

# Fertility Specialist Practice in the Philippines During the COVID- 19 Pandemic

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**Objective:** To determine the changes in the clinical practice of infertility specialists in the Philippines, specifically, the proportion of specialists who stopped practice, length of break from clinics, the decrease in caseload, changes in consultation platform, screening frequency, number of clinicians that contracted COVID 19 and safety protocols employed during the COVID – 19 pandemic.

**Methods:** A cross-sectional study using an online questionnaire given to all members of the Philippine Society for Reproductive Medicine (PSRM) last November 2020. Participants were requested to answer the questionnaire through google spread sheet, with informed consent. All data were collated, summarized and reported in terms of frequencies, and measures of central tendency.

**Results:** There were 110 active members of the PSRM who participated in the study. There was an overall decrease in the percentage of fertility consultations during the pandemic. There is also a substantial decrease in the caseload from different practices: 45.4% reported more than 50% decrease in IVF-related procedures, 54.5% noted more than 50% decrease in intrauterine insemination procedures, 52.8% reported more than 50% decrease in ovulation induction treatment, and 66.3% reported more than 50% decrease in endoscopic procedures. About 37% of the respondents deferred approximately 5-10 cases for fertility treatment, with 27.3% of the respondents reported deferring embryo transfer to less than 5 couples. More than half of the specialists (51.8%) stopped performing fertility procedures and 68.2% of the respondents completely stopped doing out patient consultations. However, some specialists resumed clinics by May 2020 (30.9%) and June 2020 (30.9%). Upon resumption of clinics, specialists used both face to face consultation and teleconsultation, with the largest proportion of respondents using both platforms. Safety measures employed during face-to-face consultations to prevent disease transmission included hand sanitizers in the clinics, restricted number of people in the waiting room and consultation room, use of personal protective equipment, symptom check prior to face to face consults, installation of air purifiers, and acrylic barriers, and use of health declaration forms. Majority of the specialists are aware of the international and local guidelines regarding infertility care during the pandemic (98.2%) and inform patients regarding the contents of the guidelines (90%).

**Conclusion:** There is a significant decline in the consultations and fertility procedures during the pandemic. Specialists are well informed of the international and local guidelines regarding fertility care during the pandemic.

**Key words:** COVID – 19, in vitro fertilization (IVF), fertility specialist, reproductive medicine

## Introduction

When the entire Philippines was placed under enhanced community quarantine from March 17 to May 31, 2020 following the WHO announcement of the COVID–19 disease as a pandemic<sup>1</sup>, the Philippine

Society for Reproductive Medicine (PSRM) released a statement calling all fertility centers and specialists to suspend all procedures, including oocyte pick up, embryo transfers, intrauterine inseminations (IUI) as well as elective reproductive surgeries. The society also encouraged its members to refrain

from conducting outpatient clinics and instead opt for video or teleconsultations for the safety of its members and patients.<sup>2</sup> The guideline released by PSRM is in accordance with the international societies' call to avoid overburdening the healthcare system due to the novel coronavirus infection. The European Society of Human Reproduction and Embryology<sup>3</sup> and the American Society for Reproductive Medicine<sup>4</sup> initially released statements encouraging its members to defer fertility procedures and prioritize fertility preservation and those with diminished ovarian reserve and advanced maternal age. Most of the clinicians had to make decisions due to the circumstances with the objective of ensuring the safety of patients, reduce non-essential contacts and prevent possible maternal and fetal complications in future pregnancies.

After almost 75 days of enhanced community quarantine, several areas in the Philippines were placed on less stringent protocols and several fertility centers and specialists have reopened their clinics as international societies have affirmed the importance of continuing reproductive care during the pandemic.<sup>5</sup> Guidelines regarding restarting of fertility procedures vary among different societies.<sup>6,7</sup> Most of the practices on restarting face-to-face consultations and fertility treatments are based on expert opinions since there is no single evidence-based intervention against coronavirus at the moment, therefore combined measures are warranted. These measures should include social distancing, use of personal protective equipment, scheduled appointments, and strict sanitation. There is also no consensus regarding screening of asymptomatic health care workers and patients.

There has been an undoubtedly drastic decrease in elective outpatient care worldwide. In the United States, the number of visits to ambulatory practices declined nearly 60 percent by early April 2020. Since that time a rebound has occurred, but the number of visits is still roughly one-third lower than what was seen before the pandemic.<sup>8</sup> A substantial reduction in patient visits in general practice consultations was also reported in a study done in China wherein consultations during the first 6 months of 2020 that included a 60-day lockdown period was compared to data from the first 6 months of 2019.<sup>9</sup>

On September 2020, the PSRM released recommendations on resuming fertility care.<sup>10</sup>

Some of these guidelines include wearing full PPE during procedures such as OPU and ET, physical distancing practices, pre-treatment counseling for patients regarding potential risks of pursuing care during the COVID-19 pandemic, including unknown impact of COVID-19 infection on pregnancy and fetal risks; risk of exposure to COVID-19 infection at the clinic, possible treatment cancellation due to infection, or changes in national policies and strict home quarantine while undergoing treatment procedure. Other recommendations are strict triaging or screening of all patients prior to entering the infertility clinic, including filling-up of questionnaires regarding possible signs and symptoms and risk of exposure, and checking of body temperatures. Screening may initially be done remotely by telemedicine, filling-up of contact-tracing forms prior to entering the infertility clinic, as mandated by the IATF. Importantly, PSRM recommended the requirement for a negative RT-PCR COVID-19 test for the patient, husband and attending specialist prior to initiating an IVF cycle, or prior to performing intrauterine insemination, the choice of anesthesia during oocyte retrieval must include methods that do not trigger aerosol formation such as regional, intravenous, and local anesthesia.

The general objective of the study was to determine the practices of fertility specialists in the Philippines during the COVID – 19 pandemic. The specific objectives were to describe the demographic characteristics of fertility specialists included in the study as well as to determine the changes in practices such as the number of specialists that stopped their practice and length of break, changes in caseload and consultation platform. The study also aimed to determine the proportion of specialists that regularly screen themselves and the safety protocols and physical changes employed in their clinics.

## Methods

This is a cross-sectional study design, which used an online questionnaire using google platform. An endorsement from the PSRM Board of Directors was secured and a link to the google form containing the informed consent and the questionnaire was emailed to all PSRM members (134) through the official PSRM email, after approval of the hospital ethics

review board (SL-20335 / RPC-277-10-20GC). The investigators did not obtain any personal information from the participants. The questionnaire was pre-tested, and contained a total of 22 questions divided in 4 sections (demographics, caseload, consultation platform and screening practices). All active members of the PSRM were included, while those who refuse to participate in the study were excluded. All data were anonymous and non-participation in the study had no bearing in the status of their membership. All data gathered were entered in an excel form. Responses were collectively studied using descriptive data analysis such as frequencies and measures of central tendency, where appropriate.

## Results

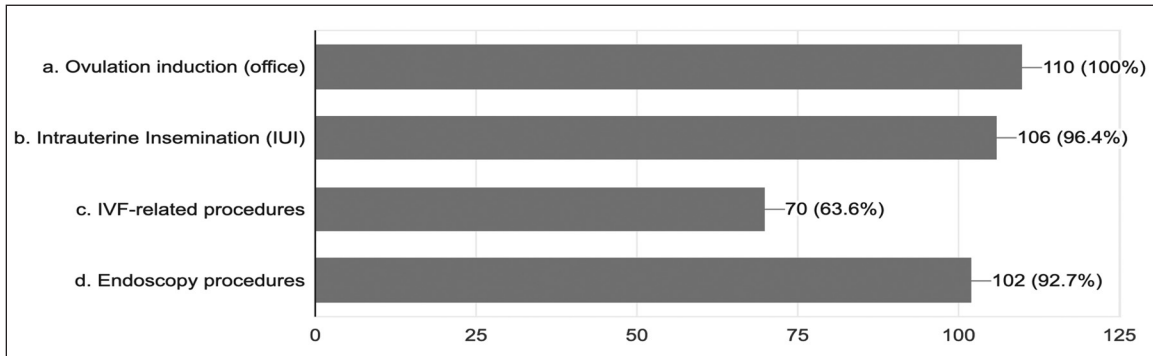
A response rate of 82% (110 out of 134 active PSRM members) was documented. Ninety one percent (n=100) of respondents were female and 9% (n=10) were male. More than half of the respondents (54.5%) have been practicing for more than 10 years. Majority of the respondents are based in the National Capital Region (61.8%), followed by region IV (9.1%), region III (7.3%), region VI, VII and XI (3.6% each), region I (2.7%), region II, V and VIII (1.8% each), and region 1, IX, and X (0.9%) and most specialists have access to a fertility center (92.7%).

All of the 110 respondents perform office ovulation induction, 94.6% perform intrauterine insemination, 92.7% perform endoscopic procedures and 63.6% perform IVF-related procedures (Figure 1). Almost all of the specialists noted a decrease in the number of patient consultations due to the pandemic with 40.9% reporting more than 50% decrease, and 37.3% citing a 31-50% decrease, while 3.6% noted no change in the number of consultations. There is also a substantial decrease in the caseload from different practices: 45.4% reported more than 50% decrease in IVF-related procedures, 54.5% noted more than 50% decrease in intrauterine insemination procedures, 52.8% reported more than 50% decrease in ovulation induction treatment, and 66.3% reported more than 50% decrease in endoscopic procedures. About 37% of the respondents deferred approximately 5-10 cases for fertility treatment, while another 35.5% deferred more than 10 cases for fertility treatments, due to the pandemic. About

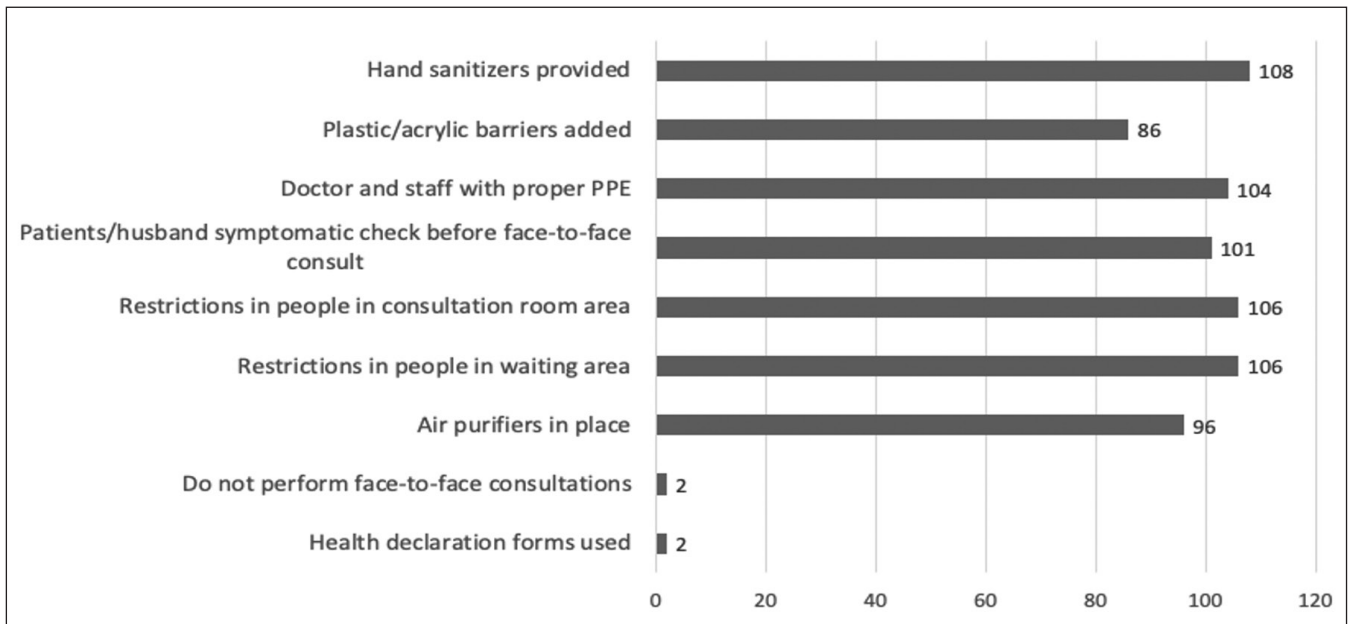
27.3% of the respondents deferred embryo transfer to less than 5 couples, while another 17.3% deferred approximately 5-10 cases for embryo transfer.

During the pandemic in 2020, more than half of the specialists (51.8%) stopped performing fertility procedures and 68.2% of the respondents completely stopped doing out patient consultations. However, some specialists resumed clinics by May 2020 (30.9%) and June 2020 (30.9%). Upon resumption of clinics, specialists used both face to face consultation and teleconsultation, with the largest proportion of respondents using both platforms but more teleconsultation (48.2%), while 17.3% only used face-to-face consultations. When asked about the safety measures employed during face-to-face consultations to prevent disease transmission (Figure 2), specialists provided hand sanitizers in their clinics (n=108), restricted people in the waiting room (n=106) and consultation room (n=106), and used personal protective equipment (n=104). Other measures employed are symptom check prior to face to face consults (n=101), installation of air purifiers (n=96) and acrylic barriers (n=86), and using of health declaration forms (n=2). There were 2 specialists that have not resumed face-to-face consultations at the time of the survey.

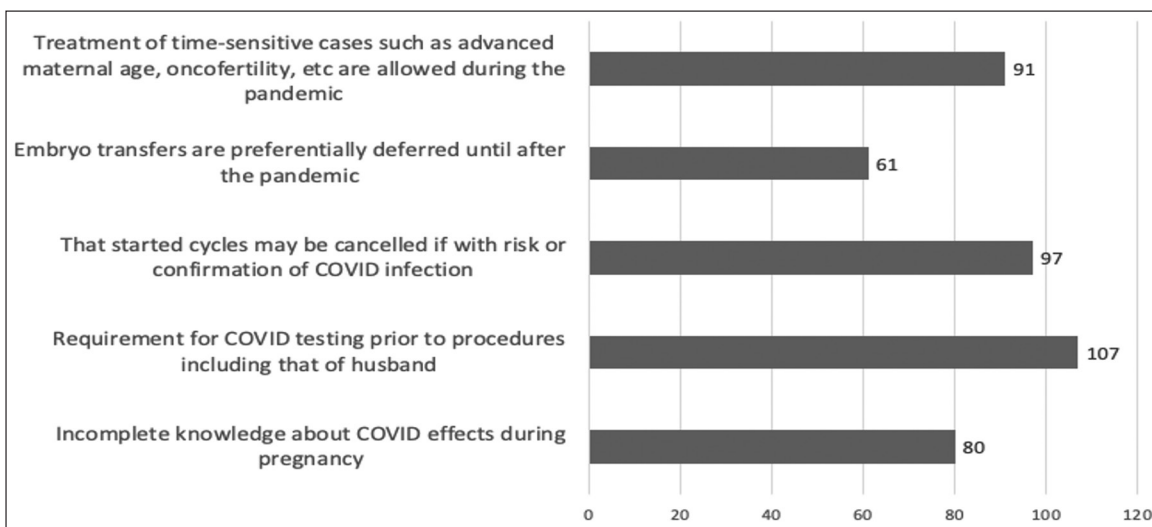
In terms of personal screening, more than half (55.5%) of the respondents occasionally screen based on symptoms and exposure to COVID 19, but there were still 17.3% that have not tested at the time the survey was conducted. Only 7.3% of the respondents admitted to having tested positive for COVID-19 by RT PCR. Of those that tested positive for COVID 19, the source of the infection was either not established (n=3), or contracted from the outpatient clinic (n=3), or a non-medical source (n=2). Less than half of the specialists have handled COVID – 19 patients (45.5%), or have seen patients who were later diagnosed with COVID – 19 (49.1%). Majority of the specialists are aware of the international and local guidelines regarding infertility care during the pandemic (98.2%) and inform patients regarding the contents of the guidelines (90%). Figure 3 shows the guidelines routinely mentioned during consultations: requirement of COVID testing prior to procedures including that of husband (n=107), started cycles may be cancelled if with risk or confirmation of COVID infection (n=97), priority treatment of time-sensitive cases such as advanced maternal age,



**Figure 1.** Procedures performed as a fertility specialist.



**Figure 2.** Measures employed during face to face consultations to decrease transmission of COVID 19.



**Figure 3.** Guidelines routinely mentioned during consultation.

oncofertility (n=91), incomplete knowledge about COVID effects during pregnancy (n=80), and embryo transfers are preferentially deferred until after the pandemic (n=61).

## Discussion

Majority of the 110 respondents are practising in the National Capital Region followed by Region IV and III and have access to a fertility center. The bulk of response with availability of fertility centers and area of practice is attributed to 5 of the 7 PSRM-accredited fertility centers located in Luzon with 4 of the centers located within Metro Manila. It is worthy to note that 7.3% of specialists in the country still do not have access to fertility centers.

Most of the respondents perform office ovulation induction, intrauterine insemination, endoscopy procedures and IVF related procedures. By November 2020, when this study was performed, there was a significant decrease in patient consultations and across all categories of procedures reported by the specialists. There was approximately 31 - 75% decrease in patient consultations according to the respondents, similar to the report of a 60% decline from baseline between mid-February and the end of March of general outpatient consults by Stephenson.<sup>11</sup> By mid-May, there was a slight increase in the number of consults but is still less than 30% from baseline.

Case load for IVF-related procedures, IUI, ovulation induction and endoscopy significantly declined during the period studied. This decline is similar to the report of Tan, et al.<sup>12</sup> where a global survey was done via an online platform, to determine the different regional response of fertility care to the COVID-19 pandemic. They reported more than 75% reduction in IVF cycles as well as IUI cycles.

Most of the respondents reported deferring around 5-10 fertility procedures during the pandemic, and among those who perform embryo transfers, most opted to defer the embryo transfer during this time. Despite agreeing to the postponement of fertility procedures in accordance with the international and local guidelines, 85% of patients that had a cycle cancelled found it to be a moderate to extremely upsetting experience as reported in the survey performed by Turocy, et al.<sup>13</sup> with 22% ranking it equivalent to the loss of a child. The long

term effect on the mental health and psychological well-being of the couples that had cancelled cycles will be difficult to assess.

Majority of the local fertility specialists have stopped performing fertility-related procedures and doing outpatient clinics during the pandemic, but some of the respondents resumed clinics by May and June 2020. A guideline was published by the National Health Service England recommending an initial virtual consult for patients seeking fertility treatment, and to reserve face-to-face appointments for those who require a physical assessment.<sup>14</sup> Performing telemedicine protects both physician and patients especially those at high risk of contracting COVID-19. In a survey by Byravan and Sunmboye,<sup>15</sup> patients felt that virtual consultations are safer during the pandemic, in addition, they felt listened to, able to ask questions and were satisfied with the advice given to them during teleconsults. Telemedicine is useful in delivering fertility care during the COVID-19 pandemic, with high risk patients mostly preferring to consult virtually than face to face.<sup>16</sup>

Some of the safety measures used during face-to-face consultations are provision of hand sanitizers, restriction of people in the waiting and consultation room, use of personal protective equipment, symptom check prior to consults, installation of air purifiers and acrylic barriers and use of health declaration forms. The practices mentioned are similar to guidelines recommended by the international and local societies.

There are no available guidelines regarding screening of asymptomatic health care workers. A study by Al-zoubi<sup>17</sup> found zero prevalence rate for positive COVID-19 tests among asymptomatic healthcare workers. Most of the participants screen themselves based on symptoms and COVID – 19 exposure as a precautionary measure. Eight specialists (7.3%) at the time of the survey reported testing positive for COVID-19, with the source of the infection traced either from outpatient clinic or non-medical sources since majority of the respondents have not handled COVID-19 patients.

Most of the specialists are aware of the international and local guidelines regarding fertility care during the pandemic and are informing their patients regarding these guidelines. Counseling included prioritization of time-sensitive cases such as advanced maternal age and oncofertility, the

preferential deferring of embryo transfer until more information is known, requirement of a COVID-19 RT PCR swab prior to the procedure with a risk of cycle cancellation if ever the patient, partner or provider becomes COVID – 19 positive as well as possible risks of COVID-19 on pregnancy outcomes.

Continuing research on the effect of the COVID-19 pandemic to fertility practice is crucial as the lessons learned will serve as an important foundation in developing measures to limit the adverse outcomes in the future.

## Limitations and Recommendation

The findings of the study are limited to the time and situation when this survey was conducted. A follow up of the current practices and effects of the COVID – 19 pandemic in a few years is recommended.

## Conclusion

The COVID - 19 pandemic resulted in a considerable reduction in fertility consultations and procedures specifically IVF-related procedures, intrauterine uterine inseminations, endoscopic procedures and even office ovulation induction treatments among fertility specialists in the Philippines. Majority of PSRM members are aware of the international and local guidelines regarding fertility care in the pandemic and have discontinued clinic consults. Upon resumption of practice, fertility specialists have implemented several safety protocols to decrease the rate of transmission of COVID – 19.

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