early Adopter' sites, which have been chosen to fast-track national policy implementation.

Participants: All midwives working in the 'Early Adopter' sites were eligible to take part.

Method: Anonymous online survey disseminated by local and national leaders, and social media, in October 2017. Descriptive statistics were calculated for quantitative survey responses. Qualitative free text responses were analysed thematically.

Findings: 798 midwives participated (estimated response rate 20% calculated using local and national NHS workforce headcount data for participating sites). Being willing or able to work in a continuity model (caseloading and/or team) was lowest where this included intrapartum care in both hospital and home settings (35%, $n = 279$). Willingness to work in a continuity model of care increased as the range of intrapartum care settings covered decreased (home births only 45%, $n = 359$; no intrapartum care at all 54%, $n = 426$). A need to work on the same day each week was reported by 24% ($n = 188$). 31% ($n = 246$) were currently working 12 h shifts only, while 37% ($n = 295$) reported being unable to work any on-calls and/or nights.

Qualitative analysis revealed multiple barriers to working in continuity models: the most prominent was caring responsibilities for children and others. Midwives suggested a range of approaches to facilitate working differently including concessions in the way midwife roles are organised, such as greater autonomy and choice in working patterns.

Conclusions: Findings suggest that many midwives are not currently able or willing to work in continuity models, which includes care across antenatal, intrapartum and postnatal periods as recommended by UK policy.

Implications for Practice: A range of approaches to providing continuity models should be explored as the implementation of 'Better Births' takes place across England. This should include studies of the impact of the different models on women, babies and midwives, along with their practical scalability and cost.

Introduction

Continuity-based models of care are widely recommended in order to improve outcomes and experience for women and babies (Bryant, 2009; National Maternity Review, 2016; World Health Organization, 2016). However, implementing continuity is a challenge for midwives and service planners in many countries with similar maternity systems (Donald et al., 2014; Homer et al., 2017; Dawson et al., 2018a). In order to deliver increased continuity

List of abbreviations: AMLU, Alongside Midwifery Led Unit; FMLU, Freestanding Midwifery Led Unit; LMS, Local Maternity System; MLU, Midwife Led Unit; NHS, National Health Service; OU, Obstetric Unit; RCM, Royal College of Midwives.

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across the antenatal, intrapartum and postnatal periods, it is crucial that midwives are willing and able to adopt as well as sustain new models of care. However, there is inconsistent evidence for the effects of this way of working on midwives. Some studies suggest that working in continuity based models increases midwife wellbeing and satisfaction (Freeman, 2006; Newton et al., 2014; Jepsen et al., 2017; Dixon et al., 2017; Fenwick et al., 2018; Dawson et al., 2018b). Other studies indicate that working patterns and characteristics that may be applied to all midwives, but have been associated with continuity models may increase risk of burnout. Factors which may increase burnout include mixed day and night shifts (Mollart et al., 2013), working in isolation (Young et al., 2015), idealism (Lynch, 2002), high workload (Cramer and Hunter, 2018), long hours (Yoshida and Sandall, 2013) and on-call (Fereday and Oster, 2010; Donald et al., 2014; Stoll and Gallagher, 2018).

The English National Maternity Review, 'Better Births' (National Maternity Review, 2016) set out the vision to improve quality, safety and efficiency of maternity services. The Review states that, "*Every woman should have a midwife, who…can provide continuity throughout the pregnancy, birth and postnatally* (National Maternity Review, 2016), p. 9), updated in the recent English NHS Long Term Plan (NHS England, 2019), which states *"By March 2021, most women receive continuity of the person caring for them during pregnancy, during birth and postnatally"* (page 48). This means that for all women, the majority of their care, including the intrapartum period, should be provided by the same health professional (usually a midwife), regardless of whether care is based in the community or hospital.

'Team' and 'caseloading' models of care are the primary routes by which NHS England envisage continuity will be delivered. Caseloading is defined as '*whereby each midwife is allocated a certain number of women (the caseload) and arranges their working life around the needs of the caseload*,' (NHS England, 2017) p.4) and team midwifery is defined as '*whereby each woman has an individual midwife, who is responsible for co-ordinating her care, and who works in a team of four to eight…This allows for protected time, during which the other members of the team will provide unscheduled care, and the lead midwife will not be called upon*' (NHS England, 2017) p.4). While UK policy has defined continuity in terms of relationships (NHS England, 2017), other forms of continuity are also practiced in healthcare including; management continuity (the communication of facts and judgements across team, institutional and professional boundaries), and informational continuity (where information is available in a timely and consistent manner)(Jenkins et al., 2015). Approaches to continuity also differ with regards to periods of care targeted: in some models, continuity applies within or between phases of care (e.g. antenatal and postnatal only), as well as across all phases (from antenatal to intrapartum to postnatal). To explore the feasibility of delivering continuity of care at scale in the UK, we designed a questionnaire study to explore the views of midwives working in England.

Methods

The aim of the study was to examine the working patterns that midwives are willing and able to adopt, and ascertain what barriers exist and what would help midwives to work in continuity models of care.

Design

The study was a cross-sectional online survey of all midwives working in seven 'Local Maternity Systems' (defined in 'Setting' below) in England.

The survey was designed with midwives, and in collaboration with the UK Royal College of Midwives (RCM) and included 49 questions exploring midwife demographics, experience, current working practices and views on different ways of working. There were 33 quantitative questions and 16 qualitative questions. The survey was piloted with midwives who work in clinical areas and refined during the design phase. Broad areas surveyed were: age; current working setting and patterns; experience and seniority (staff grade, births attended in past 12 months); carer responsibilities and support; working patterns and settings the participant would be willing or able to undertake in the future. The survey questions are provided as supplementary information.

Table 1
Early adopter sites.

	Number ($n = 798$)	%
Cheshire & Merseyside	184	23
Birmingham & Solihull	174	22
North Central London	138	17
Dorset	104	13
Somerset	92	12
Surrey	67	8
North West London	45	6
Total	804*	101

* 12 midwives worked in more than one site.

Setting

English maternity services are divided into 44 'Local Maternity Systems', where providers across a geographical locality are grouped together to deliver and improve care. The study was undertaken in the seven 'Early Adopter' sites (see Table 1), Local Maternity Systems chosen to be 'Early Adopters', tasked with implementing some or all of the *Better Births* (National Maternity Review, 2016) recommendations within two years (NHS England, 2016).

All midwives across the seven 'Early Adopter' sites were eligible to take part, covering 27 hospitals and maternity providers. In the UK National Health Service, maternity is provided in both the community (predominantly by community midwives and maternity support workers) and hospital (by midwives, maternity support workers, and obstetricians). Each individual midwife usually works in *either* hospital or community, though some move between both settings. Obstetricians are based in the hospital. Community midwives provide antenatal and postnatal care in community clinics and women's homes, offering varying levels of continuity. Antenatal care is also provided by obstetricians, midwives and maternity support workers in the hospital, usually for women with increased risk and/or complications. During labour and birth women are always attended by a midwife. Intrapartum care is usually provided in obstetric units, which are obstetric-led, with birthing rooms and operating theatres, however care is provided by midwives unless there are complications. Increasingly, low risk births occur in midwife-led birth centres, which can be 'alongside' in/adjacent to the hospital or 'freestanding' in the community. Community midwives usually attend home births, although the home birth rate is low (2.1% in 2017 (Office for National Statistics, 2019)).

Data collection

Midwives at participating trusts were informed about the online survey by local managers, and participation was voluntary and responses confidential. Electronic data was collected via a secure survey hosting company, Typeform. Information about the project, and a weblink to the survey was sent by email and/or text message to all midwives working at participating organisations by managers. The weblink was also publicised by managers (face to face, by email and/or SMS), communications teams, on posters in staff

Table 2
Demographic and work information.

	Number of respondents	%
Age (years)	***n* = 795**	**100%**
20–29	118	15%
30–39	197	25%
40–49	205	26%
50–59	245	31%
60 or over	30	4%
Duration registered as a midwife (years)	***n* = 794**	**100%**
0–5 years	193	24%
5–10 years	152	19%
>10 years	449	57%
Grade/seniority	***n* = 790**	**100%**
Band 5 (newly qualified midwife)	25	3%
Band 6 (midwife)	523	66%
Band 7 (sister/team leader/specialist midwife)	201	25%
Band 8/9 (senior midwife/manager)	41	5%
Caring responsibilities*	***n* = 787**	**100%**
No caring responsibilities	271	34%
Children <18 years old	371	47%
Adult relatives	156	20%
Grandchildren (not primary carer)	69	9%
Other	11	1%
Contracted hours per week	***n* = 797**	**100%**
Full time (37.5 h)	415	52%
Part time (less than 37.5 h)	370	46%
Other	12	2%

* Some midwives had more than one caring responsibility.

areas, by RCM representatives and on social media. Midwives could view the weblink at a time, place and on a device of their choosing. The survey was open for a total of four weeks in October 2017, and local managers were asked to remind staff about the survey during the data collection period (the researchers did not contact eligible midwives). A prize draw for a £50 shopping voucher at each of the seven sites was offered as an incentive for participation. Only midwives working in participating sites were eligible to take part, using a screening question at the start of the survey.

Data analysis

For quantitative questions, descriptive statistics (proportions and percentages) were used to summarise the sample. The denominator was derived using locally reported headcounts from participating sites, and 2017 NHS workforce headcount data (NHS Digital, 2017) where local data was not provided by sites, suggesting that there were around 4000 midwives eligible to take part. Qualitative responses were analysed thematically by Authors 1 and 2 (Braun and Clarke, 2013). Following familiarisation with the data, inductive open coding was undertaken for different sections of data (referring to settings, organisations and patterns). Codes were reviewed by two members of the team Authors 1 and 2, and subsequently reorganised into- and written up as broad themes.

Ethical considerations

Ethical approval was granted by the University of Birmingham ethics committee, ERN_17–0919S. Participants gave consent prior to participation. No survey data were identifiable to the company, the NHS organisations, or the researchers involved in this study (contact details for prize draw were gathered separately).

Results

Sample

There were 798 midwives who participated in the survey from across the different sites (see Table 1), an estimated response rate of 20%.

Age, experience and personal circumstances

Participant characteristics are shown in Table 2, with key characteristics summarised below. The most common age was between 50 and 59 years (31%, $n = 245$).

Over half (57%, $n = 449$) had been qualified for more than 10 years. Two-thirds (66%, $n = 523$) were standard clinical midwives and on a UK pay scale of Band 6 (Band 5 is the midwives entry level pay scale; Band 7 includes midwife specialists and managers)(NHS Health Education England, 2019). Caring responsibilities of some sort were reported by 65% ($n = 512$), with 47% ($n = 371$) reporting primary responsibility for children.

Current continuity-based model working

A quarter (24%, $n = 195$) of midwives reported that they worked in caseloading and/or team continuity (16%, $n = 131$ in team and 15%, $n = 119$ in caseloading models). The definitions of caseloading and team midwifery were given in the survey but midwives who stated that they worked in one of these models reported practice which did not appear consistent with these. For example, 7% ($n = 14$) had not attended any births, 43% ($n = 84$) had attended up to 10 births in the past year; on-call working was only reported by 60% ($n = 78$) of those who said they worked in team midwifery models and 70% ($n = 83$) of the caseloading midwives.

Current place and model of working

The most frequent places of work were community (36%, $n = 286$), and Obstetric Unit (OU) (34%, $n = 268$) (see Table 3).

A minority (10%, $n = 81$) currently worked in a home birth setting (not necessarily as part of a specific home birth team), and 30% ($n = 239$) had done so in the past year. Most (88%, $n = 701$) had attended a birth in the past year. Of the midwives working only in the community, 68% ($n = 124$) had attended 1 to 10 births in the last year. A third (32%, $n = 255$) worked in more than one setting. Almost a third (28%, $n = 81/286$) of midwives working in the community were also working in intrapartum care in the hospital setting (i.e. OU, Midwifery Led Units). A fifth (21%, $n = 292$) had never worked in community and a third (34%, $n = 272$) had never worked in a home birth setting.

Table 3
Working experience.

	Number	%
Current place of work*	***n* = 798**	**100**
Community	286	36
Obstetric Unit	268	34
Postnatal ward	133	17
Alongside Midwifery Led Unit	113	14
Antenatal ward	107	13
Specialist	101	13
Rotational/integrated	89	11
Home birth	81	10
Antenatal clinic	73	9
Freestanding Midwifery Led Unit	39	5
Other	38	5
Number of different settings worked in	***n* = 798**	**100**
1	543	68
2	112	14
3	67	8
4 or more	76	10
Setting(s) most time spent past 5 years*	***n* = 798**	**100**
Obstetric Unit	321	40
Community	291	36
Postnatal ward	114	14
Antenatal ward	100	13
Rotational/integrated	94	12
Alongside Midwifery Led Unit	88	11
Freestanding Midwifery Led Unit	87	11
Specialist	77	10
Home birth	60	8
Antenatal clinic	50	6
Other	21	2
Pattern of work*	***n* = 798**	**100**
On a rota (varied shifts)	596	75
Same shifts every week	158	20
Other/Bank shifts	56	7
Number of intrapartum episodes attended past year	***n* = 793**	**100**
None	89	11
1–10	252	32
11–20	100	13
21–30	52	7
31–40	48	6
41–50	33	4
More than 50	219	27

* Some midwives selected more than one answer to this question.

Working hours

Half (52%, $n = 415$) of the midwives stated they worked full-time. The majority (83%, $n = 659$) worked some unsocial hours (outside Monday to Friday office hours) and just over a third (37%, $n = 295$) worked on-calls from home. A third (31%, $n = 246$) only worked 12 h shifts. Most (75%, $n = 596$) worked a varied set of shifts each week.

Midwives' views on different ways of working: quantitative findings

Working in specific models of care

Midwives were presented with a list of continuity based models involving varying levels of intrapartum care provision (see introduction for definition of caseloading and team models). They were then asked which models would be acceptable to them (see Table 4).

Willingness to work in continuity-based models increased as the range of intrapartum care settings covered decreased. A third (35%, $n = 279$) of midwives were willing to work in midwifery models that included providing intrapartum care across all settings, which are the models required to fulfil the recommendations of the Better Births policy (24% $n = 190$ as a caseloading model, 32% $n = 253$ in a team model). Almost half (45%, $n = 359$) were willing to work in a continuity based model which included intrapartum care for home births only (not hospital births). Just over half (54% $n = 426$) were willing to work in a continuity model that did not provide any intrapartum care (49%, $n = 380$ caseloading, and 47%, $n = 370$ team).

We also asked midwives about their willingness to attend home births, and 41% ($n = 317$) were willing to do this as part of a community caseloading model, 38% ($n = 294$) in a community team midwifery model, and 40% as a midwife based in a midwife-led unit ($n = 318$).

The midwives who were willing to work in a continuity based model of care including intrapartum care across all settings were more likely to be younger (48%, $n = 57/118$ aged 20–29 years old compared to 15%, $n = 118/798$ of all midwives), less experienced (53%, $n = 102/193$ qualified between 0–5 years compared to 24%, $n = 193/798$), Band 5 (64%, $n = 16/25$ compared to 3%, $n = 25/798$) and already work across different settings in rotational posts (51%, $n = 45/89$ compared to 11%, $n = 89/798$).

Working in different organisations and settings

Midwives were asked about their willingness to work across different organisations (i.e. other NHS hospital trusts) and different settings (e.g. obstetric unit or community). Almost half (47%, $n = 372$) were willing to work across settings, with around half of this group already doing so (26% of whole cohort, $n = 208$). A third (34%, $n = 269$) said that they would not be willing to work across settings. Half (50%, $n = 396$) said that they did not want to work across different organisations. The most popular work settings were: alongside midwifery unit (81%, $n = 417$), and community (72%, $n = 374$) (see Table 5).

Approximately a third of midwives did not answer the question about specific settings in which they would be willing to work. When asked about working across settings, half (52%, $n = 417$) agreed with the statement "I enjoy working where I am now and do not want to move," and 57% ($n = 462$) agreed with the statement "I have specific knowledge/skills in the area I work and I want to continue focusing on this area." A third 35% ($n = 277$) identified at least one barrier to working in the obstetric unit: 25% ($n = 201$) reported a need to update their skills, and 19% ($n = 148$) of midwives lacked clinical confidence to work there. Shadowing opportunities were the most popular practical way of increasing confidence to work in other settings (52%, $n = 415$).

Table 4
Midwives' willingness to work in specific continuity models of care.

Midwifery models of care		Yes		Maybe		No		Total respondents
		n	%	n	%	n	%	
Continuity models no intrapartum care (community care only)	Caseloading	380	49%	135	17%	265	34%	780
	Team	370	47%	141	18%	272	35%	783
	Caseloading &/or team	426	54%	188	24%	313	40%	790
Continuity model with home births (community care only)	Caseloading	317	41%	166	21%	299	38%	782
	Team	294	38%	167	21%	321	41%	782
	Caseloading &/or team	359	45%	222	28%	365	46%	790
Continuity model with intrapartum care in all settings	Caseloading	190	24%	168	22%	422	54%	780
	Team	253	32%	190	24%	337	43%	780
	Caseloading &/or team	279	35%	241	31%	440	56%	788

Table 5
Midwives' willingness to work in different settings.

Settings midwives would work	yes n	%	Maybe n	%	No No	%	Total respondents
Alongside Midwifery Led Unit	417	81%	62	12%	37	7%	516
Community	374	72%	92	18%	55	11%	521
Home birth	324	63%	103	20%	89	17%	516
Obstetric Unit	311	60%	81	16%	123	24%	515
Antenatal ward	309	60%	77	15%	129	25%	515
Postnatal ward	296	57%	82	16%	137	27%	515
FMLU	291	57%	80	16%	142	28%	513

When asked about working in a home birth setting (i.e. providing intrapartum care in the home), 63% ($n = 324$) were prepared to do so. We also asked specifically about confidence to attend home births with 13% ($n = 107$) not feeling confident. 50% ($n = 402$) were confident to be first, or first *and* second midwife at a home birth, whilst 24% ($n = 188$) were confident to be second midwife only. 62% ($n = 491$) of midwives thought that there were specific things that would help improve confidence to attend home births with 36% ($n = 288$) identifying shadowing opportunities, and 25% ($n = 203$) suggesting training and update sessions.

Feeling confident to run their own community work and clinics was reported by 70% ($n = 555$). Suggested facilitators for this were supernumerary shadowing (16%, $n = 128$) and training/update sessions (8%, $n = 60$).

Different patterns of work

Midwives were asked more general questions about their availability for work days and patterns of work (see Table 6).

Being able to work at weekends/bank holidays was reported by 72%, ($n = 562$), but fewer midwives were available to work on-calls at night (36%, $n = 285$) than night shifts during weekdays (43%, $n = 334$) or at weekends (42%, $n = 323$). More midwives were able to work set shifts (71%, $n = 555$) and rotas (71%, $n = 548$) than annualised hours (caseloading 28%, $n = 219$; team 35%, $n = 271$). A quarter (24%, $n = 188$) needed to work on specific days of the week. When asked how many night time on-calls were acceptable, the most frequent response was 'none' (31%, $n = 245$), and the median was 2 nights (26%, $n = 207$). Measures commonly selected by midwives to facilitate working more nights, weekends and bank holidays included knowing the rota well in advance (56%, $n = 444$), being able to swap shifts (51%, $n = 406$), have flexible working (44%, $n = 354$) and accommodate annual leave (43%, $n = 344$). Few midwives selected measures to facilitate working different days of the week, with no more than 4% of midwives selecting any of the suggested measures.

Qualitative findings: midwives' views on different ways of working

Barriers to changing the way midwives work: qualitative findings

Midwives described a range of challenges to working across organisations, settings, and in different patterns. The barriers to changing the way midwives work fell into four cross-cutting themes: practical barriers; wellbeing and work-life balance; personal preference; quality and safety concerns.

Practical barriers to working differently. Practical barriers constituted relatively fixed circumstances in midwives' lives which made working differently challenging, and included the sub-themes of caring responsibilities; transport issues; responsibilities elsewhere; health conditions. Concerns primarily related to working flexible and unpredictable hours that are required in most continuity based models.

Caring responsibilities were frequently reported, mainly for children but also adults. The need for predictability to accommodate carer responsibilities, and the inflexibility and cost of childcare were reported by a large number of midwives. A lack of family support, partners who were shift workers, and being a single parent were exacerbating factors.

> *If my children are expecting me to pick them up from school and I don't because I'm called to a labouring woman, that would put them under stress. My husband works shifts also and we do not have a lot of family support. ID 65d 40–49yrs old from Cheshire & Merseyside*

In describing caring responsibilities, some described concerns about being expected or 'pressured' into working in ways that did not enable them to meet their family's needs, and a sense that their needs were not valued as highly as those of the women they care for.

> *As a single parent the fact that I may be forced to work across settings that don't allow me to adequately care for my children makes me extremely uneasy. The fact that my working life is expected to be my top priority and my children come second does not make me feel valued or appreciated. ID 682c 20–29 yrs old from Cheshire & Merseyside*

However, it was also suggested that flexible working patterns associated with continuity may align better with caring responsibilities, except for intrapartum care which was by its nature unpredictable.

> *Flexible working can also benefit the midwife in terms of childcare. I organise my visits around school plays, parents' evenings, activities, husband work and childcare. It is only the birth element which is unpredictable. I see more of my children working flexible hours than in scheduled hours. ID 99d 50–59 yrs old from Dorset*

Some midwives also reported difficulties in travel, including living far away, travelling at peak times, proximity to children, not being able to drive, and concerns about driving when fatigued. Many reported responsibilities elsewhere which limited their availability, such as management or specialist clinical duties, volunteering, study, and bank midwifery shifts. A smaller number of midwives described medical conditions, e.g. diabetes. There was also a sense that willingness and ability to work in continuity models was not fixed, and could change over the course of midwives' careers.

> *Would LOVE!! To work this way [continuity models] in the future as is the ideal way I would like to practice and the care I want to be able to provide, however just not possible at present.* ID *577d 50–59 yrs old from North Central London*

Wellbeing and work-life balance concerns. Many midwives expressed concerns about wellbeing, stress, and work-life balance, with a small number stating that they would leave midwifery if asked to adopt particular ways of working.

> *I do not want to be doing any more on calls than 2 per month as this does not suit family life balance. If the model of working like*

Table 6
Days, times and shift patterns available for work.

Work times and availability		Yes		Maybe in particular circumstances		Possible but don't want to		Not possible		Total respondents
Days and times available	Weekday day time	702	89%	39	5%	23	3%	22	3%	786
	Weekend/ bank holiday day time	562	72%	96	12%	92	12%	29	4%	779
	Weekend/bank holiday days on call from home	347	45%	114	15%	201	26%	113	15%	775
	Weekday nights in hospital	334	43%	65	8%	176	23%	205	26%	780
	Weekend nights in hospital	323	42%	63	8%	208	27%	184	24%	778
	Night time on-call from home	285	36%	104	13%	203	26%	197	25%	789
Ability to work different shift patterns	Set shifts	555	71%	93	12%	88	11%	45	6%	781
	Rota system	548	71%	0	0%	158	21%	64	8%	770
	Annualised hours in caseloading model buddy system	219	28%	112	14%	185	24%	259	33%	775
	Annualised hours as part of a team	271	35%	107	14%	175	23%	221	29%	774

1-2-1 [an independent midwifery provider] was introduced then I would definitely resign from midwifery and I know a lot of my colleagues would too. It is not sustainable way of working in the long run, as midwives get burned out very quickly. ID 61f 50–59 yrs old from North Central London

Some described negative impacts on their own or colleagues' wellbeing while working in continuity based models in the past.

Previously worked in caseloading model for homebirth quickly became burned out. Team had high levels of sickness/stress related conditions. Very poor work/life balance. ID 50d 30–39 yrs old from Cheshire & Merseyside

It was suggested that current plans to scale up continuity may not be sustainable, due to the possible impact on work life balance of the workforce, and staff retention.

Caseloading is only suitable for a small group of women. We cannot expect a workforce of hundreds of midwives to have no work/life balance. Small teams of 4–6 midwives is not continuity. Expecting all midwives to care for their caseload in all locations/situations will dilute the care that women receive. The caseloading model is only suitable for women not midwives. Consider the staff retention at organisations who currently practice a caseloading model. Unsustainable. ID 50d 30–39 yrs old from Cheshire & Merseyside

A minority described positive personal experience of continuity based models.

As a community midwife, over 10 years ago, I worked in a team of 6 (all Band 7) midwives … We provided 24 h care to our women…It was an excellent service, enjoyed by our clients and their families and by us, the midwives. I found it a very satisfying period in my career. ID 713c 50–59 yrs old from North West London

Some participants suggested that increasing age meant they were becoming less suited to working across settings, organisations, or unsocial/flexible hours. Some midwives described current concerns regarding work-life balance alongside fears about the impact of continuity, and how they already perceived that their needs were not adequately considered, or feel valued.

Unfortunately many staff are now unwell as a result of poor health that is or was contributed to by working conditions and hours. We have no protection on hours worked as a profession and it's ridiculous watching others health failing due to demands. ID 68a 40–49 yrs old from North Central London

I would leave the profession. It's bad enough now but this would be totally unreasonable. Can't think of anyone who would find this acceptable. ID 676e 40–49 yrs old from Surrey Heartlands

For some midwives, there was a desire to separate private life and work, to be 'on' or 'off' duty.

Do not want to be available to women at all times, need time when I can be off and have a glass of wine etc. without worrying that I am going to be called. ID 55d 50–59 yrs old from Somerset

Personal preference for particular ways of working. Midwives reported how they liked where they currently worked and how they did not think they would enjoy working in other settings. Personal preference was expressed for particular settings, organisations and shift patterns. Many simply expressed that they simply did not wish to work differently without providing a reason.

It sounds awful to say this but I actually do not want to work anywhere other than a Labour Ward/ Birth centre environment. I have found my "place" in midwifery. I have, over the years, experienced

and worked in all areas but enjoy working in this environment the most. ID 713c 50–59 yrs old from North West London

It was also suggested that midwives' preferences would impact on the ability to scale up continuity models.

We are using a huge amount of resources to explore a model that is not transferable on a larger scale. In the vast majority midwives do not want to work to the true caseloading model. Midwives will leave the profession at a time when we are reduced in numbers due to an aging workforce. ID 73d 30–39 yrs old from Cheshire & Merseyside

Quality and safety concerns. Some midwives reported concerns about the quality and safety of care that may result from changing the way they work. The most commonly reported concern was a need to have setting-specific expertise, and not be a 'Jack of all trades'. Some of the midwives had specific concerns about the quality and/or safety of cross-organisational working, moving between different NHS Trusts. Fatigue and safe working were concerns with respect to different shift patterns and unsocial hours with reasons including: age; working the day after night duty; working a mixture of days and nights in quick succession; long hours; having insufficient work-life balance to feel rested.

I feel we should have midwives with more clinical specialities and passions. We do not want a Jack of all trades workforce who do not have the specialist knowledge to provide safe care to women at the different stages of their care. This sort of flexibility will increase risk to women as the role will become too broad. Many midwives will leave the profession if they are asked to spread their expertise too thinly and will not risk being left vulnerable. ID 73d 30–39 yrs old from Cheshire & Merseyside

Some related how they perceived current models of maternity care as working well, and that proposed models would not achieve the anticipated improvements in care quality for women.

We are constantly being told that our current model of care is not working. My patients currently receive continuity of carer in the antenatal and postnatal setting of over 90–95%. I do not see how by employing small teams that this continuity can be improved upon and feel devastated that this wonderful service we have strived so hard to achieve will be replaced by a second hand model of care, which was disbanded 9 years ago in our unit as it did not work and midwives were burned out. ID 65d 40–49 yrs old from Cheshire & Merseyside

What would help midwives to work differently: qualitative findings

Midwives provided a range of suggestions for what would help them to work differently. The main themes are presented in order of prominence.

Concession in how midwife roles are organised. Midwives suggested that predictability, and/or concessions in their working patterns would encourage them to work differently, with a wide range of suggestions including: increased flexibility in hours; autonomy and choice about working patterns; limiting number of on-call shifts; part time working; choice over annual leave; shorter shifts; fixed shifts; ability to caseload own women; and having a buddy to work with. Predictability was mentioned most frequently. A small number of midwives suggested measures that would encourage them to consider caseloading midwifery specifically: annualised hours, provision of a buddy and manageable-sized caseload.

Self rostering, more flexibility to change shifts and annual leave …more individual options to work for staff with children or other carers requirements, trial of working 8 h shift patterns (6–14, 14–22, 22–6) being less exhausted from night shifts, able to do school runs, more productive. ID 7d 50–59 yrs old from North Central London

Adequate staffing. Midwives described how sufficient staffing for models of care would encourage them to consider change, and some contrasted this with current gaps in NHS midwifery staffing. There were also concerns raised about being used to cover areas that were short staffed.

Have already worked a team case load model. There was not enough staff to cover all requirements in the end only labour care received full attention the rest suffered. The staff involved were so overworked they actually reached burn out and sickness levels were really high. Before any team care could be considered again the staffing level would need to be generous not adequate. ID 62a 60 plus yr old from Dorset

Financial incentives: enhanced pay and assistance with travel. Many midwives stated that additional pay would encourage them to work differently. Proposed support for travel included covering costs, reliable parking provision, pool car, courtesy bus/taxi, travel time included in paid hours.

Free parking, accessible guaranteed parking space, payment for fuel and other expenses [would help me to work in this way]. ID 10b 30–39 yrs old from Birmingham & Solihull

Induction, support, training and development opportunities. Midwives reported how they would require support to work across organisations and settings. Some midwives stated that the opportunity to develop in a new role or organisation would help them to consider working differently.

Am happy to work in any setting but need the time and space to be allowed to come back up to speed with all the changes etc. and not just pulled in and made to take over in short staffing situations where the senior back up is non-existent. ID 658e 30–39 yrs old from North Central London

Good orientation [would help me work across settings]… [if the settings I was asked to work in] had some specialist services or areas that were well developed that were different to where I work currently so that could learn new lessons. ID 152e 40–49 yrs old from Surrey Heartlands

Leadership, management and organisation. Leadership, management and organisation of maternity services were reported to be a facilitator for working across organisations and settings, and some midwives related how they had seen this working well elsewhere. Many midwives focused on a specific aspect of cross-organisational working: significant variation in policies and practice therefore it was implicit that this variation would need to be addressed, though only a few explicitly recommended standardising across the system.

There are huge cross-agency issues, all the 4 NHS trusts nearby do things differently, expect different things and make our lives to caseload women difficult and at times unsafe. I therefore am reluctant to wish to work across the settings until there is a better culture of supportive care for women's choices. ID 88f 40–49 yrs old from Surrey Heartlands

Continuity and quality as an incentive. Some midwives strongly supported continuity-based models of care, and reported that they would be happy to, or are already working in them, and that they found the way of working, and the continuity they could offer, attractive, suggesting that this would incentivise them to change the way they work.

I will work across any site as long as it includes community (including homebirth) and birth centre, fundamentally with as much continuity as possible. ID 813e 40–49 yrs old from North Central London

However, there were midwives who strongly supported continuity yet still stated that they would not be able to work in this model themselves.

A change in midwifery culture. Some midwives suggested that a significant change was required in the midwifery culture as a whole, and the NHS systems and structures that support it, in order to change the way midwives work.

There needs to be a wholesale shift in the culture of the midwifery management to allow midwives the autonomy to work in a caseloading model rather than the current micromanagement. There also needs to be a radical rethink of the skills midwives need to work in this way the current NHS structure has eroded skills like clinical reasoning and decision making midwives have a pass the buck attitude to decision making. To be truly autonomous in practice within midwifery Clinical skills such as advanced history taking and physical assessment need to be incorporated into post registration education as midwives move towards non-medical prescribing. ID 56d Prefers not to say age from Dorset

Discussion

This study is the first to the authors' knowledge that has assessed the proportion of the midwifery workforce willing to work in a continuity model of care. Dawson et al. explored the willingness of Australian student midwives exposed to caseloading in training to work in this way when qualified, with 67% saying that they would want to (Dawson et al., 2015). The results of this study suggest that implementing midwife-led, continuity based care which includes the intrapartum period for every woman giving birth in the UK is unlikely to be feasible at the current time, however just over a third of midwives were willing and able to work in this way. Midwives, who were not, described a range of barriers including: practical barriers, in particular childcare; wellbeing and work-life balance; personal preference to work in particular ways/places; confidence and concern about quality and safety of certain ways of working.

Most midwives who took part in the survey were used to working flexible and unsocial hours. Many however, had personal circumstances or responsibilities outside of work which made them unable to work in ways consistent with a full continuity of care model, and a third were working permanent 12 h shifts, an approach which enables staff to condense a working week into a shorter timeframe. Caring responsibilities were a prominent practical concern, and over half had dependent children. However, there was also an account in the data of how the flexible working associated with continuity models can suit family life for some midwives.

Half of the midwives reported being unwilling to work in particular places of work or working environments. However, a quarter already worked across settings, and half of those willing to work in continuity based models were working across settings, e.g. in rotational posts. Increasing general exposure to cross-setting working may address skills gaps, and increase midwives' confidence to adopt continuity models.

While continuity models were predominantly described as having a negative impact by midwives in our study, some recent research suggests that they can be associated with increased midwife wellbeing and satisfaction (Collins et al., 2010; Yoshida and Sandall, 2013; Newton et al., 2016; Jepsen et al., 2017; Fenwick et al., 2017; Fenwick et al., 2018; Dawson et al., 2018b). However, it has been argued that midwives choosing to work in these models are a self-selecting group, unrepresentative of the wider workforce, who prefer and thrive in this environment (Turnbull et al., 1995; Newton et al., 2014; Dawson et al., 2018b), chiming with others' studies looking at preferences for different ways of working (Bogaerts et al., 2018). Some of our survey participants described past negative experiences of continuity based models, consistent with others' study findings regarding midwife burnout (Sandall, 1997; Stevens and McCourt, 2002b; Young et al., 2015). Many perceived these models as impacting negatively, with additional concerns about midwives leaving if compelled to adopt them. It is likely that the flexibility required to work in these roles may be a better 'fit' for some midwives than others. For many UK midwives, who have chosen to spend their careers working in shift patterns where one is either 'on' or 'off duty', models where boundaries are more blurred this may not fit their inherent preferences, and result in significant stress (Bogaerts et al., 2018).

At a time when there is an international shortage of midwives (Nuffield Trust, 2017), it is vital that the workforce is supported and retained. In our survey, there were many reports of midwives feeling stressed, under pressure, and undervalued, which aligns with other recent work exploring midwife wellbeing (Royal College of Midwives, 2016a), and is likely to be a key factor in midwives' receptivity to change. Evidence suggests that some midwives can adapt to flexible continuity-based working patterns (Edmondson and Walker, 2014; Newton et al., 2016; Jepsen et al., 2016). Our findings indicate that full-scale continuity-based working may suit some midwives at particular times in their lives and careers.

Implementing continuity represents a shift in expectations of the midwifery profession in health systems where these models are not embedded in practice. They often reduce separation of life and work, and making working life more reactive and less predictable. Midwives willing to adopt continuity models in our study tended to be younger, and may be more amenable to change, perhaps because they were not working during the last national implementation of continuity, and possibly exposed to fewer negative accounts/experiences of that time. It has been suggested that increasing students' and other midwives' exposure to continuity models may increase awareness, interest, and with it future sustainability (Carter et al., 2015; Dawson et al., 2018a). However, recent work has highlighted the importance of work-life balance, particularly to younger midwives (Jones et al., 2015), so continuity models will need to take account of this.

Our findings suggest that in order to implement continuity, health service leaders need to ensure that staffing is adequate to meet the requirements of new care models, provide clinical and change management support for staff, address practical barriers and align with midwife preferences where possible, engage midwives in planning and consider making concessions in midwives' pay and conditions of work. In our study, important quantitative observations were the increasing willingness to work in continuity-based models as intrapartum care decreased, and a preference for team midwifery models over caseloading. This may be related to the need/desire for predictability expressed by many (as births are unpredictable), and this could be addressed more easily by implementing team models of midwifery, where duties are shared with a wider group with less on-call. Willingness to undertake intrapartum care may also relate to lack of confidence and a perceived need to update skills, which could be addressed by including shadowing and training opportunities as part of implementation. The evidence highlights the importance of addressing operational and staff wellbeing issues, and indicates that midwives need occupational autonomy and social support (Sandall, 1997), time to adapt to a different way of working and appropriate train-

ing (Stevens and McCourt, 2002a), family friendly working environments (Fenwick et al., 2017), managerial support (Yoshida and Sandall, 2013; Newton et al., 2014; Dixon et al., 2017), funding/adequate resources and support for new models (Dawson et al., 2016; Dixon et al., 2017), flexibility (Fereday and Oster, 2010) as well as adequate leave (Dawson et al., 2018a). To support implementation in the NHS, the RCM has produced detailed guidance that managers can use to explore these issues with midwives at a local level (Royal College of Midwives, 2017).

While in the UK the Royal College of Midwives supports the NHS plans for the continuity model outlined in *Better Births* (Sandall, 2017), and continuity is advocated in other health systems around the world, current and future midwives will need to agree and accept the role of a midwife, and what continuity in midwifery looks like in the twenty first century. Midwives in our survey were concerned about safety of working across different settings as a 'jack of all trades', which would be required to offer continuity across the continuum in all maternity settings. The quality and safety of care will be an important consideration if more midwives are required to work flexibly across settings and times, and this must be monitored and evaluated. It is likely that there will always be a need for midwives with setting-specific expertise.

Some midwives in our survey suggested that current approaches to delivering care were working well, with good ante- and postnatal continuity, and questioned the need for change. In order to implement change in healthcare it is important that those involved agree the 'problem', support the proposed solution, and feel that it is achievable and sustainable (Dixon-Woods et al., 2012). It appears that some UK midwives need to be convinced that continuity is worthwhile and possible, and to understand how current plans are different to previous failed attempts to scale it up nationally (particularly from *Changing Childbirth* ((Department of Health, 1993). The UK policy change is underpinned by the Cochrane review of 'Midwife-led continuity models versus other models of care for childbearing women', which showed that midwife-led continuity models resulted in substantial benefits (such as 24% reduction in preterm birth and 16% reduction in fetal loss and neonatal death). However, the comparator maternity care models (i.e. controls) in the trials included in the review were heterogeneous, and often included hospital-based and obstetric-led services as controls, which is very different to UK current practice. As such, the review findings should be interpreted with caution in specific health service contexts. It is unlikely that the introduction of continuity of midwife-led care across the whole UK maternity pathway, where much care is already provided by midwives, will provide similar benefits to those seen in the Cochrane review meta-analyses. This would also apply to other international settings with standard care that is similar to that in the UK. Work to implement continuity should include gathering and disseminating evidence to show midwives the benefits of continuity, and what plans would mean for them, and the women they care for, in a way that is acceptable to them.

It may not be possible to provide continuity based models at scale for most women if the pool of willing and able midwives is too small, and our findings suggest that this is currently the case in the UK. In addition, the benefits and risks of implementing these models across an entire country's health system are not known. However, continuity based models could be implemented incrementally, targeting populations with greatest likelihood of benefit, and working with midwives who are willing to work in this way (Allen et al., 2016; Homer et al., 2017; Reid et al., 2018). Recently updated UK policy acknowledges ability to benefit, and now states that while 'most' women should receive continuity by 2021, "*75% of women from BAME [black and minority ethnic] communities and a similar percentage of women from the most deprived groups will receive continuity of care*" (NHS England, 2019) (page 41). At the same time, continuity may be optimised for women cared for in other models, and its impact evaluated. For example, where continuity of midwife across the entire continuum (including intrapartum care) is not possible, services might maximise continuity across the antenatal and postnatal periods, and provide opportunities for women to meet the team of midwives who will attend their birth.

Where health systems are implementing these models, they should be rigorously evaluated, to identify what is safe, effective, affordable and feasible, with scale up and spread as appropriate (Sandall, 2018; Royal College of Midwives, 2017). Future work should consider: the characteristics of midwives suited to continuity based working; characteristics of models that are acceptable and beneficial to both midwives and women; effective approaches to recruitment, support and training of students and midwives to work successfully and sustainably in continuity models; the impact of implementing large-scale continuity models on midwives, and midwife attrition.

Strengths and limitations

This was a pragmatic study which aimed to respond to an important policy and practice question in a timely way, and was therefore carried out over a short timeframe. Given a longer duration it may have been possible to achieve a higher response rate, although participants had broadly similar characteristics to recent national workforce data and survey reports (Royal College of Midwives, 2016a; Royal College of Midwives, 2016b). The survey focused on 'Early Adopter' sites only, and there may be differences in the views and experiences of midwives in other services. We also identified some potential confusion in the survey around continuity based models (caseloading and team) with only 60% ($n = 78$) of team midwives, and 70% ($n = 83$) of the caseloading midwives reporting working any on-calls, when on-calls for intrapartum care are normally part of working in continuity models. While definitions of the models were provided in the survey, there may have been some misinterpretation.

The survey was developed collaboratively with midwives and the RCM, included both qualitative and quantitative questions, was piloted, and the questions have been made available for other sites to adapt and use to support their own continuity work. The questions were comprehensive, though this resulted in a relatively lengthy survey which may have impacted on the response rate. Comparison with data on the wider midwife workforce characteristics in England suggests that midwives in our survey appear be representative (Royal College of Midwives, 2016b). A wide range of LMSs, geographical areas, and providers were included in the survey.

Conclusion

This study is the first to assess the proportion of the midwifery workforce willing to work in a continuity model of care. The findings have shown that many UK midwives are not currently able or willing to change the way they work to implement continuity for every woman as recommended by national policy, suggesting that rapid scale-up of continuity models will be challenging. Moreover, the evidence underpinning the policy is drawn from a wide range of complex service contexts which differ from the UK, meaning that anticipated outcomes may not be realised. However, increasing continuity is welcome, and range of approaches to providing continuity in different service contexts are currently being explored as a result of 'Better Births' policy in England, providing further opportunities to build the international evidence base in this important area of practice. This study has identified what may help or hinder implementation of continuity. Further rollout

and scale up of continuity models should include studies of the impact of different continuity models on women, babies and midwives, along with their practical scalability and cost.

Conflict of Interest

The authors declare no competing interests relating to the study (we have uploaded conflict of interest declaration forms).

Ethical Approval

All participants provided consent to an online form prior to completing the survey. Ethical approval was granted by the University of Birmingham ethics committee, ERN_17-0919S. The Health Research Authority also provided approval for the project, IRAS ID 228283.

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Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.midw.2019.05.005.

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