

#### P-478 Quality of life assessment in women undergoing assisted reproduction. A study of FertiQoL and HADS

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**Study question:** The present study aims to explore infertility-related psychosocial outcomes, including fertility quality of life (QoL), as well as anxiety and depression levels, in women diagnosed with infertility.

**Summary answer:** Differences on fertility-related QoL appeared when comparing treatment types (gamete donation vs own gamete). Furthermore, statistically significant associations were found between QoL and anxious-depressive symptomatology.

**What is known already:** Those who wish to have children and do not achieve their objective just like other peers can see their goals and expectations with pessimism, generating concern and a series of negative emotions. Several psychological implications of infertility have been described, such as increased levels of stress, anxiety, depression, decreased self-esteem, mood and hope, or poor relationship adjustment. The emotional impact of infertility in people's life cycle can be so strong that reducing it only to biological aspects would lead to a dangerous situation of neglect. For this reason, QoL assessment in ART becomes an important need.

**Study design, size, duration:** FertiQoL stands as the most widely used tool to assess infertility-related QoL, overcoming the limitations of other instruments that only target specific medical conditions. The present is a multi-site cross-sectional study over patients with infertility (n=104), aiming to explore their fertility-QoL, as well as their anxiety and depression levels, which are symptoms that have been previously associated. Questionnaire administration, and sociodemographic and medical data gathering took place between January 2019 and December 2020.

**Participants/materials, setting, methods:** Participants were 104 female patients (M.age= 39.8) undergoing or expecting a fertility treatment. The FertiQoL Spanish version was administered through mobile app, and its paper version distributed at medical/psychological appointments. QoL was self-reported through FertiQoL, assessing the influence of infertility problems in various areas (e.g. impact on self-esteem, emotions, general health, family, partners, social relationships, work, life projects...). Additionally, HADS (Hospital Anxiety and Depression Scale) was provided as a measurement of anxiety and depression levels.

**Main results and the role of chance:** Regarding treatments, 50.6% of participants were currently undergoing gamete donation while 44.3% were undergoing treatments that involved using their own gametes. After comparing QoL between these treatment types, results showed that patients who underwent

egg donation, compared to those who used their own eggs, reported statistically significantly lower scores of QoL in the Social Subscale ( $p = .03$ ), but not in the other psychological outcomes. Also, statistically significant negative correlations were found between HADS and all core FertiQoL subscales ( $p < .05$ ). Results are consistent with previous studies showing similar associations between fertility QoL and anxiety and depression, as well as with increased psychological negative implications of gamete donation. The majority of participants reported non-pathological scores of anxiety and depression when considering the cut off value of 8 for HADS, thus suggesting the presence of a relatively healthy sample. The number of treatments that patients had previously taken and the years of infertility were not associated with any of the psychological variables.

**Limitations, reasons for caution:** Some limitations to consider are presence of co-morbid diagnosis, differences in medication, or patient's cultural backgrounds. Also, conclusions should be interpreted cautiously since the design doesn't allow causal inferences. Further investigations should consider a continuous assessment to explore changes in psychological well-being at different points of intervention, specially with gamete donation.

**Wider implications of the findings:** The great advantage we've seen so far when using FertiQoL is the possibility to identify more accurately the true impact on other aspects of patient's well-being besides the emotional area. ART professionals, including psychologists and counselors, will have more information within a small amount of time about QoL when using this tool.