BMJ Open

Defining practices suitable for care via teleconsultation in gynaecological and obstetrical care: a French Delphi survey

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To cite: Rousseau A, Baumann S, Constant J, *et al*. Defining practices suitable for care via teleconsultation in gynaecological and obstetrical care: a French Delphi survey. *BMJ Open* 2024;**14**:e085621. doi:10.1136/bmjopen-2024-085621

► Prepublication history and additional supplemental material for this paper are available online. To view these files, please visit the journal online (https://doi.org/10.1136/bmjopen-2024-085621).

Received 21 February 2024
Accepted 11 April 2024

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ABSTRACT

Objective Delineate the scope of teleconsultation services that can be effectively performed to provide women with comprehensive gynaecological and obstetrical care.

Design Based on the literature and experts' insights, we identified a list of gynaecological and obstetrical care practices suitable for teleconsultation. A three-round Delphi consensus survey was then conducted online among a panel of French experts. Experts using a 9-point Likert scale assessed the relevance of each teleconsultation practice in four key domains: prevention, gynaecology and antenatal and postnatal care. Consensus was determined by applying a dual-criteria approach: the median score on a 9-point Likert scale and the percentage of votes either below 5 or 5 and higher.

Setting The study was conducted at a national level in France and involved multiple healthcare centres and professionals from various geographical locations.

Participants The panel comprised 22 French experts with 19 healthcare professionals, including 12 midwives, 3 obstetricians-gynaecologists, 4 general practitioners and 3 healthcare system users. Participants were selected to include diverse practice settings encompassing hospital and private practices in both rural and urban areas.

Primary and secondary outcome measures The study's primary outcome was the identification of gynaecological and obstetrical care practices suitable for teleconsultation. Secondary outcomes included the level of professional consensus on these practices.

Results In total, 71 practices were included in the Delphi survey. The practices approved for teleconsultation were distributed as follows: 92% in prevention (n=12/13), 55% in gynaecology (n=18/33), 31% in prenatal care (n=5/16) and 12% in postnatal care (n=1/9). Lastly, 10 practices remained under discussion: 7 in gynaecology, 2 in prenatal care and 1 in postnatal care.

Conclusions Our consensus survey highlights both the advantages and limitations of teleconsultations for women's gynaecological and obstetrical care, emphasising the need for careful consideration and tailored implementation.

STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ The use of the Delphi method, which allowed us to gather expert consensus on a wide range of practices related to women's gynaecological and obstetrical care.
⇒ The high response rate among our expert panel across all three rounds of the Delphi survey, which enhances the reliability of our findings.
⇒ A related limitation is that the Delphi method relies heavily on the expertise and opinions of the selected French panel.

INTRODUCTION

In the 20th century, new means of communication revolutionised the field of healthcare. For instance, the Royal Naval Hospital initiated a ground-breaking practice in 1975, using telegrams and radiotelephones to analyse the medical issues of merchant marine personnel at sea.[1] Since then, telemedicine has gone from strength-to-strength. Telemedicine refers to medical practitioners using telecommunications tools for remote diagnosis and medical care, including patient education, for teleconsultation, tele-expertise, telemonitoring and even answering questions.[2–5] Here we use the term teleconsultation to refer to medical consultation or support by healthcare workers using telecommunications technology to provide telemedicine between clinicians and patients (ie, women in the specific area of midwifery).[6]

Teleconsultation has demonstrated superior outcomes in managing chronic pathologies (eg, diabetes, psychological conditions), gynaecology and women's health, leading to higher patient and professional satisfaction compared with routine care.[7–12] The COVID-19 pandemic accelerated the development of telemedicine, as this form of practice helped to reduce the risk of transmission.[13–17]

In France, teleconsultations by physicians became eligible for reimbursement in 2018, whereas midwives were initially not allowed to bill or be reimbursed for similar teleconsultations.[18] Due to the pandemic, midwives were granted exceptional authorisation to conduct teleconsultations on 20 March 2020. Subsequently, on 20 December 2021, this

temporary exception was made permanent and allowed all midwives across France to perform and be remunerated for teleconsultations.[18] General guidelines already existed to guide healthcare professionals in teleconsultation practices,[4] and more specific advice was published for the COVID-19 period.[19] However, to our knowledge, no guidelines have been developed to guide healthcare workers in conducting teleconsultations for women's gynaecological and obstetrical care outside pandemics. In France, women can be followed by a midwife, an obstetrician-gynaecologist or a general practitioner (GP) of their choice (public or private, community or hospital-based) for pregnancy monitoring and/or preventive gynaecological care. Midwives and GPs are often the primary care providers in the perinatal period, positioning them at the forefront of care and making them integral to the exploration of teleconsultation practices in this context, while gynaecologists, who also provide primary care, offer added expertise towards specialised or high-risk pathological situation. Pregnancy and gynaecological consultations are covered by the national health insurance fund.

Accordingly, the main objective of this research was to delineate the scope of teleconsultation services, outside of pandemics, that can be performed effectively as part of the comprehensive gynaecological and obstetrical care of women.

METHODS

Study design

The techniques used to determine consensus are essentially the nominal group technique (ie, small group discussion followed by a vote) and the Delphi technique (ie, vote from a large group followed by individual feedback).[20–22] We used a Delphi survey to reach an expert consensus on teleconsultation practices suitable for women's gynaecological and obstetrical care. The methodology involved a multistep process, supervised by a scientific steering committee. The survey unfolded as follows: (1) Initial selection: we identified a comprehensive list of gynaecological and obstetrical care practices suitable for performing by teleconsultation, based on literature and experts' insights; (2) expert panel formation: a panel of French experts was assembled, comprising midwives, GPs, obstetricians-gynaecologists and patient-users, all actively engaged in women's gynaecological and obstetrical care; (3) Delphi method implementation: the expert panel participated in a Delphi survey to reach a consensus about each of the candidate practices.

The scientific steering committee comprised four midwives (three from the French National College of Midwives), one GP, one obstetrician-gynaecologist and one patient-user representative (from the inter-associative collective around birth).

Delphi organisation and questionnaire

The Delphi consensus was reached through three rounds of an iterative process that used online questionnaires. These were hosted on the secure LimeSurvey platform and disseminated via email, with follow-up reminders sent after 15 days to non-respondents.

The self-administered questionnaire (cf. online supplemental material) introduced the survey's objective and specified that the context for teleconsultation had to consider various factors: age, social precarity, vulnerability, women's isolation, the presence of third parties (eg, family, child, caregiver) and emergency situations. It categorised all perinatal practices into four key domains: prevention (13 practices), gynaecology (33 practices) and antenatal (16 practices) and postnatal care (8 practices). The investigators (AR, LG) proposed these practices based on the literature and French midwifery skills, excluding reasons for consultation that required technical clinical procedures. The scientific steering committee validated the list and the expert panel finalised it.

Establishment and consultation of the expert panel

Members of the expert panel assessed the relevance of each teleconsultation practice, using a 9-point Likert scale ranging from 1 (not relevant) to 9 (totally relevant). A rating was mandatory for each practice. In the first round, participants could suggest additional practices they thought should be added to the initial list. A second round focused on practices for which no consensus had been reached. Participants re-evaluated them using the same Likert scale, while considering the first-round results. Ratings were again mandatory, and participants were encouraged to justify their choices through comments. The third and final round aimed to reach a consensus, informed by anonymised comments from the previous rounds. In this final round, ratings were optional, allowing experts to abstain if unconvinced.

The expert panel comprised professionals from both academic societies and clinical settings, all currently engaged in clinical practice. Selection criteria emphasised diverse practice settings, including hospital and community practices, as well as rural and urban locations. According to these criteria, and by calling on learnt societies, we contacted 24 experts and 22 participated: 12 midwives (hospital-based and/or independent), 3 obstetricians-gynaecologists, 4 GPs and 3 healthcare system users (ie, women from a users' association). As the list of selected activities was mainly concerned with physiological care, the scientific steering committee felt it was important to involve a larger number of midwives, reflecting the primary role in perinatal care. The guidelines recommend including between 15 and 60 participants, we plan to conduct three rounds including 22 participants.[21]

Analysis

Consensus was determined by a dual-criteria approach: the median score on a 9-point Likert scale and the

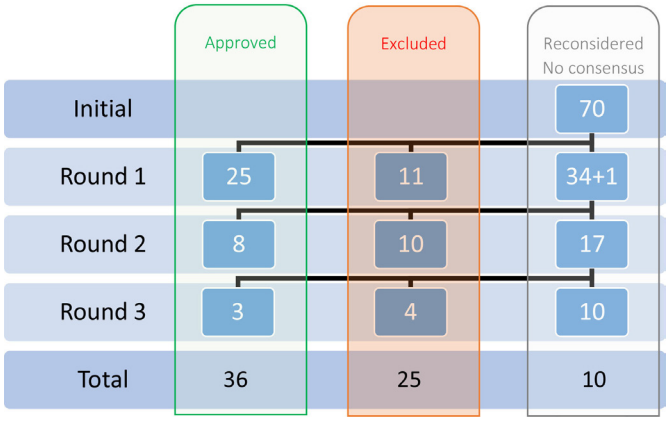

Figure 1 Selection and exclusion of practices throughout the three rounds of the Delphi process.

percentage of votes either below 5 or 5 or above. If the median score was less than 5 and more than 70% of the expert panel voted the same way, the practice was considered unsuitable for teleconsultation. Conversely, if the median score was greater than or equal to 5 and more than 70% of votes were greater than 5, the practice was considered suitable for these video or audio visits. Practices not meeting these criteria were labelled 'under discussion' and underwent further voting.[22 23] After three voting rounds, practices remaining 'under discussion' were concluded to lack consensus.

RESULTS

In the first round, we received 22 responses, and in both the second and third rounds 21, with one GP abstaining. Throughout the three rounds, a single practice in postnatal care was added after the first round, for an assessment of 71 total proposed practices.

In the first round, 25 practices were approved, 11 excluded and 34 reconsidered by the panel; 1 practice was added ('postnatal sessions (individual or group)'). In the second round, 8 more practices were approved, 10 excluded and 17 reconsidered. In the third round, 3 more practices were chosen, 4 excluded and 10 still failed to reach a consensus (figure 1). In the end, 51% of the proposed practices were deemed suitable for teleconsultation (n=36/71), 35% were rejected (n=25/71) and 14% lacked consensus (n=10/71) (figure 1).

The approved practices for teleconsultation were categorised as follows: 92% in prevention (n=12/13), 55% in gynaecology (n=18/33), 31% in prenatal care (n=5/16) and 12% in postnatal care (n=1/9) (table 1). Those deemed unsuitable for teleconsultation were distributed as follows: 8% in prevention (n=1/13), 24% in gynaecology (n=8/33), 56% in prenatal care (n=9/16) and 78% in postnatal care (n=7/9) (table 2). Lastly, 10 practices remained under discussion—7 in gynaecology, 2 in prenatal care and 1 in postnatal care (table 3). Expert comments highlighted the benefits of teleconsultations, such as convenience, faster access to care, availability of healthcare professionals in medical deserts and efficiency in delivering information and routine follow-ups. However, the need for physical examinations or to address sensitive issues or establish a relationship, and some aspects of prenatal and postnatal care were cited as reasons for in-person visits (table 3).

DISCUSSION

Main findings

Our consensus survey highlights that experts agree that teleconsultations are convenient and effective: 36 practices were selected as appropriate for teleconsultation. Nonetheless, the rejection and non-acceptance of teleconsultation of practices involving physical examinations, sensitive issues and aspects of prenatal and postnatal care indicate the need for careful consideration of the limitations of relying solely on teleconsultations for these specific cases.

Interpretation

Our findings align with the existing literature highlighting the effectiveness and convenience of teleconsultations for preventive healthcare.[24] A French qualitative study conducted during the COVID-19 pandemic underscored the utility of teleconsultations in this type of healthcare. The preponderance of validated preventive practices for teleconsultation in our study suggests that this form of practice is eminently suitable for preventive care. This finding has significant ramifications for enhancing access to preventive care, particularly in settings where medical treatment (ie, 'cure') often overshadows preventive and supportive care (ie, 'care'). The French study mentioned just above underlined that midwives adopted teleconsultation not only to sustain continuity of care but also to engage in relational care, thereby accentuating the cure-care dichotomy in clinical practice.[25] In our Delphi survey, most preventive practices proved suitable for teleconsultation, indicating its strong potential in such care. This has important implications for improving access to preventive healthcare, particularly in contexts where treatment is often prioritised over prevention.

Experts selected follow-up and post-abortion consultations as suitable for teleconsultation only in round 3. However, the literature appears rather favourable to carrying out abortion follow-up via teleconsultation; it is highly acceptable to women and providers, safe and effective, with a high level of satisfaction among patients and enabling faster access to the abortion.[26 27] Teleconsultation has demonstrated its utility in the management of voluntary termination of pregnancy (TOP) by medication abortions; it both facilitates access to care and enhances patient satisfaction. For example, 'Women on Web',[28 29] a non-governmental, non-profit organisation, leverages online telemedicine and medication regimen to provide early termination of pregnancy in regions lacking access to safe TOP services. Women's testimonials indicate that this form of care gives them a general sense of privacy

Table 1 Practices selected for teleconsultation

Prevention practices	Agreement*		
	% score ≥5	Med	Rd
Care coordination (referral letters)	95	8.5	1
Follow-up of a painful pathology with reassessment of analgesic therapy	73	7	1
Psychological support (if patient agrees)	73	7	1
Monitoring a person undergoing withdrawal (alcohol, tobacco, etc)	86	7.5	1
The administrative process of drawing up a medical certificate when the patient has already been examined (eg, for sick leave)	95	9	1
Extended sick leave (eg, depression, complicated postoperative recovery)	91	8.5	1
Follow-up of sick leave (psychological issue or persistence of disabling symptoms but insufficient to justify a new physical examination)	91	7	1
Consultation for information and/or vaccination prescription	91	9	1
An urgent request from a patient to assess the degree of urgency and the need for a rapid clinical examination, or not	86	7.5	1
Prescription renewals	82	9	1
Patient health education (dietary advice, etc)	95	8.5	1
Advice (tips, information)	95	8.5	1
Gynaecological practices	**Agreement****		
	% score ≥5	Med	Rd
Follow-up consultation for contraceptive renewal or reassessment	91	7.5	1
Relay consultation and/or change of contraception	95	9	2
Initial consultation for contraceptive IUD/implant insertion, with prescription	95	9	2
Initial consultation for contraceptive discontinuation IUD/contraceptive implant	71	9	2
Initial consultation for permanent contraception (information, discussion)	95	9	2
Follow-up consultation for dysmenorrhoea	73	7	1
Initial consultation for non-febrile lower urinary tract infection in women (cystitis)	76	7	2
Follow-up consultation for secondary treatment of non-febrile lower urinary tract infection in women (cystitis)	73	7.5	1
Follow-up consultation for secondary treatment of non-febrile vaginal infection in women	73	5.5	1
Consultation for prescribing laboratory examinations	73	5	1
Follow-up consultation for laboratory examinations	95	8.5	1
Consultation for advice and/or prescription of an STI check-up	86	9	2
STI follow-up consultation	73	6.5	1
STI consultation for partner if asymptomatic	77	8	1
Follow-up abortion consultation	94	9	3
Post-abortion consultation	81	9	3
Sexual health information consultation	82	8	1
Consultation with the male partner in the case of infertility, for prescription of the spermogram	71	8	2
Prenatal practices	**Agreement***		
	% score ≥5	Med	Rd
Prenatal check-up, including blood test prescription	82	8	1
Advice/information/explanations of pregnancy tests	77	7.5	1
Reporting normal results	91	8	1
Reporting trisomy 21 screening results: explanations, prescription and transfer of necessary documents to the laboratory (to be signed by the patient)	73	8	2
Information and management of pathological results between 2 monthly prenatal consultations	74	8	3
Postnatal practices	**Agreement***		
	% score ≥5	Med	Rd
Advice on feeding newborn babies	91	7.5	1

*Definition of agreement: median score ≥5 and ≥70% of votes ≥5.
.IUD, Intrauterine Device; Med, median; Rd, round; STI, sexually transmitted infections.

Table 2 Practices not selected for teleconsultation

Prevention practices	Agreement*		
	% score ≥5	Med	Rd
Screening for domestic, marital and/or gender-based and sexual violence	18	2	1
Gynaecological practices	**Agreement***		
	% score>5	Med	Rd
Initial consultation for dysmenorrhoea	19	1	2
Initial consultation for non-febrile vaginal infection in women	10	2	2
Initial consultation for metrorrhagia or menorrhagia	14	1	1
Initial consultation for pelvic pain	14	1	1
Initial consultation for dyspareunia	27	1	1
Sexology consultation	23	1	1
Consultation for precocious puberty	14	1	1
Initial prevention consultation for adolescents	19	1	2
Prenatal practices	**Agreement***		
	% score ≥5	Med	Rd
Initial consultation at the very start of pregnancy (first or second month)	29	2	2
Individual preparation for birth and parenthood	15	1	3
Group preparation for birth and parenthood	29	1	2
The 4th-month consultation for women at low obstetrical risk	29	2	3
5th-month consultation (preferably after second-trimester ultrasound scan)	24	1	2
6th-month consultation for women at low obstetrical risk	10	1	2
7th-month consultation for women at low obstetrical risk	23	1	1
8th-month consultation (preferably after third-trimester ultrasound scan)	18	1	1
9th-month consultation for women at low obstetrical risk	9	1	1
Postnatal practices	**Agreement***		
	% score ≥5	Med	Rd
Breastfeeding consultation	24	2	2
First visit for mother and child in the first week, in the case of a priori physiological situations	14	1	1
Continued monitoring of the woman and child after a first home visit	14	1	2
First early postnatal interview (4–8 weeks)	21	1	3
Postnatal medical consultation (6–8 weeks post-delivery)	14	1	1
Information on perineal rehabilitation and needs assessment (first session)	19	1	2
Postnatal sessions (individual or group)	17	1	3

*Definition of agreement: median score <5 and ≥70% of the expert panel <5.
Med, median; Rd, round.

and security.[30] Conversely, some women expressed a preference for face-to-face interactions with physicians. This underscores the necessity of informing women about available service modalities, enabling them to make an informed choice tailored to their comfort and needs.

While our findings broadly endorse the utility of teleconsultations, they also suggest limitations, particularly in prenatal and postnatal care where physical examinations and sensitive dialogues are often more effective when conducted in person.[31] This highlights the need for a nuanced approach that considers the specific nature and requirements of individual healthcare practices when considering the appropriateness of teleconsultation. Additionally, societal and healthcare system factors, such as reimbursement policies, can significantly influence the feasibility and acceptability of this modality.[32] For example, in France, teleconsultations are reimbursed by the national health insurance fund just as in-person consultations are; this enhances their accessibility. However, this is not universally the case; in some countries, teleconsultations are either not reimbursed or only reimbursed for specific healthcare professionals, which potentially limits their widespread adoption.

Our team's earlier qualitative analysis[18] showed that midwives adopted telemedicine to ensure their patients' access to continuous care, maintain their professional activity and income and reduce the risks of infection. However, while teleconsultations offered practical

Table 3 Practices that failed to achieve consensus

Prevention practices	Arguments for selection	Arguments for exclusion
/	/	/
Gynaecological practices	**Arguments for selection**	**Arguments for exclusion**
Initial contraception information consultation Approval ratio (≥5): 67% Median score: 8	► Informational consultations on contraception can be conducted by teleconsultation only, without any clinical examination. ► Video consultations enable the midwife or physician to support their explanations with visuals or other informational tools. ► For young women, trust can be established equally well in both in-person and teleconsultation settings. ► In emergencies, remote consultations can facilitate access to necessary information. ► Presenting various contraception methods through teleconsultations is possible with sufficient discussion time.	► In-person consultation allows for a clinical examination to verify contraindications and choose the most suitable contraception. ► Establishing a trustful relationship with the midwife or physician is easier in person, which is crucial for sensitive subjects such as contraception. ► In-person visits allow for more interactive presentations of different contraception methods, such as demonstrating the insertion of an IUD.
Initial fertility/infertility/sterility information consultation Approval ratio: 41% Median score: 3	► Initial contact can be made through video consultation. ► No need for a clinical examination. ► Information can be provided to the women without a clinical examination. ► Remote exchanges are possible.	► Too much information and emotion involved. ► Sensitive subject that may require an in-person consultation. ► Some explanations may require visual aids. ► Difficult to address psychological aspects via teleconsultation. ► Clinical examination often proves useful. ► In-person consultation is more appropriate for the first visit to the clinic.
Fertility treatment/follow-up consultation Approval ratio: 70% Median score: 7.5	► It is a follow-up consultation, making it possible via video. ► Suitable for discussing fertility test results and treatment plans via teleconsultation. ► Relevant for planning ongoing care.	► Sensitive subject that may require an in-person consultation. ► In-person consultation is important for thorough assessment. ► Emotional impact of infertility may be better addressed in person. ► Difficult to address psychological aspects via teleconsultation. ► Difficult to deliver test results via video, especially if complications arise.
Advice on prescribing genetic testing Approval ratio: 63% Median score: 7	► Possible to perform remotely without the need for a clinical examination. ► Exchange of information can be facilitated through teleconsultation.	► Better understanding of information and thorough assessment are important. ► Sensitive subject that may require in-person presence.
Follow-up genetic assessment consultation Approval ratio: 43% Median score: 4	► Remote exchanges can be relevant.	► In-person consultation is important for discussions and addressing psychological aspects.
Pre-abortion consultation Approval ratio: 47% Median score: 3	► Simplifies women's journey, provides quicker access and facilitates information exchange remotely.	► Sensitive subject requires in-person consultation for supportive psychosocial space outside the home. ► Ultrasound confirmation of pregnancy and comprehensive assessment are best done in person. ► In-person consultation allows for necessary examination and medication dispensing, while also addressing potential external pressures.

Continued

Table 3 Continued

Prevention practices	Arguments for selection	Arguments for exclusion
Follow-up consultation for women's cancer screening showing an abnormal result Approval ratio: 33% Median score: 1.5	► Clinical examination already performed during cancer screening, and follow-up can be efficiently conducted via teleconsultation. ► No need for a new clinical examination. ► Teleconsultation can expedite access to colposcopy or other additional examinations. ► Choice of in-person vs teleconsultation can be left to the women.	► Sensitive subject requires in-person consultation to provide psychosocial support for the women. ► Announcement of abnormal results may necessitate an in-person clinical examination. ► In-person interaction is considered more 'humane' than a remote announcement, ensuring the women's support system. ► Proper psychological support is essential and best provided in person.
Prenatal practices	**Arguments for selection**	**Arguments for exclusion**
Preconception consultation Approval ratio: 70% Median score: 8.5	(No specific reasons provided)	► Comprehensive clinical examination, including cardiac auscultation and breast examination, is necessary and must be conducted in person. ► Preconception consultations often involve meeting the partner and addressing various topics, requiring significant human and clinical interactions.
Early prenatal interview Approval ratio: 32% Median score: 1	► Reaches couples who work and provides flexibility when in-person appointments are not feasible. ► No need for a clinical examination, making it suitable for remote consultation.	► In-person consultations are preferable for establishing trust and a conducive environment to address all topics and get to know the facility if the interview takes place in the maternity ward. ► Some find teleconsultations too lengthy, while in-person interactions are considered more enriching.
Postnatal practices	**Arguments for selection**	**Arguments for exclusion**
Second early postnatal interview Approval ratio: 37% Median score: 2	► Gives the woman the autonomy to choose between remote or in-person consultation. ► Avoids the challenges of complicated travel, especially when considering professional or other reasons. ► If monitoring the baby's weight is not required, teleconsultation can be suitable. ► When the consultation is the only feasible option for the woman.	► The second early postnatal interview often requires a physical assessment of the mother–child relationship, necessitating an in-person consultation. ► Importance of direct contact to detect signs of postnatal depression. ► If the consultation is deemed necessary, it should be conducted in person.

IUD, Intrauterine Device.

benefits during the pandemic, their sustained use afterwards requires careful consideration of technical, regulatory and ethical aspects. These findings provide valuable insights for healthcare providers and policymakers seeking to optimise the use of teleconsultations for women's gynaecological and obstetrical care.

Strength and limitations

One of the main strengths of our study is its use of the Delphi method, which allowed us to gather expert consensus on a wide range of practices related to women's gynaecological and obstetrical care. This method is recognised for its effectiveness in achieving consensus in healthcare settings.[33] However, a related limitation is that the Delphi method relies heavily on the expertise and opinions of the selected panel. While we made efforts to include a diverse range of experts, the results may not fully represent all possible perspectives in the field. Thus, the selection of experts participating in the Delphi, particularly those practicing in rural or urban areas, was therefore carefully considered, but the study was not designed to differentiate the activities that can be carried out by teleconsultation, depending on the area. Further studies would be needed to assess this point, and the appropriateness of teleconsultation in continuity of care by territorial area.

Another strength is the high response rate among our expert panel across all three rounds of the Delphi survey, which enhances the reliability of our findings.[21] However, the limitation associated with this is that our panel was predominantly French, which may limit the generalisability of our findings to other cultural or healthcare contexts or places where midwives use different skills from those taught in France.

Perspectives

Following this Delphi survey, the French College of Midwives (College National des Sage-femme de France) will be able to publish guidelines to help professionals choose the practices they will be willing to perform by teleconsultation.

The findings of our study open several avenues for future research and have significant implications for practice. Teleconsultations have shown the potential to enhance access to healthcare, particularly in areas where in-person consultations may be limited by medical demographics, geography or costs. Future research could explore the use of teleconsultations in different healthcare contexts, such as in rural or underserved areas, and for managing other health conditions.

In terms of practice, our study suggests both that healthcare providers could benefit from training in the effective use of teleconsultations and that policies could be developed to support their integration into routine care. This is particularly relevant for practices that are currently performed less frequently by midwives, such as those related to infertility and genetics. Our study found no consensus on whether these practices are suitable for teleconsultations, indicating a need for further investigation and potentially, specialised training for midwives.

Moreover, our study has broader implications for the transformation of healthcare delivery. By leveraging teleconsultations, we can potentially improve access to care, enhance patient satisfaction and ensure continuity of care, even in challenging circumstances. However, it is crucial to consider the technical, regulatory, and ethical aspects of teleconsultations to ensure their sustainable and effective use after the pandemic.

CONCLUSION

Our consensus survey highlights both the benefits and limitations of teleconsultations for women's gynaecological and obstetrical care, emphasising the need for careful consideration and tailored implementation. Further research and consideration of the potential benefits and drawbacks of teleconsultations in these areas are warranted to ensure optimal care and outcomes for women.

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Acknowledgements We extend our deepest gratitude to the French College of Midwives (Collège National des Sages-femmes de France, CNSF), under whose initiative this significant work was conceptualised and carried out. We are especially thankful for the invaluable logistical support provided by Louise Mercier from the CNSF, whose dedication and expertise were instrumental in the successful execution of this project. Furthermore, we acknowledge and appreciate the collaborative efforts of the University College of General Medicine (CUMG), and the Inter-associative Collective Around Birth (CIANE) for their invaluable contributions to this project. Their cooperation has been pivotal in enhancing the scope and impact of our research. We also express our gratitude to JA Cahn for the meticulous editing of our English, which has significantly enhanced the clarity and professionalism of our work.

Contributors AR and LG participated in the conception and design of the survey and are acting as guarantors. All authors (AR, SB, JC, SD, OM, LL-D, LG) identified a comprehensive list of gynaecological and obstetrical care practices suitable for teleconsultation and participated in the interpretation of the results. LG conducted the statistical analysis. The initial draft of the manuscript was prepared by AR, with subsequent significant contributions and completion by LG. All other authors provided comments on drafts, contributing significantly to the development of the final manuscript, and approved the final version for publication.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient and public involvement Patients and/or the public were involved in the design, or conduct, or reporting, or dissemination plans of this research. Refer to the Methods section for further details.

Patient consent for publication Not applicable.

Ethics approval This study adhered to the 'International Council for Harmonisation – Good Clinical Practice' (ICH GCP) guidelines and French legislation, safeguarding participants' rights, safety and well-being while ensuring data credibility. The study also adhered to the Declaration of Helsinki. Individual informed consent was obtained from all experts participating in the study, as required by ethics guidelines. This study was registered to the Commission nationale de l'informatique et des libertés (CNIL, MR-004 no 2227512 dated 12 September 2022).

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement Data are available upon reasonable request. All data relevant to the study are included in the article or uploaded as supplementary information. Results show all data included in the survey.

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REFERENCES

1 Brayley NF. A review of three years experience of medical advice to seafarers by the casualty officer, Royal naval hospital Plymouth, via Portishead radio (W/T medico Portishead). *J R Nav Med Serv* 1980;66:93–106.
2 Australian Nursing Federation. Telehealth standards: registered midwives, 2013. Available: http://anf.org.au/documents/ reports/ Telehealth_Standar ds_Registered_Midwives.pdf
3 Collège des médecins du Québec. Le médecin, la télémédecine et les technologies de l'information et de la communication. In: *Guide d'exercice [Physicians, telemedicine, and information and communication tools*. 2015. Available: http://www.cmq. org/ publications-pdf/p-1-2015-02-01-frmedecin-telemedecine-et-tic. pdf
4 Haute Autorité de Santé. Qualité et sécurité des actes de téléconsultation et de téléexpertise [Quality and security of telemedicine consultations], 2019. Available: https:// www.has-sante. fr/upload/docs/application/pdf/2019-07/rapport_ delaboration_ teleconsultation_et_teleexpertise.pdf
5 Implementing Telehealth in practice: ACOG committee opinion summary, number 798. *Obstet Gynecol* 2020;135:493–4.
6 Tuckson RV, Edmunds M, Hodgkins ML. Telehealth. *N Engl J Med* 2017;377:1585–92.
7 DeNicola N, Grossman D, Marko K, *et al*. Telehealth interventions to improve obstetric and gynecologic health outcomes: A systematic review. *Obstet Gynecol* 2020;135:371–82.

8 Flodgren G, Rachas A, Farmer AJ, *et al*. Interactive Telemedicine: effects on professional practice and health care outcomes. *Cochrane Database Syst Rev* 2015;2015:CD002098.
9 Cantor AG, Jungbauer RM, Totten AM, *et al*. Telehealth strategies for the delivery of maternal health care: A rapid review. *Ann Intern Med* 2022;175:1285–97.
10 Butler Tobah YS, LeBlanc A, Branda ME, *et al*. Randomized comparison of a reduced-visit prenatal care model enhanced with remote monitoring. *Am J Obstet Gynecol* 2019;221:S0002-9378(19)30810-5.
11 Moise IK, Ivanova N, Wilson C, *et al*. Lessons from Digital technology-enabled health interventions implemented during the Coronavirus pandemic to improve maternal and birth outcomes: a global Scoping review. *BMC Pregnancy Childbirth* 2023;23:195.
12 Lee S, Hitt WC. Clinical applications of Telemedicine in Gynecology and women's health. *Obstet Gynecol Clin North Am* 2020;47:259–70.
13 Greiner AL. Telemedicine applications in obstetrics and Gynecology. *Clin Obstet Gynecol* 2017;60:853–66.
14 Greenhalgh T, Wherton J, Shaw S, *et al*. Video consultations for COVID-19. *BMJ* 2020;368:m998.
15 Kern-Goldberger AR, Srinivas SK. Telemedicine in obstetrics. *Clin Perinatol* 2020;47:743–57.
16 Aziz A, Zork N, Aubey JJ, *et al*. Telehealth for high-risk pregnancies in the setting of the COVID-19 pandemic. *Am J Perinatol* 2020;37:800–8.
17 Lurie N, Carr BG. The role of Telehealth in the medical response to disasters. *JAMA Intern Med* 2018;178:745–6.
18 Rousseau A, Gaucher L, Gautier S, *et al*. How midwives implemented Teleconsultations during the COVID-19 health crisis: a mixed-methods study. *BMJ Open* 2022;12:e057292.
19 Haute Autorité de Santé (HAS. Réponses rapides dans le cadre de la Covid-19. Continuité du suivi postnatal des femmes et de leur enfant, 2020. Available: https://www.has-sante.fr/upload/docs/application/pdf/2020-05/375_rr_covid19_postnatal_maj_deconfinement_mel-.pdf
20 McMillan SS, King M, Tully MP. How to use the nominal group and Delphi techniques. *Int J Clin Pharm* 2016;38:655–62.
21 Hasson F, Keeney S, McKenna H. Research guidelines for the Delphi survey technique. *J Adv Nurs* 2000;32:1008–15.
22 Diamond IR, Grant RC, Feldman BM, *et al*. Defining consensus: a systematic review recommends Methodologic criteria for reporting of Delphi studies. *J Clin Epidemiol* 2014;67:401–9.
23 Koenders N, van den Heuvel S, Bloemen S, *et al*. Development of a Longlist of Healthcare quality indicators for physical activity of patients during hospital stay: a modified RAND Delphi study. *BMJ Open* 2019;9:e032208.
24 Carrillo de Albornoz S, Sia K-L, Harris A. The effectiveness of Teleconsultations in primary care: systematic review. *Fam Pract* 2022;39:168–82.
25 Baumann S, Gaucher L, Mahrez I, *et al*. Experiences of Teleconsultation by French liberal midwives during the COVID-19 crisis. *Sante Publique Vandoeuvre--Nancy Fr* 2022;34:821–32.
26 Endler M, Lavelanet A, Cleeve A, *et al*. Telemedicine for medical abortion: a systematic review. *BJOG* 2019;126:1094–102.
27 Grossman D. Telemedicine provision of medication abortion. *Am J Public Health* 2022;112:1282–3.
28 Gomperts R, Jelinska K, Davies S, *et al*. Using Telemedicine for termination of pregnancy with Mifepristone and misoprostol in settings where there is no access to safe services. *BJOG* 2008;115:1171–8.
29 Aiken A, Gomperts R, Trussell J. Experiences and characteristics of women seeking and completing at-home medical termination of pregnancy through online Telemedicine in Ireland and northern Ireland: a population-based analysis. *BJOG* 2017;124:1208–15.
30 Grindlay K, Lane K, Grossman D. Women's and providers' experiences with medical abortion provided through Telemedicine: a qualitative study. *Women's Health Issues* 2013;23:e117–22.
31 O'Cathail M, Sivanandan MA, Diver C, *et al*. The use of patient-facing Teleconsultations in the national health service: Scoping review. *JMIR Med Inform* 2020;8:e15380.
32 Scott Kruse C, Karem P, Shifflett K, *et al*. Evaluating barriers to adopting Telemedicine worldwide: A systematic review. *J Telemed Telecare* 2018;24:4–12.
33 Keeney S, Hasson F, McKenna HP. A critical review of the Delphi technique as a research methodology for nursing. *Int J Nurs Stud* 2001;38:195–200.