

• **P-495 Telemedicine in ART during SARS-CoV-2 pandemic : far**
• **and yet close**

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• **Study question:** Could telemedicine help in the management of the infertile
• couple's path at a fertility center?

• **Summary answer:** The introduction of telemedicine increased the number
• of cycles within 6 months from the first consultation and reduced the drop-
• out rate.

• **What is known already:** In Italy during the complete lockdown due to the
• first pandemic wave of SARS-CoV-2 the activity of fertility centers were stopped,
• with the exception of fertility preservation procedures for oncological patients.
• We therefore proposed a service of telemedicine to our patients, that we called
• SmartPMA.

• **Study design, size, duration:** A longitudinal study performed at a public
• infertility center. The SmartPMA service was offered to 93 couples referred to
• our center from March 9th to May 31st, 2020. Initially 72 couples was interested
• in SmartPMA. Our center gradually re-opened and the first oocytes retrieval
• was performed on June 9th .

• **Participants/materials, setting, methods:** Sixty-one out of 72 couples
• (85%) performed the SmartPMA from April 7th to June 16th, 2020. After acquir-
• ing informed consent and sending two anamnestic questionnaires, we booked
• a video-consultation with a gynecologist and a biologist. Afterwards, we sent
• medical prescriptions for appropriate clinical tests. At the re-opening, we offered
• the chance to start the ART cycle. Time to the first treatment and drop-out rates
• were compared to historical controls (2017-2019) using chi-square test.

• **Main results and the role of chance:** Eleven couples declined the SmartPMA
• and booked an appointment at the reopening. Only 2 of these couples (18%)
• actually performed an IVF treatment within six months.

• Three out of the 61 couples that accepted the SmartPMA did not perform IVF
• treatments because the age of women exceeded the legal limit to access to a
• public ART center. Twelve out of 58 couples (21%) did not performed any IVF
• treatment for the following reasons: 4 women spontaneously got pregnant, 1
• couple gave up for medical reasons, 3 were referred to ovidonation, and 4 were
• lost to follow-up.

• Thirty-eight out of 58 couples (66%) (median age of woman: 36 + 4 years,
• range 27-43) performed at least one ART treatment (14 IUI, 12 ICSI cycle, 12
• FIVET cycle). Eight out of 58 couples (14%) needed further clinical tests and
• their treatments are ongoing. The mean time to first treatment in the SmartPMA
• couples was 4 + 1 months (range 1-6). After SmartPMA, 66% of the couples
• performed the first cycle within 6 months, compared to 37% of controls
• (333/898 couples at their first access to our center from 2017 to 2019), p
• <0.00001. The drop-out was reduced from 39% to 20%, p=0 .0038.

• **Limitations, reasons for caution:** We cannot exclude that the couples that
• joined the SmartPMA service during the pandemic period were particularly
• motivated to perform IVF treatments. We are aware of the small sample size
• and that this is a monocentric study.

• **Wider implications of the findings:** Even after the pandemic, telemedicine
• can be an useful tool for fertility centers to reduce the discomfort of several
• visits in hospital, without losing patients but rather ultimately reducing the time
• to treatments and drop-out.

• **Trial registration number:** not applicable