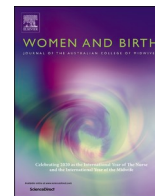




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Mothers' perspectives on the potential use of video-calling during early labour in the United Kingdom and Italy: A qualitative study

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ABSTRACT

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

Background: Despite pre-pandemic research which identified potential advantages of video-calling in early labour, implementation of such service has not been reported.

Aim: To explore mothers' 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 and ethical processes were followed. Six virtual focus groups were conducted with 37 participants, 24 mothers who gave birth in the UK and 13 who gave birth in Italy. Line-by-line thematic analysis was performed and themes agreed.

Findings: Two themes emerged: 1) women's expectations of video-calls' content and features; 2) technological challenges and solutions. Mothers responded positively to the concept of video-calling in early labour. Receiving guidance, information on coping with pain and advice on timely access in early labour was perceived as key. Women highlighted the importance of accessible, reliable and user-friendly technology. Equitable access, technological literacy, acceptability and privacy were considered as challenges to implementation, with solutions proposed to overcome disparities.

Discussion and conclusion: Guidance and training should be provided to midwives, with designated resources to build a service that is accessible, acceptable, safe, individualised and respectful for mothers and birth companions. Further research should explore feasibility, acceptability, clinical and cost-effectiveness.

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

Pre-pandemic research identified potential advantages of video-

calling in early labour, but implementation of such service has not been reported.

What this paper adds

After the Covid-19 pandemic, mothers from the United Kingdom and Italy identified how video-calls in early labour should be provided, including content and features.

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Introduction

Digital transformation of health and social care is a top priority for the Department of Health and Social Care, NHS England (DHSC and NHSE), Italian Ministry of Health and Italian Council of Ministers [23, 21, 22, 29]. Enhanced telemedicine services are anticipated to improve service users' interaction with a variety of healthcare providers, and access to individualised resources when and where required [29]. United Kingdom (UK) and Italy's digital policies recognise the potential of telemedicine to transform healthcare through supporting flexible, tailored services that promote health, wellbeing and independence [23, 21, 22, 29]. Digital technologies can also reduce pressure on overstretched workforce and help target disparities in access and outcomes. Successful telehealth provision has been found to be associated with increased service users' satisfaction and improved outcomes [10, 26]. Over the last two decades there have been several attempts at digitally transforming healthcare provision in a range of areas, including maternity service. The rapid and extraordinary deployment of digital technologies during the pandemic constitutes a significant foundation for change [29].

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. Early labour is often a time of uncertainty and discomfort for women whilst at home and professional input is required to provide support and confirm labour onset. Uncertainty between what women perceive as early or active labour, difficulty in recognising when to access the maternity unit and managing the period prior to formal assessment whilst coping with pain during early labour have been reported within existing research [18, 24, 16, 4, 5, 7, 8]. Challenges of early labour care include midwives not having visual cues to assess labour progress during triage telephone assessments [16, 5], numerous journeys to the hospital without confirmation of labour onset [18, 24, 4], lack of professional support prior to maternity unit admission and early hospitalisation with potential implications on maternal and neonatal outcomes [18, 24, 27, 35, 38, 4]. It is unclear why women are often left to manage early labour with minimal professional guidance or support [1, 7, 8]. Tailoring early labour care to meet individual needs, with provision of effective communication may reassure women and facilitate timely admission to the maternity unit from women, companions and healthcare professionals perspectives [1].

Focus groups and interviews with midwives in England and the United States about the potential for video-calling in early labour prior to the pandemic generated generally positive views about the potential for video-calls and using visual cues to make more accurate assessments and to enhance trust, with some concerns about privacy and issues of accessibility. Strategies for implementation included the need for a private space in birth facilities and training for both staff and service users [45]. Pre-pandemic research conducted with mothers identified potential advantages of video-technology in early labour including the ability 'to see' and improved human connections when compared to telephone calls [9]. Similarly to midwives, women also raised concerns about privacy and suggested the need for a practice call. No other studies of the potential or actual use of video-calling in early labour have been identified.

This paper reports a study of mothers' perspectives on the potential use of video-calls during early labour in England and Italy.

Methods

Research methodology

A multi-centre descriptive qualitative methodology using virtual focus groups for data collection method, which was deemed the most appropriate approach to address the research aim [2].

Setting

The research settings were two high-income countries, UK and Italy. In 2021, the UK had 624,828 live births and Italy had 399,431 births. Antenatal care for straightforward pregnancies is provided mostly by midwives in the UK, whilst in Italy obstetricians are often the primary caregivers, with few community or hospital services offering midwife-led antenatal care. In most UK settings, women planning birth in a hospital or birth centre telephone the maternity unit when they feel that labour is starting [31]. In Italy, women generally access the maternity unit directly without previously telephoning; however, labour ward midwives may be available to answer labour onset enquiries over the phone [18, 4]. Whilst maternity services have introduced several changes and innovations for early labour care, there are still challenges in providing a high-quality, woman-centred service in both countries and early labour care is a continuing priority for maternity services in both UK and Italy [18, 44, 51].

Ethical considerations

Ethics review and approvals were provided by the University of Nottingham Faculty of Medicine and Health Sciences Research Ethics Committee and the University of Milano Bicocca Ethics Committee. Participants received a participant information sheet and informed consent obtained prior to recruitment. Respect for privacy and personal feelings was upheld and participants were able to decide how much information to share, with pseudonyms used to maintain anonymity. Participants were free to decline participation or to withdraw at any time. They were offered vouchers as acknowledgement of their time and a copy of final study findings.

Sampling strategy

A purposive sampling strategy was undertaken, based on the relevance of participants' experiences to the research focus and optimal size for qualitative studies and focus groups [14]. Women were eligible to participate if they met the following inclusion criteria: 18 years old or over; able to give informed consent; able to understand and speak English/Italian (depending on the country); gave birth within recent 12 months in the UK or Italy at recruitment point; spontaneous early labour that started outside the hospital environment. Exclusion criteria were elective caesarean section, labour induction and early labour that started in hospital.

Recruitment

Information about the research was posted on relevant groups on social media platforms, including Facebook, Twitter, Netmums, Mumsnet, Pianeta Mamma. A study page on callforparticipants.com was created to assist advertisement. Online recruitment allowed for a geographically and experientially diverse sample [12] whilst being cost-effective. Permission from social media channels' coordinators was sought for circulation of study information and recruitment through their networks. 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 and discuss potential participation.

Data collection

Six virtual focus groups of approximately 1 h were conducted, three in each setting, in English or Italian. The focus groups were held on the Microsoft Teams platform from October 2021 to January 2022. A facilitator and a co-facilitator conducted each focus group. Principles for focus groups were made clear to participants by the facilitator, including confidentiality, natural respect and avoiding overlapping speech. The

focus groups were supported by a topic guide ([Supplementary Material 1](#)) to encourage the participants to share their experiences and views. The topic guide was developed from existing evidence on early labour services, challenges, uncertainties and remote/digital healthcare provision, agreed by the research team and reviewed by an advisory group of women and midwives prior to data collection.

Data processing and analysis

Focus groups were digitally 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. Following separate analysis, themes and relevant quotes were translated from Italian to English, themes/sub-themes from the two settings manually merged and presented in tabular form. Equivalent sub-themes were combined and dissimilar sub-themes kept as identified from one of the two data sets. Interim and final data analysis was shared with all co-investigators, discussed in detail and consensus of themes and sub-themes agreed.

Techniques to enhance trustworthiness

The research team met monthly throughout the project. An advisory group formed by two women and two midwives from both countries informed the interview topic guide content and development, findings and recommendations for practice. ⁽²³⁾ Data analysis was discussed and uniform across the data, enhancing trustworthiness of findings.

Researchers' characteristics and reflexivity

The research team is represented by the chief 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). Collectively, 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. There were no previous links between the researchers and participants.

Findings

The sample consisted of 37 participants, 24 mothers who gave birth in the UK and 13 mothers who gave birth in Italy. Participating women were of mixed parity, all had a spontaneous labour onset and gave birth in different hospitals in both countries. No further data about participants were collected as the aim of the study focussed on mothers' overall perspectives rather than linking these to specific characteristics. Each participant was invited to take part in a virtual focus group. Two main themes emerged across the UK and Italian focus group discussions: 1) women's expectations of video-calls' content and features; 2) technological challenges and solutions. Related sub-themes were identified and are reported below.

Theme 1: Women's expectations of video-calls' content and features

Video-call content: guidance and reassurance

Women from both countries suggested that video-calling would enable midwives to provide support and reassurance in early labour, in addition to facilitating relationship building between women and

midwives. Receiving guidance and having concerns about coping in early labour addressed by a midwife was perceived as key by mothers. They would expect to be reassured about the normality of common signs of early labour, with consequent alleviation of anxiety and panic.

Seeing her I would feel better, because even though I was in labour pain, I would feel like this person was close to me. And seeing her and her visual expressions would make my heart like calm down (UK-FG2).

And I really would have liked to talk to someone to understand if everything was normal. I didn't know and so at that point I thought, 'well, maybe it was all in my head, maybe it was regressing, maybe I wasn't in labour at all...' (IT-FG1).

you are able to like be instructed on maybe how to breathe, how to give yourself energy (UK-FG3).

I can't count the contractions, 'let's count them together' or 'I'm so bad physically, can you please tell me how I can put myself, some position I can take, help me a little bit to manage this phase of pain so that I can stay at home (IT-FG1).

You're going to get some reassurance, and then that person will see your face and then probably understands which type of pain you're going through. (UK-FG3).

Participants from Italy suggested that seeing a healthcare professional virtually may result in a more individualised interaction, facilitating relationship building, as opposed to a telephone call. Visual cues had potential to facilitate tailored support when compared to that provided via telephone. A potential negative issue would be the midwife not acknowledging labour onset in case the woman is coping very well with pain.

perhaps at a psychological level, the fact of seeing someone's face is something that can give a little more, I don't know, that makes you feel the intervention and help of the professional closer, more human. (IT-FG3).

Because maybe over the phone by voice only, you get the perception that, yes, the other person says that but, they don't see you and maybe they're not saying it just right for you, maybe you think it's a standard indication. (IT-FG1).

to see maybe the facial expressions, or rather how one is posed, if I'm standing or lying down maybe this can help the midwife to have some more information. (IT-FG2).

I personally have a very different experience, I mean, I think I was able to manage the pain very well and so if they had seen my face I probably wouldn't have gone to the hospital when I felt like going, and this in my opinion is a first point. (IT-FG1).

Mothers from Italy suggested that a video-call service would also help the birth companion to offer better support to the labouring woman.

It could be of great help more than anything else for husbands, who maybe at that moment could indeed they are a very valuable support, but often they do not know what to do at all (IT-FG1).

Length of conversation and agreed re-assessments

The proposed ideal length of a video-call conversation across both UK and Italian groups was between five to twenty minutes, with preference for a short ad-hoc call. The midwife should have enough time to consider and address individual needs, with the option of a longer call if required by the specific situation.

Time should not be the matter, it should last, it should not be timed, it should last as much as the pregnant mother needs. (UK-FG3).

I think around five minutes can be really helpful, but if it goes beyond the five minutes, it can start becoming so cumbersome and you might end up even not getting the help that you required. It should be brief and to the point (UK-FG1).

A minimum of 10–15 min to collect the right questions and understand what the person needs. it couldn't last more than about 20 min because otherwise [...] it would become a consultancy, it would be another kind of service in my opinion. (IT-FG3).

In the Italian setting, women felt that by using the service as rapid pre-hospital triage assessment, this would allow staff to assess the

woman immediately and direct/advise on the next steps (e.g. attending a maternity unit or staying home to allow for labour to establish, reducing unnecessary admissions to hospital). The participants believed that agreed time periods for re-assessment would support women to stay at home in the early labour phase.

Maybe I would have avoided unnecessary emergency room admissions. (IT-FG2).

Obviously at the time when I'm having contractions and I want to figure out whether it's time to go to the hospital that certainly could be helpful. (IT-FG3).

Although I had also attended antenatal classes at the hospital, I had read all the human knowledge, however, until you're there in that moment and that person who tells you, 'no, look, it's not' or 'yes, look, it is so', I felt very much the need to rely on someone. (IT-FG1).

the midwife can tell you, depending on the situation, stay at home and call me in an hour or stay calm, there is no need, you can go tomorrow morning or, anyway, let's talk again in two hours, so that you can update me and let me know how you are doing. (IT-FG2).

Continuity of caregiver

Mothers from both settings recognised the importance of continuity of caregiver when being offered a video-call service. This was mainly due to familiarity, establishment of a trusting relationship and knowledge of their individual situation. Women raised preferences for various types of continuity, including prior relationship with the caregiver during pregnancy, consistency of caregiver providing the service in case of repeated video-calls and to receive intrapartum care from the midwife involved in the video-call/s. However, one Italian mother expressed that it was not essential to have a video-call with a known caregiver due the personal trust in the maternity services.

I would prefer to be consistent, to have one person who I can consistently access so that I am assured that what I am sharing with this person just stays between the two of us. (UK-FG1).

I would prefer to have the midwife receiving it so that when I get there, they can already have background knowledge of what I was experiencing before I go through the process of giving birth (UK-FG1).

I would have very much appreciated the possibility of making a video call with a person, but with a person who actually in such a vulnerable moment already knew me (IT-FG1).

I trust the service offered by the hospital, the emergency room and therefore the call. So in my opinion it is not so essential to have in front of me a face already known (IT-FG2).

Designated and skilled midwives

The need for designated and skilled midwives was discussed by the Italian women with focus on a particular group of caregivers providing the service with sufficient staffing. The designated staff should be always present and not called away to emergencies or engaged in labour care activities. The women also suggested appropriate training for midwives for them to ask relevant questions and properly assess the woman in early labour. This would give focus to the conversation and allow appropriate triage.

I would also add from my point of view, specific training for this. [...] As much as all midwives are well prepared on everything, but maybe for this kind of service I imagine that, in order not to have to answer to you, there is a kind of filter. mm-mm a series of questions by which you can feel reassured, but maybe I imagine that there is a specific training for this and not only a simple call centre where you can call because otherwise it is similar to a call to the emergency room that you can do even now. (IT-FG3).

That by evaluating a whole series of other factors, she is able to assess how a person is doing, even from a distance, even by asking a number of questions, not just, 'do you feel pain or not', in short, I am sure that in the toolkit of a professional there is a way to understand a little more deeply what the situation is. (IT-FG1).

Target population and criteria for a video-call service

Mothers suggested that emergency or serious issues should be dealt with directly by emergency services rather than using the video-call service. Italian participants highlighted the need for rules or criteria for the video-call service, with the service being an additional option and not mandatory in emergency situations.

To avoid that a person frightened by a serious situation calls instead of going promptly to the emergency room or calling 118. I think it should be clear that this is an additional service, more to reassure, to help, but it does not replace the emergency room. (IT-FG3).

well, for me simple rules of use. In the sense that, if you have these serious issues don't call us, go directly to the hospital. (IT-FG3).

Theme 2: Technological challenges and solutions

Accessible, reliable, user-friendly and tailored technology

Women highlighted the importance of accessible, reliable and user-friendly technology. Platforms suggested by women as ideal options for a video-call service were WhatsApp, Google Meet, Skype, Zoom and Microsoft Teams. WhatsApp was the preferred option as women would not be required to download any further App, set up a password/meeting ID or find the link whilst in early labour. The type of device used was also discussed, with women preferring a mobile phone/device due to ease of access and usability.

Personally, I would also prefer the video calling via WhatsApp because it is quick and it's fast compared to maybe Zoom or the Teams, which requires you to set up the password, meeting ID, and the link, but with WhatsApp it will be quick. Because you are in pain, you will need the quickest option (UK-FG1).

In my opinion the ideal thing to do is to use an app like Skype or Meet. I also know of people who may not be so accustomed to this type of technology, in my opinion trying to include even these people simply by allowing for example making a video call to WhatsApp that is the most immediate and would meet all needs. (IT-FG3).

A dedicated application tailored specifically for the video-call service was mentioned, including the function to automatically generate a video-call without the need for installing proprietary software and the option of using the application whilst offline. Women identified technologies that could integrate with the service such as exercise/health devices and the use of artificial intelligence to increase connection and communication. The availability of transcripts was also mentioned in case of confusion so that conversations could be revisited if required.

I think software will be tailored specifically for this, for video calls, for the women, so that it will be easier, and straightforward for these women. (UK-FG3).

Investigate what are those tools that at a distance can help the professional better understand what the person's situation is. Tools that already in the possession of people, for example an Apple Watch, allow to help the professional to monitor the parameters of this person. From the point of view of technology, how can we overcome the barrier of distance through tools that may be useful, for example using artificial intelligence. making connections through technology (IT-FG1).

The App should have maybe something whereby when the doctor or the professionals in the App talks, it types itself, and it describes itself, such that if I didn't get something right whoever is with me can read through and say, 'Ah, the doctor said you should do this'. (UK-FG2).

Using devices when experiencing early labour pain: test-call and immediate answer

Concerns were raised about the ability to use devices when experiencing early labour pain. Women suggested it would be beneficial to undertake a preparatory test video-call during the antenatal period or during mild contractions to familiarise themselves with the application and processes.

it would be useful to advise maybe moms to do a test of how to connect just

to avoid when there are pains and they want to use this service, find themselves in trouble. Even if it's just to see if you have all the technology you need. (IT-FG3).

In regard to building an efficient video-call service, women from Italy suggested the need for an immediate answer or short wait, with a preference to a call queue with an ordered number system rather than an engaged tone and a message to call back later.

If, on the other hand, there is a fairly immediate response, even if it is not on the first ring, but maybe within five minutes, then I can say, 'Okay, I'll wait, I'll get an answer'. Maybe a telephone queue. Not that the number is busy, but maybe you stay in the queue and then you know that after two calls it's your turn. (IT-FG2).

Smartphones, internet connection and language barriers: equitable access concerns and mitigation strategies

The UK groups raised concerns about achieving an equitable provision as some women do not own smartphones. They also highlighted poor connection or lack of wireless internet as potential issues, with an offline option offered as potential alternative.

This equality, diversity and inclusion issue, what is going to happen if someone doesn't have a smartphone? That's one thing. But if they have a smartphone or some sort of device, then all sorts of device have different software. (UK- FG3).

If there is any problem with your internet provider, this can be quite a problem because if the internet connection breaks and there is no constant communication, then you will be stranded. So, this can be quite disadvantageous for the video call. (UK-FG1).

If you think of all the population, how many people have a smartphone, or a phone that can be used for this, so that's another question, I think. (UK-FG3).

I would recommend an offline option in case there is a problem with the internet connection, so that you can still get help, even when you're offline. (UK-FG2).

The women from the Italian groups discussed language barriers, with a suggestion that there would be difficulty in communicating if the women/partners were unable to speak Italian. They explored the option of having a cultural mediator during the video-call.

Also possibly a cultural mediator, because obviously [...] there are many people who maybe need to access the service and maybe don't speak our language. I mean, I happened to go to the emergency room and see women who maybe didn't understand what the midwives were saying. (IT- FG3).

Privacy and confidentiality

Although women from the Italian setting did not express particular concerns about privacy or confidentiality, most mothers from the UK setting would feel uncomfortable being seen if the caregiver undertaking the call was not in a private environment. One participant from Italy suggested that consent should be embedded in the application before starting the video-call.

We've got used to it for work, too, and if we had to think about these things, we probably wouldn't do anything anymore. So I don't see it as a problem at all. (IT-FG3).

I'd prefer the person I'm speaking to be in like a more private room and alone. That will make me feel more comfortable. (UK-FG2).

You call that person, and then he or she is in a room full of people. That would be embarrassing. (UK-FG3).

The moment that they call you, you should be in a position to protect them with their privacy and ensure that information, all the images... these should be kept very safe. (UK- FG3).

I have no objections about privacy for the simple reason that we are talking about a professional figure. (IT-FG1).

A popup with the consent of privacy because there is a video interaction and then that is something to develop within the system of the application. (IT- FG3).

Discussion

The findings show that mothers from both contexts responded positively to the concept of video-calling in early labour. Potential benefits comprised individualised reassurance from healthcare professionals about normalising experiences during the remote assessment, with support and feedback regarding coping with early labour at home. Women also suggested video-calls may help avoid numerous journeys to the maternity unit and encourage timely access. These views reflect benefits identified by earlier research, which highlighted the potential for enhanced assessments through visual cues, building empathic relationships and trust, confidence in coping with early labour at home, appropriate access to the maternity unit, time and cost saving [9,45]. Our findings also support the importance of patient centredness, timeliness, efficiency, effectiveness [15], relationship building, fit and visibility [50] as underpinning principles when implementing telehealth.

Uncertainties and challenges related to early labour care provision identified by our findings and broader international literature [24,25, 41,4] have been exacerbated by changes to provision of care and restrictions implemented during the Covid-19 pandemic [28,48]. These need to be urgently addressed to achieve respectful, safe, and individualised and quality care that women and babies need in all settings [19, 20,30,32,37]. Advantages of maternity tele-care have been highlighted by several authors, including reduced workload, improved healthcare provision, greater service users' self-care [13], cost saving, convenience, improved waiting times [54], relationship building with healthcare providers, enhanced accessibility, increased compliance and motivation to attend care [40]. Our findings suggest that the use of video-calls in early labour may have potential to contribute improvements for both care providers and recipients.

Although digital technology doubtlessly brings with it a host of benefits, it may present some concerns in terms of integrity, trust, privacy and accessibility [33,55]. The WHO [53] global strategy on digital health 2020–25 identifies digital integrity, confidentiality and transparency as key in achieving high safety and data security standards, stressing the need to urgently deal with cybersecurity, trust building, ethics, accountability, equity, capacity building and digital literacy to ensure that quality data are collected and utilised to support service planning, commissioning and transformation. Within the early labour context, barriers to implementation of early labour video-calls identified by our study reflect those raised by Spiby et al. [45] and Faucher and Kennedy [9] regarding equitable access, technological literacy, acceptability and privacy. These illustrate examples of the concerns raised in other maternity care-related telemedicine implementation, including antenatal and postnatal virtual visits introduced prior or during the pandemic [11,34,39,40,46,49].

Participants proposed strategies to overcome barriers and disparities, for example use of an interpreter in case of language differences, appropriate training of a designated team of midwives, consideration of continuity of carer, accessible, reliable and user-friendly technology. These link to key contemporary theories about planning, implementing and evaluating telehealth, including end user acceptance [17], socio-economic and technological inequalities and internet connectivity [11, 46]. Guidance, technical support and training for healthcare professionals are also raised as essential within virtual provision of care [11, 34,36,43,47,52]. Implementing telehealth proactively rather than reactively is more likely to produce greater long-term benefits and help with both ordinary and emergency challenges in healthcare practice [43,47].

This qualitative study provides the first reported exploration of the potential use of video-calls for early labour, including benefits and challenges, among mothers in the post-pandemic era, during which time the use of digitalisation and video-calling increased across society [6]. Differences between UK and Italy highlighted by the findings reflected variation of mothers' perspectives that may be associated with different socio-cultural aspects or models of care. The strengths of this study are

inclusion of mothers from two countries, accessing several maternity care pathways and models. A potential limitation of the research is that the purposive sampling of women recruited online may not be fully representative of mothers and maternity care settings across the two countries. The difficulty in recruiting mothers within the Italian setting resulted in an unexpected difference in the number of participants from the two countries, with impact on the focus groups' size and different conditions for data collection acknowledged by the authors.

Our findings highlighted that clear guidance and training should be provided to midwives and healthcare professionals, with designated resources to provide a service that is accessible, acceptable, safe, individualised and respectful for mothers and birth companions. Importantly, video-calling in early labour is still untested nationally and internationally; further research should systematically explore feasibility, acceptability, clinical and cost-effectiveness following a recognised and rigorous approach [42].

Author Contribution

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.

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Conflict of interest

No conflicts of interest.

Ethical statement

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Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at [doi:10.1016/j.wombi.2023.01.004](https://doi.org/10.1016/j.wombi.2023.01.004).

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