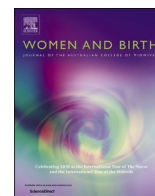




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## How should a video-call service for early labour be provided? A qualitative study of midwives' perspectives in the United Kingdom and Italy

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## ABSTRACT

**Problem:** Women in early labour are typically encouraged to delay admission to the maternity unit, but they may find this challenging without appropriate professional support.

**Background:** Prior to the pandemic, research conducted with midwives and women showed positivity towards using video-technology for early labour, with concerns raised about privacy.

**Aim:** To explore midwives' perspectives on potential use of video-calls during early labour

**Methods:** A multi-centre descriptive qualitative study was undertaken in UK and Italy. Ethical approval was gained prior to commencing the study and ethical processes were followed. Seven virtual focus groups were conducted with 36 participants, 17 midwives working in the UK and 19 midwives working in Italy. Line-by-line thematic analysis was performed and themes agreed by the research team.

**Findings:** The findings include three main themes: 1) who, where, when and how: key aspects to consider for an effective video-call service in early labour; 2) video-call content and expected contribution; 3) potential barriers to address.

**Discussion:** Midwives responded positively to the concept of video-calling in early labour and provided detailed suggestions on how an ideal video-call service for early labour should be provided to maximise effectiveness, safety and quality of care.

**Conclusion:** Guidance, support and training should be provided to midwives and healthcare professionals, with dedicated resources for an early labour video-call service that is accessible, acceptable, safe, individualised and respectful for mothers and families. Further research should systematically explore clinical, psychosocial and service feasibility and acceptability.

## Statement of significance

## Problem

Women in early labour are typically encouraged to delay admission to the maternity unit, but they may find this challenging without appropriate professional support.

## What is already known?

Prior to the pandemic, research conducted with midwives and women showed positivity towards using video-technology for early labour, with concerns raised about privacy.

## What this paper adds?

After the Covid-19 pandemic, midwives from the United Kingdom and Italy identified how video-calls in early labour should be provided and the possible benefits and contribution of such a service.

## Introduction

Early labour (or latent first stage of labour) is defined as 'a period of time, not necessarily continuous, when there are painful contractions and there is some cervical change, including cervical effacement and

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dilatation up to 4 cm' ([31]: 19). Midwives conducting early labour phone calls are required to confirm established labour without the visual and nonverbal signs usually assessed in face-to-face care [5], relying on subtle cues such as the woman's voice or breathing patterns [43]. Numerous phone calls and journeys to the hospital without confirmation of labour onset are often causes of dissatisfaction for mothers and birth companions [15,23,4]. Women in early labour are typically encouraged to delay admission to the maternity unit, but they may find this challenging without appropriate professional support [15,23,4]. NICE [31] guidance on intrapartum care recommends that women not in active labour should be provided with individualised support and encouraged to remain at or return home, although the content of 'individualised support' is not specified.

Prior to the pandemic, focus groups and interviews with midwives in England and the United States (US) explored the potential of video-calling in early labour [45]. Overall, midwives from both countries showed positivity towards the potential to use video-technology for this element of maternity care. The potential to utilise visual cues were considered helpful in making more accurate assessments and to enhance trusting relationships. Some concerns about privacy and accessibility were raised and strategies for implementation and further research proposed, such as the need for a private space in birth facilities and training for both staff and service users. Similarly, research conducted with women identified possible benefits of video-calls in early labour including being able 'to see' the midwife and improved human connections when compared to phone calls. Like midwives, women also raised concerns about privacy and suggested the need for a practice call ([6]: 342; AUTHORS BLINDED, 2023). Recent systematic reviews have not identified other studies about video-calling in early labour.

Since the above studies on potential to use video-calls in early labour were undertaken, the Covid-19 pandemic has prompted radical changes in the organisation of maternity care, with a rapid shift to remote consultations internationally and a substantial reduction of face-to-face appointments [11,38,39,47,48]. Although antenatal and postnatal phone consultations were widely implemented across UK and Italian maternity settings during the pandemic, the use of video-calling for early labour care has not been reported. Experiences of maternity care during the Covid-19 pandemic may have influenced midwives and mothers' views [1,7,8,41], thus adding a novel aspect to the literature in this topic area when compared to previous studies conducted in the UK and US. As a population, we have also all engaged much more with video-call technology thus midwives were not at the same point in terms of usage, as the earlier research. The Spiby et al. [46] study was conducted prior to the pandemic and in the US context, which has a different provision of usual care than the ones in the UK and Italy. Effective ways of communication during the critical phase of early labour need to be further explored, planned and evaluated to ensure equitable safe, respectful and individualised provision of care [18,17,29,49], a key priority especially in light of recent changes to maternity care pathways.

The aim of the proposed study was to explore midwives' perspectives on the potential implementation of a video-call service during early labour in the United Kingdom and Italy. This is the first report on potential use of video-calls in early labour post-pandemic.

## Methods

### Research methodology

A multi-centre descriptive qualitative methodology [2] using virtual focus groups for data collection method was deemed most appropriate to address the research aim. This manuscript adheres to the Standards for Reporting Qualitative Research (SRQR).

### Research settings

The research settings were two high-income countries, UK and Italy. In the UK, combinations of midwifery-led, medical-led and shared models of care and a range of birthplaces (hospital, alongside midwifery unit, freestanding midwifery unit, home) are available. Midwifery-led models are mostly provided across the country for low-risk pregnancy, birth and postpartum [40]. In most UK settings, women telephone the maternity unit when they feel labour is starting [31].

In Italy, although some facilities provide midwifery-led care for low-risk women during pregnancy, various models of care are present nationally, regionally and locally. The predominant model of care during pregnancy is obstetric-led [16] and women often meet different professionals during pregnancy, birth, and puerperium [37]. Almost all births occur in hospitals, where midwives are often the main caregivers during early labour, active labour and birth [17]. In Italy, women commonly directly access the maternity unit without phoning; however, labour ward midwives are usually available to answer labour onset related queries over the phone [15,4]. In both settings, challenges in providing high quality and woman-centred early labour care are acknowledged [15,44,52].

### Ethical considerations

Ethical approval was gained prior to commencing the study and ethical processes were followed. Potential participants were provided with a participant information sheet including all aspects pertaining to involvement in the study and informed consent was obtained prior to enrolment. Participants were free to decline participation and to withdraw at any time. Pseudonyms have been used in the presentation of quotes to maintain anonymity and confidentiality. Vouchers were supplied to acknowledge participants' time and a copy of final study findings offered.

### Sampling strategy and participants

A purposive sampling strategy was undertaken, based on the relevance of participants' characteristics to the research focus and optimal size for qualitative focus groups [13]. Midwives were eligible to take part in the study if they were qualified hospital-based midwives of any clinical role or seniority working in the United Kingdom or Italy. The sample consisted of 36 participants, 17 midwives working in the UK and 19 midwives working in Italy. Each participant was invited to take part in one virtual focus group.

### Recruitment

Midwives working in the United Kingdom were informed about the study via posts on relevant groups on social media platforms, including Facebook, Twitter and Instagram. Permission from social media channels' coordinators was sought for circulation of study information and recruitment through their networks. A study page on callforparticipants.com was also created to assist advertisement. Midwives working in Italy were recruited via three Italian Colleges of Midwives, responsible for professional registration, spread across the country (north, centre and south). An informative email was forwarded to Italian midwives via the Italian Colleges of midwives. Both recruitment strategies allowed for the identification of a geographically and experientially diverse sample [10], whilst being cost-effective. Eligible participants who were interested in taking part, were advised to contact the research team by telephone or email. A member of the research team was available to answer any queries, provide more detailed information on the study and discuss potential participation.

### Data collection

Seven virtual focus groups of an approximate duration of 1 h each were conducted between October 2021 and January 2022, four in the UK and three in Italy. Focus groups were chosen as preferred data collection method due to their interactive nature, allowing participants to build on each other's ideas through facilitated discussion [26]. The focus groups were held via the Microsoft Teams platform, enabling participation of midwives working in various regions across both countries to gain perspectives from different local realities and geographical locations. The midwives were invited to take part in focus groups in their native language. A facilitator and a co-facilitator conducted each focus group. The focus groups were supported by a topic guide, developed from existing evidence, agreed by the research team and reviewed by an advisory group of women and midwives prior to data collection. Topics discussed included pros and cons of video-calls in early labour; relationship establishment between midwives and women/families; what makes a successful video-call and suggestions for implementation; privacy and confidentiality issues; training for staff and service users and platforms likely to work in practice.

### Data analysis

Focus groups were audio recorded and fully transcribed by a professional transcriber. Scripts were read and re-read to identify emergent themes, with line-by-line thematic analysis in the language of discussion performed separately by JD (English focus groups) and SF (Italian focus groups) supervised by the principal investigator (SB) and the team. Braun and Clarke's [3] six-phase framework was utilised for conducting individual thematic analysis for the two data sets: 1) become familiar with the data; 2) generate initial codes; 3) search for themes; 4) review themes; 5) define themes; 6) write-up. The rationale for using thematic analysis was to identify themes and interpret patterns in the data that were significant to participants whilst addressing the research question [3]. Themes and relevant quotes were translated from Italian to English and themes/sub-themes from the two settings merged. Interim and final data analysis was shared with all co-investigators, reviewed and discussed in detail and consensus of themes and sub-themes established.

### Researchers' characteristics and reflexivity

The research team comprises the principal investigator (SB, based in England), three co-investigators (HS, based in England and AN/SF, based in Italy) and two research assistants (JD/EC, one based in each country). The team has expertise in midwifery practice, education and research. The impact of the researchers' background is acknowledged, and the midwifery lens considered as a strength for data collection and analysis, resulting in relevant recommendations for practice, education and research.

### Findings

The findings include three main themes: 1) who, where, when and how: key aspects to consider for a video-call service in early labour; 2) video-call content and expected contribution; 3) potential barriers to address.

#### Theme 1 – who, where, when and how: key aspects to consider for an effective video-call service in early labour

When considering the implementation of a video-call service for early labour, midwives have identified some aspects that must be considered and managed to maximise effectiveness, safety and quality of care.

### Designated midwives following continuity or caseholding models

Midwives suggested that the video-call service should be offered by a designated small team of midwives, following continuity or caseholding models, with a prior trusting relationship established during antenatal appointments or classes. The midwives also emphasised that the midwife conducting the video-call, whenever possible, should be the one who subsequently welcomes the woman to the maternity unit thus limiting care fragmentation and repeated transfers of information. Whilst acknowledging the potential organisational and logistic challenges in ensuring such continuity, midwives from both countries emphasised its significance concerning the woman feeling more relaxed, optimistic and confident about the service:

*If you're seeing the same midwife, even on a video-call, it makes you feel even more reassured. [...] I do think that implementing this with the continuity teams and see how that works with them, I think that would be good. (UK-FG2)*

*I find knowing her essential [...] it allows me to perform the assessment even through a video-call. It's hard to do with a person I have never seen or met before [...] video-calls should be somewhat limited to people who are well known to us or that we have assisted before. (IT-FG3)*

*The women speak to the midwife that they will meet when they come in, and that is very, very successful, and it keeps women at home for longer if they know that they are going to speak to the same person when they ring back. I am a staunch supporter of that. (UK-FG1)*

*It is definitely important that whoever performs the triage assessment by video-call is the same person who greets the woman; otherwise there would be another transfer of information, repeating things, forgetting things. (IT-FG2)*

### Dedicated space and time

Designated midwives who can perform video-calls in a private and quiet environment should be allocated to the service. Whilst Italian midwives propose the identification of one midwife from the team for every shift, UK midwives highlighted the need to identify a team of several midwives to ensure simultaneous responses to more than one video-call request, thus avoiding long waiting times for women. The space where midwives perform video-calls must be only used for this purpose and not in the same area of physical triage. A private environment for healthcare professionals conducting the video-call was considered as essential. Appropriate and exclusively dedicated time must be offered to each woman to guarantee effective support and quality service provision:

*Identify a designated midwife [...] Someone who is not involved in the other aspects of care. [...] The designated midwife should have a dedicated space so that she can fully focus on what she is doing. (IT-FG2)*

### Definitely a designated team for sure (UK-FG3)

*If it was only one midwife staffing it [...] you might have to wait in a queue, unless you're going to have multiple midwives doing it. (UK-FG4)*

*I think one of the main things is just giving them time, so being able to spend that time with them in order to reassure them, not rushing the appointment. (UK-FG2)*

### Training, skills and support tools

Midwives recognised the need for staff to receive appropriate training, possess key soft skills and be provided with support tools. Although a higher level of IT knowledge following the pandemic was

anticipated, educational training should include information on the platform's technical aspects, video-call management, general information technology (IT) and network issues. The midwives also suggested further training on broader communication skills including demonstrating empathy, time management within the video-call and ability to manage non-verbal communication (e.g. impact of facial expressions and body movement during the remote consultation). The participants would value the provision of tools such as protocols, templates and checklists that would guide the midwife regarding the focus and record of observation, targeted questions and documentation of coping strategies suggested to the woman during the remote interaction:

*General training on the type of system used for the video-call [...] some basic understanding ensuring that the midwife who is providing the service is familiar with the device she is using. (IT-FG2)*

*So you would need some training, maybe not necessarily on doing the calls but standardising and using the time as best you can. (UK-FG3)*

*Comprehensive training on empathic communication and on all the abilities necessary to help the woman gain confidence already at your first contact. (IT-FG2)*

*To have a protocol or share what the questions are, and know how to ask the questions. (IT-FG1)*

*You need a chart, so that everybody is providing the same questions, the same amount of information. (UK-FG3)*

#### User-friendly technology

Midwives suggested the need for a user-friendly platform accessible to all women via their mobile phone, identifying WhatsApp as the tool that would best fit these requirements. Although they suggested that other platforms (e.g. Meet, MS Teams, Webex and Zoom) may offer better video-call quality and security, they were not mentioned as the preferred choice because not all women could access them or feel comfortable with this type of advanced technology. UK midwives also proposed the potential use of an NHS application, suggesting the NHS brand/ affiliation may be more reassuring in case of sensitive information disclosure:

*WhatsApp would be very accessible because every woman has WhatsApp on their phone. Everybody knows how to use it. (UK-FG4)*

*WhatsApp is the most useful tool. In fact, 99 % of women have WhatsApp, making it easier to use for this service. Also for us it's easier to use. (IT-FG1)*

*I think that the most accessible tool is WhatsApp. Nowadays everyone has WhatsApp, whereas Webex, Google can be more complicated to use and less accessible. (IT-FG3)*

*I think it would be a bit more reassuring for women as well, using an NHS app. (UK-FG4)*

#### Shared decision-making

Participants emphasised the importance of engaging in information exchange by providing structured information about the video-call service during pregnancy, to enable adequate knowledge about what to expect from the service, the platform functions and staff involved. A shared decision-making approach between the midwife and woman about the video-call service or the usual system for contact would be ideal:

*I think during the antenatal period women have got to know that this is what is going to be the norm now, that actually it's quite usual to do that and make it clear how to do that so that they are not messing about in early labour (UK-FG1)*

*That these women are informed thoroughly about the service they are about to use, that they are maybe briefed during late pregnancy appointments. At the front of their chart, there should be a privacy consent form, information on how the service is managed, who makes the phone calls and from where. They have to be fully aware of what they are going to do. (IT-FG1)*

*I think individual, not just one way will suit everybody. So if all the options were available that would be fantastic. (UK-FG3)*

#### Service evaluation

When developing an effective video-call service in early labour, midwives identified the range of stakeholders affected by a video-calling service and that all perspectives would require evaluation, including clinical, psychosocial and service feasibility. Issues identified reflected existing challenges and service pressures:

*Having feedback, a feasibility assessment on whether this really is a useful service for both providers and users, and in what way, what are the problems and the positive aspects of these video-calls. (IT-FG2)*

*Speaking to partners. Because I do think as well a lot of early admissions are due to partner anxiety because they are watching their loved one in pain. Getting a bit of information about how you think a service like this might help them. (UK-FG3)*

*I think that I would study the outcomes... do these calls decrease accesses to the A&E? Does the latent phase get shortened? I would evaluate the outcomes both in terms of A&E and birth. I would add an analysis of the satisfaction level of the mothers and the staff that provide the service, and probably also an assessment of the physiological outcomes. (IT-FG3)*

*Look at the perception of women from minority background and, most vulnerable, what their perspective is of video-calling a midwife (UK-FG1)*

*I am just thinking more about the non-English speaking women and, yes, what we can do to really maximise how we communicate with them. (UK-FG3)*

#### Theme 2 – video-call content and expected contribution

The midwives suggested the following key elements should be considered as video-call content to offer a positive contribution to the quality of care provided and labouring woman's experience: observation of visual cues; reassurance and management of uncertainties; support of the woman's skills and involvement of birth companion.

#### Labour assessment

Being able to see the woman coping with pain in her own environment was recognised as the main advantage of video-calls, allowing midwives to collect relevant information without having to rely on the woman or partner's verbal description during a phone call. Useful cues that can be observed during a video-call may include the woman's feelings and behaviour, movements, reaction to pain, contraction duration and frequency and vaginal discharge:

*Video-calls definitely have the advantage of letting you see the woman, how she moves, how she acts, where and who she is. There are a lot of visual elements we can use to make an assessment, whereas on the phone, you can only rely on the voice for clues: when the woman is quiet, there is a contraction but you can't picture her [...], you can't see how her body is reacting. (IT-FG2)*

*I could hear the woman is quite like a silent labourer, and those were the ones that really catch me out because she is silently labouring and I'm like, 'Oh, you're coping really well at home and everything.' But because I can't physically see, how she is behaving, she could be on her knees, she*



could be - I don't know, grabbing at the curtains. She comes in and she's eight centimetres and I'm like, oh, okay, 'I'm really sorry, I didn't know you were that far along.' (UK-FG2)

#### Reassurance and uncertainty management

Midwives reported that the use of a video-call may facilitate reassurance and management of the woman and birth partners' uncertainties at home without the need to travel, allowing timely admission to the maternity unit and avoiding repeated accesses:

*Sometimes on the phone we just get people who start the conversation by going, 'I probably don't need to come in, but I just want to check that everything sounds okay'. And they're the ones that probably would benefit from a video-call, because they know they don't need to come in, but they want to check that everything sounds okay. (UK-FG4)*

*It is advantageous only for the mother-to-be, in the sense that it avoids transporting her during a very delicate phase when any kind of movement is uncomfortable. (FG3)*

#### Supporting the woman's skills

Working remotely to support the woman's skills is another benefit described by midwives, as this would enable the woman to participate actively in decision-making, recognise wellbeing signs, identify changes taking place in this phase and understand what coping strategies could be adopted. Midwives felt a video-call would be more effective in providing advice on breathing techniques when compared to a telephone call, as the visual aspect would facilitate rhythmic breathing alongside the woman using eye contact:

*Rather than having her assess how long a contraction is [...], give the woman or the person next to her small tools to be able to provide more precise information about the current situation. (ITFG2).*

*I find that a lot of women can't get on top of their breathing unless you do it with them. And if they can look directly at you, I find that I can help them regulate their breathing with eye contact and doing it with them, breathing through with them, it tends to help get on top of that. But trying to do that over the phone is difficult. (UK-FG3).*

#### Birth companion involvement

Another potential benefit of video-calls identified by the participating midwives was the increased involvement of the birth companion in providing support to the woman in early labour at home. UK midwives reported the challenge of receiving telephone calls from the woman's partner, often excluding a direct conversation with the woman; a video-call would instead facilitate the establishment of a family-centred trusting relationship between the mother, birth companion and midwife:

*If the woman is with her partner or with someone of her choice, on the ability of also communicating with those around her and maybe coach them on techniques or something that can provide practical support. (IT-FG2)*

*We have that battle calls where the partner calls and we're like, 'But we want to speak to the woman' and actually, the woman don't always want to speak to you, they've asked their partner to call on their behalf. So, it actually would make it a bit more family centred if you're having a video-call with the woman and the partner (UK-FG2)*

### Theme 3 – potential barriers to address

The midwives raised concerns about provision of virtual care and advice for women in vulnerable situations and language barriers.

Medico-legal issues were also considered as a potential barrier. The participants agreed on the fact that a video-call should not replace face-to-face early labour care when required.

#### Vulnerability and language barriers

Midwives identified the provision of virtual care and advice for women in vulnerable situations and language barriers as concerns to be addressed when planning a video-call service. However, some midwives working in the UK setting recognised that the video element may facilitate non-verbal communication when compared to a telephone call:

*A limitation of this service is that there are a lot of women with a strong language barrier [...] who are the most difficult to assist and to provide effective and safe care. (IT-FG2)*

*Women that don't necessarily speak good English or limited English, it would maybe be a little bit better for them as well. Because at least then they could physically see you and then maybe you could use hand gestures to kind of help. (UK- FG3)*

#### Medico-legal concerns

Medico-legal concerns were also raised regarding women potentially recording the consultation and professional liability when using technology to assess maternal and foetal wellbeing remotely:

*I'm thinking from a legal point of view. Will Legal have any concerns with that, because [...] not that there's anything wrong with it but women will have the evidence of what was said to them, won't they? And would Legal have any worries about them being able to record us? (UK-FG1)*

*I would like to understand how this thing is regulated as far as midwife liability. [...] If I make a mistake, if I tell the woman, 'No, you can stay home because your contractions are still far apart' but then her labour starts tumultuously [...] and she goes through all the phases very quickly, and then they say, 'The midwife was wrong [...]' What responsibility do I have in that case? (IT-FG2)*

#### Video-call not a replacement to face-to-face early labour care

The midwives considered video-calls as a useful tool compared to telephone calls and a valid alternative to face-to-face triage assessments. However, they agreed that a video-call should not replace meeting the woman face-to-face when required:

*It definitely can't replace meeting a person face to face, but it can be an excellent tool. Something between a phone call and an in-person meeting. (IT-FG1)*

*I don't think it would be better than doing a face-to-face assessment. I feel like doing a face-to-face assessment you get you know the full picture. (UK-FG4)*

### Discussion

The broad international literature demonstrates the uncertainties and challenges related to early labour care management including admission timing as a grey area, lack of clear guidance, engagement in multiple care activities with no dedicated staff for early labour care provision and discrepancy between labouring women's expectations and the diagnosis of active labour onset by healthcare professionals [23, 25,4,42]. These have recently been exacerbated by changes to provision of care and restrictions implemented during the Covid-19 pandemic [28, 48]. There is an urgent need for these factors to be addressed to achieve the respectful, safe, individualised and quality care that women and

families need in all settings [11,19,29,32,36].

The findings of this study show that midwives from both settings responded positively to the concept of video-calling in early labour, considered a valid option between phone calls and face to face assessments. Some of our data mirror previous research from Spiby et al. [45] regarding potential benefits and challenges of such service, including enhanced assessment using visual cues, facilitation of relationship building and trust, technological failure and IT literacy. Although privacy concerns were raised by both our study and Spiby et al. [45] research, these were stronger in the latter. This may be due to telehealth and video consultations having been considered and utilised more widely in healthcare practice during the pandemic [24,27,53].

Novel contributions of our study comprise midwives' detailed suggestions on how an ideal video-call service for early labour should be provided to maximise effectiveness, safety and quality of care. Midwives suggested that a video-call service should be offered by a small team of midwives following continuity or caseholding models [29] with dedicated environment and time, ensuring simultaneous responses to more than one video-call request, thus avoiding long waiting times for women. A key issue highlighted by midwives comprised appropriate training and support tools for staff, echoing existing literature considering guidance, technical support and training for healthcare professionals as essential within virtual provision of healthcare [34,35,53, 9]. Although digital technology appears to bring various benefits, it may present some concerns in terms of integrity, trust, privacy and accessibility [33,54]. Management strategies should be implemented to protect data integrity [54] in the context of digital care. The identification of a user-friendly platform accessible to all women via their mobile phone and provision of structured information about the service during pregnancy were suggested to manage expectations and inform decision-making. These link to key factors identified by contemporary theories about planning, implementability and evaluation of telehealth, including end user acceptance [14], socioeconomic and technological inequalities and internet connectivity [47,9].

Overall, there seem to be no adverse perinatal outcomes or increased risk for both the mother or foetus due to virtual antenatal care compared to traditional face-to-face care [12]. Research has shown benefits in the provision of remote antenatal care, such as increased access, relationship enhancement, better documentation of care, reduced costs and more efficient use of time [12,49,50]. Our findings related to early labour appear therefore to resonate with research related to communication technology during pregnancy, increasing application and transferability to other stages of the maternity continuum.

This qualitative study provides the first reported exploration of the potential use of video-calls for early labour, including ideal service provision, benefits and challenges, among midwives in the post-pandemic era. The strengths of this study are inclusion of midwives from two countries, providing maternity care within a range of pathways and models. A potential limitation of the research is that participants may be those who are particularly in favour or against telehealth approaches and therefore the reported views may not be reflective of the broader midwifery population.

## Conclusion

Our findings highlighted that midwives would view positively a video-call service in early labour to enhance assessments using visual cues, reassure and advise the woman and birth companion about the latent phase and facilitate the establishment of a trusting relationship. Clear guidance, support and training should be provided to midwives and healthcare professionals, with dedicated resources to offer an early labour video-call service that is accessible, acceptable, safe, individualised and respectful for mothers and families. Resources required include user-friendly and accessible technology, designated midwives and physical spaces, in order to dedicate the appropriate time to the woman in early labour and fulfil multiple video-calls. Information

provision during pregnancy would also be essential so that women can make an informed decision about accessing the video-call service or the usual care pathway (e.g. phone call or maternity unit access). Language barriers, vulnerable situations, IT failure and literacy are factors that would need to be addressed when developing and implementing a video-call service.

Although antenatal and postnatal phone consultations were widely implemented across UK and Italian maternity settings during the pandemic, the use of video-calling for early labour care has not been reported and is still, to our knowledge, untested nationally and internationally. Given that healthcare digital transformation is a top priority in UK and Italy [20–22], midwives should be open to engaging with these as required to achieve optimal early labour care. The next stages of a research programme should systematically explore service feasibility and acceptability, including evaluation of perspectives of a range of stakeholders affected by the offer of a video-call service in early labour.

## CRedit authorship contribution statement

The article is the authors' original work. The article has not received prior publication and is not under consideration for publication elsewhere. All authors have seen and approved the manuscript being submitted. The authors abide by the copyright terms and conditions of Elsevier and the Australian College of Midwives.

## Ethical statement

Country: United Kingdom

- Ethics Committee: Faculty of Medicine & Health Sciences Research Ethics Committee.
- Approval number: FMHS 203-0221.
- Date of approval: 12/03/21.

Country: Italy

- Ethics Committee: University of Milano Bicocca Ethics Committee.
- Approval number: 0121566/21.
- Date of approval: 29/09/21.

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## Conflict of interest

None declared.

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