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COVID-19 impact in abortions’ practice, a regional French evaluation

Karen Gibelin\textsuperscript{a}, Aubert Agostini\textsuperscript{a}, Michèle Marcot\textsuperscript{b}, Hélène Piclet\textsuperscript{c}, Florence Bretelle\textsuperscript{a,c}, Laura Miquel\textsuperscript{a,*}

\textsuperscript{a} Department of Obstetrics, Gynecology and Reproductive Medicine, Pôle Femmes Parents Enfants, AP-HM La Conception University Hospital, 147 bd Baille, 13005, Marseille, France
\textsuperscript{b} Méditerranean Network, Péritrinauté South and Corse, Network, 13015, Marseille, France
\textsuperscript{c} Department of Gynecology, Obstetrics and Reproductive Medicine, Pôle Femmes Parents Enfants, AP-HM Hôpital Nord University Hospital, Chemin des Bourrely, 13015, Marseille, France

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\textbf{A B S T R A C T}

\textbf{Introduction:} On March 14, 2020, France has entered into stage 3 of the COVID-19 pandemic. The French National Health Agency (Haute Autorité de Santé) has urgently recommended the use of medical abortion at home between 7 and 9 weeks of gestation and telemedicine for medical abortion consultations. The main objective of this study was to assess whether the emergency measures undertaken for the management of abortions during the COVID-19 pandemic led to practice changes, and to obtain practitioners’ opinions regarding the continuation of these measures.

\textbf{Material and methods:} This was a retrospective, quantitative, online self-administered survey from August 6, 2020 to October 2, 2020, aimed at health workers performing abortions (midwives, general practitioners, gynecologists obstetricians and medical gynecologists) in the South and Corse regions in France.

\textbf{Results:} Among the 124 practitioners included, 59/77 (76.6%) offered medical abortion at home between 7 and 9 weeks of gestation and 61/89 (68.5%) of them wished to carry on this practice. 55/123 (44.7%) practitioners offered telemedicine for medical abortion at home and 71/115 (61.7%) of them wished to carry on this practice.

\textbf{Discussion:} The emergency measures implemented by the the French National Health Agency (Haute Autorité de Santé) for medical abortion are approved and followed by the majority of health workers performing abortions in the South and Corse regions. This measure may be extended out of the COVID-19 epidemic.

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\textbf{Introduction}

On March 14, 2020, France has entered into stage 3 of the COVID-19 pandemic. The containment had a general impact on the personal lives of all entire population worldwide, especially on their emotional relationships and sexual behavior. COVID-19 also caused disruptions in reproductive health services such as prenatal and postnatal care, childbirth and abortion services, contraception availability, and the management of sexually transmitted infections \cite{1}. In Europe, there were wide disparities in access to abortion care since the start of COVID-19 pandemic, with reduced access in a number of countries due to government inaction in lifting abortion regulations to enable safe abortion care amid healthcare system disruptions \cite{2}. The French Minister of Solidarity and Health launched an urgent call to The French National Health Agency (HAS) to develop measures to respond to the French women requests for abortions. The HAS have therefore recommended the performance of medical abortion (MA) at home between 7 and 9 weeks of gestation (WG) and the use of telemedicine (TM) for MA consultations. The aim of this action was to not exceed the legal limit time for abortion for women, while limiting the exposure of women and professionals healthcare to COVID-19 and preserving medical capacity of health establishments \cite{3}. In its "quick response" of April 9, 2020 and in accordance with international guidelines, HAS promotes the practice of MA at home between 7 and 9 WG \cite{3–6}. In its other "quick response" of April 2, 2020, HAS authorizes that all consultations required in case of abortion request be performed by TM, if the woman is willing and if the practitioner regards it appropriate \cite{7}. Based on these emergency guidelines, it is interesting to know whether...
practitioners have changed their practice and whether the suggested measures have been realized. The main objective of this study was to examine whether these measures undertaken for the management of abortions during the COVID-19 pandemic led to changes in practice, and to obtain practitioners’ feedback regarding on the ongoing use of these measures.

Material and methods

This was a retrospective, quantitative, online self-administered survey using Google Forms® tool. The link was sent by e-mail to practitioners (midwives, general practitioners, gynecologists obstetricians and medical gynecologists) based in the South and Corse regions in France. The survey was submitted to practitioners registered in the Mediterranean perinatal medical network (PERINATMED), which includes both regions. The remaining practitioners were enrolled through the listings available at the Medical Order Council and their email contact were requested by phone. The survey covered practitioners’ experience over a 2-month period from April 15, 2020 to June 15, 2020 and was divided in 3 sections: general section including the practitioners’ characteristics (gender, age group, profession, department and city of practice, type of abortion performed (medical only, surgical only or both)); a section about the practice of MA at home between 7 and 9 WGA; a section about the practice of TM. Some of the questions did not necessarily lead to an answer.

The survey is available on address site: https://sites.google.com/view/questionnaireigetcovid/accueil. The survey was sent to both abortion and non-abortion practitioners (865 midwives, 269 general practitioners, 408 gynecologists obstetricians and medical gynecologists) by email on August 6, 2020, with a second re-launch on September 11, 2020 and a final one on September 28, 2020. In this email, only abortion practitioners were asked to respond to this study. The local institutional review board stated that approval was not required because this study not involve patients. The results were reported as rates and percentages.

Results

Between August and September 2020, over the 1542 surveys send, 143 were collected and 124 were totally or partially usable. The sample's characteristics are reported in Table 1. Over the 124 practitioners, 89/124 (71.8 %) performed only MA and 35/124 (28.2 %) performed MA and surgical abortion. Out of the 124 practitioners, 32/124 (25.8 %) performed abortions in healthcare establishment only, 77/124 (62.1 %) performed MA at home only and 15/124 (12.1 %) performed MA at home or in a healthcare establishment. Unfortunately, data about mode of exercise (private/public) or location of exercise were too complex to report because often the professionals involved are engaged in a combination of activities (public/private) and locations (hospital/health center/city office). The majority of practitioners responding to the study were midwives. Of the 1542 emails sent, only abortion providers were asked to complete the study. According to data published by the DRESS (Direction de la Recherche, des Études, de l’Évaluation et des Statistiques) in 2018, 253 doctors and midwives performed MA at home in in the South and Corse regions [8].

Over the 92 practitioners performing MA at home and who were the only ones who have the right to perform MA at home between 7 and 9 WGA, 59/77 (76.6 %) offered MA at home between 7 and 9 WGA (Table 2). MA consultation by TM practice and opinion of practitioners about the possibility of carrying out MA at home between 7 and 9 WGA via or not healthcare establishment after COVID-19 epidemic and the MA consultations by TM are reported in Table 2. Over 27/124 (21.8 %) practitioners reported difficulties performing abortions during the COVID-19 epidemic period (Table 3).

Women’s reactions majority reported by practitioners regarding bleeding, pain, life experience and occurrence of complication are reported in Table 4.

About TM, 64/122 (52.5 %) practitioners performed at least one of the consultations for MA with TM. In their usual practice 50/87 (57.5 %) practitioners used a computer to perform TM, 25/87 (28.7 %) a landline, 22/87 (25.3 %) a smartphone and 2/87 (2.3 %) a tablet.

Discussion

The emergency measures adopted in France have also been extended to other European countries. Switzerland has increased the length of MA at home from 7 to 9 WGA, while other countries have extended this period even further (9 WGA and 6 days for England and Wales, 10 WGA for Sweden, Portugal and Northern Ireland and 11 WGA and 6 days for Scotland). The emergency measures taken by HAS were aimed to facilitate access to abortion despite the epidemic context. To facilitate it, the creation of emergency abortion care windows may make sense. Ultrasound dating is not compulsory and in the lack of a suspected borderline pregnancy period, clinical disorder or symptoms suggesting an ectopic pregnancy, its realization should not delay access to

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### Table 1
Practitioner’s Characteristics.

| Characteristic                  | Number (%) |
|--------------------------------|------------|
| Woman                          | 100 (80.6 %) |
| Man                            | 24 (19.4 %)  |
| 30 years and younger            | 9 (7.3 %)   |
| 31–40 years                    | 38 (30.6 %) |
| 41–50 years                    | 34 (27.4 %) |
| 51–60 years                    | 27 (21.8 %) |
| 61 years older                 | 16 (12.9 %) |
| Midwives                       | 53 (42.7 %) |
| General practitioners           | 28 (22.6 %) |
| Gynecologists obstetricians    | 30 (24.2 %) |
| Medical gynecologists          | 13 (10.5 %) |
| Bouches-du-Rhône               | 52 (41.9 %) |
| Var                            | 30 (24.2 %) |
| Alpes Maritimes                | 19 (15.4 %) |
| Vaucluse                       | 15 (12.1 %) |
| Corseca                        | 5 (4.0 %)   |
| Alpes de Haute Provence        | 2 (1.6 %)   |
| Hautes Alpes                   | 1 (0.8 %)   |

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### Table 2
Women’s reactions majority and complications occurrence reported by practitioners.

| Characteristic                  | Number (%) |
|--------------------------------|------------|
| Bleeding                       |            |
| Very profuse                   | 7/63 (11.1 %) |
| Profuse                        | 26/63 (41.3 %) |
| Moderately or slightly profuse | 30/63 (47.6 %) |
| Very severe                    | 4/61 (6.6 %)  |
| Severe                         | 15/61 (24.6 %) |
| Moderate                      | 29/61 (47.5 %) |
| Weak or absent                 | 13/61 (21.3 %) |
| Very good experience           | 26/57 (45.6 %) |
| Good experience                | 23/57 (40.4 %) |
| Average experience             | 4/57 (7.0 %)   |
| Bad experience                 | 4/57 (7.0 %)   |
| Experience                     |            |
| Hemorrhagic abortion           | 6/92 (6.5 %)   |
| Abortion failure               | 5/92 (5.4 %)   |
| Emergency hospitalizations     | 3/92 (3.3 %)   |
| Trophoblastic retention        | 1/92 (1.1 %)   |

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abortion [9–12]. During the COVID-19 epidemic, England, Wales and Scotland promoted the avoidance of the use of ultrasound to determine gestational age [2].

Our study is the first to evaluate the measures deployed during the COVID-19 epidemic in France. We found that the majority of the practitioners who completed the survey offered MA at home between 7 and 9 WG. Nearly two thirds of them wanted this practice to be possible after the health emergency period. A large majority of practitioners reported a “good” or “very good” experience of MA at home between 7 and 9 WG by the majority of the women. These data are comparable to those of a study already conducted in Scotland that supports the existing evidence that home-self administration of misoprostol is acceptable to women and improves their overall satisfaction [13]. In addition, difficulties in accessing ultrasound, laboratory tests or abortion treatments were reported by some practitioners in our study.

In a review of the literature that included 6 studies, Schmidt-Hansen et al. concluded that pregnant woman up to 10 WG should be eligible for MA at home after taking misoprostol as it is a safe and low-risk procedure [14]. Further studies need to be undertaken to determine if MA at home can be extended beyond 10 WG.

In terms of complications, in our study, practitioners reported hemorrhages, abortion failures, hospitalizations and trophoblastic retention. These data are higher to those observed in the literature [5,6,10,15,16].

Regarding TC, it has also been adopted by England, Wales, Scotland and Ireland [2].

In our study, nearly half of practitioners offered to perform MA consultations by TC and more than half were interested in continuing the possibility of performing MA consultations with TM. In addition, a study conducted in the U.S. in 2019 by Raymond et al. showed the effectiveness of performing TM consultation and sending treatments at home in the context of self-managed MA at home [17]. In the semistructured in-depth telephone interviews study of Fix et al. conducted in Australia in 2017, women were also satisfied with the home delivery of MA medications and TM and would recommend this service [18]. The generalization of TC would reduce the need for healthcare workers and the use of healthcare establishment. This alternative was initially developed by the WHO and more recently promoted during the COVID-19 epidemic by the WISH program in the UK [11,19–21]. Self-managed MA at home could be a solution to a several challenges, promoting women autonomy, privacy and comfort and remains an interesting alternative to explore [22–24].

The emergency measures adopted by the HAS for MA and TM are approved by the majority of practitioners in the South and Corse regions in France. They have encountered positive feedback from the majority of the women who therefore support their continuation beyond the COVID-19 epidemic. On the other hand, this study only assesses healthcare professionals’ perceptions of the measures deployed during the COVID-19 pandemic. It would be interesting to conduct a study among women to assess their opinions and feelings. Also, a study designed to evaluate the complications encountered during the practice of MA at home between 7 and 9 WG is necessary. To confirm the results of our study, other prospective studies focusing on women’s experiences in the COVID-19 epidemic context need to be carried out.

Declaration of Competing Interest

The authors report no declarations of interest.

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Glossary

HAS: Haute Autorité de Santé (High Authority for Health)
MA: Medical Abortion
TM: Telemedicine
WG: Weeks of gestation