



## LETTERS TO THE EDITOR—CORRESPONDENCE

**Comment on “Differences in psychophysical well-being and signs of depression in couples undergoing their first consultation for assisted reproduction technology (ART): an Italian pilot study”**



Dear Editors,

We read with great interest the article by Valoriani et al. [1] published in your prestigious Journal, which investigated the emotional state of infertile couples consulting for the first time an Infertility Unit. Congruently with Authors' view, we agree that infertility and assisted reproduction technologies (ART) may affect the couple's psychological and emotional stability; nevertheless, currently robust data are still lacking and so far a limited number of controlled studies was published about this topic. Although we appreciated the reported methodology, we take the opportunity to point out several elements which would let us further realize the results of this study. First of all, Valoriani et al. [1] have recruited couples with an alleged diagnosis of infertility, without specifying whether if it was due to male or female etiology, both or idiopathic. Since the study relies on the comparison between female and male components of the couple, it is important to underline that the certain infertility attribution to only one of the two or both partners before the psychometric tests may decisively influence the reported outcomes [2].

Moreover the authors declared that they included patients who underwent previous ART in their center, but they did not specify if these patients underwent ART attempts in other centers: in our opinion, this could be considered a confounding factor of paramount importance and these patients should have been excluded from the analysis. Furthermore, patients' range of infertility is (unexpectedly!) wide: it is crystal clear that cases with a year of infertility could have emotional and psychometric outcomes very different from cases of 6–10 years of infertility.

In addition, there are statistically significant differences between the two groups (men Vs. women) for age, education and employment, and this obviously could influence all subsequent data analysis. Among the exclusion criteria it was not reported the presence of pre-existing psychopathologies, unlike the study of Muscatello et al. [3] in which all subjects were screened for mental disorders by an expert psychiatrist using a structured psychiatric interview. Moreover, Authors' results are based on the use of self-report psychometric measures: according to our opinion, it is important to consider that these results may have been seriously influenced by a series of individual factors which may limit the validity of self-evaluation instruments. The set of psycho-diagnostic test seems limited compared with other studies [2–4]; in particular, the test used to assess the presence of depression is not primarily suited to the objective of the study, as in

the literature other more comprehensive tests already exist [2,4,5]. Considering this last points, we strongly suggest the presence of a psychiatrist trained in psychometry in the research team. Finally, we believe that future studies should evaluate other psychopathological variables like anxiety, anger, shame, and self judgment. In conclusion, considering the impact of infertility on psychological health and the paucity of papers on this topic, we take the opportunity to solicit further researches in order to find clearer evidence and to provide the best evidence-based treatment for these patients.

### Declaration of interest

All authors have no proprietary, financial, professional, or other personal interest of any nature in any product, service, or company. The authors alone are responsible for the content and writing of the paper. No specific funding was obtained.

### References

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**Author's response: Comment on “Differences in psychophysical well-being and signs of depression in couples undergoing their first consultation for assisted reproduction technology (ART): An Italian pilot study”**



Dear Editor,

We appreciated Dr. Vitale's and his colleagues' letter about our paper “Differences in psychophysical well-being and signs of depression in couples undergoing their first consultation for assisted reproduction technology (ART): an Italian pilot study”.

Regarding their comments, we have decided to list our answers in paragraphs

1) First of all, Valoriani et al. have recruited couples with an alleged diagnosis of infertility, important to underline that a clear infertility attribution to only one of the two or both partners before the psychometric tests, may decisively influence the reported outcomes [2].

Our study is meant for patients who make the first visit to our NHS Infertility Unit.

In Table 1 we specified the “probable diagnosis” because, even if patients have already been diagnosed, our medical staff still requires new tests to be done in the hospital, in order to obtain a more comprehensive evaluation of the couple.

However, there were some indicators on infertility, because often the couples have already conducted a medical evaluation and for that reason we considered the “probable diagnosis”.

Furthermore, when we went to check the paper quoted by Vitale and colleagues (El Kissi et al., 2013), to support their comments, we noticed that El Kissi reported that: “At the time of assessment, the diagnosis of infertility had already been presented and explained to the couple by the gynaecologist”.

We believe that, even if the infertility condition could influence the results, this was not our main goal.

Our work was intended to emphasize that, at the first visit, you are dealing with a stressful situation, especially when dealing with a diagnostic phase.

We wish to remind that being a NHS Hospital and a Clinical Medical School, many exams are to be repeated, before confirming the previous diagnosis.

Instead, we noted El Kissi et al. (2013) “enrolled couples starting a new cycle of ART, because psychological impact is dependent on the stage of medical care” while they do not specify how many cycles the couples had done before, and hence how many failures there had been.

These results can be a very important and sensitive data for the analysis of psychometric characteristics which they intend to measure. According to us, more than our “probable diagnosis”.

2) Frequently the Authors declared that they included patients who had undergone previous ART in their centre, but they did not specify if these patients had undergone ART attempts in other centres. In our

opinion, this could be considered a confusing factor of worldwide importance and these patients should have been excluded from the analysis.

We did not include patients who had undergone previous ART in our Centre, and in fact, one of our inclusion criteria was “no previous ART attempts in our Infertility Unit” (see pag. 180).

3) Furthermore, patients' range of infertility is (unexpectedly!) wide: it is obvious that cases with one year of infertility could have emotional and psychometric reasons, very different from cases of 6–10 years of infertility.

Having such a large number of couples at the first visit, this portends that the available data may be of a very wide range.

Many infertile couples are waiting a long time before contacting an ART centre, initially undergoing less invasive attempts with their gynaecologist.

We were interested to know about the emotional state experienced at the first contact in a specialist centre, which offers them a different pattern as compared to other Italian centres.

In Florence, for the last 10 years, it has been unusual/surprising, both for those who have just started to try to get pregnant and for those who were trying to have a child for several years, to find a team which includes gynaecologists, urologists and psychologists.

As far as the literature is concerned, we found many papers that show a wide range of infertility, and El Kissi et al. (2013) is one of these, presenting a range of years of infertility, reaching from less than one to more than ten years.

4) In addition, there are statistically significant differences between the two groups (men vs. women) in terms of age, education and employment, and this obviously tends to influence all subsequent data analysis.

This data reflects the social situation of Italy. Right now in our country women are better educated but less engaged on a management level than men, and this can be found in our sample.

In fact, for the benefit of any sociological proof in our country, we will not stop analysing the data collected in the study.

5) Unlike the study of Muscatello et al. [3], the presence of pre-existing psychopathologies, according to which all subjects were screened for mental disorders by an expert psychiatrist who did a structured psychiatric interview, among our exclusion criteria the presence of pre-existing psychopathologies was not reported.

Furthermore, authors' results are based on the use of self-reporting psychometric measurements: according to our opinion, it is important to consider that these results may have been seriously influenced by a series of individual factors which may limit the validity of self-evaluation instruments.

Our study is an observational research according to a new clinical model, that includes the psychologist in the clinical team which meets the infertile couples during their first visit.

We were interested to learn about the initial emotional state that these subjects experienced, how welcomed they felt, both men and women, and whether they are aware that they can openly express their emotions to the staff.

In addition, our study, which focuses on couples who come for the first time, it is part of a larger study lasting 4-years (2007–2010) and which accompanies the couples towards, either pregnancy or failure.

To couples that we followed up in the study, we administered semi-structured diagnostic interviews to assess psychiatric long-life anamnesis.

6) The set of psycho-diagnostic test seems limited compared to other studies [2–4]; in particular, the test used to assess the presence of depression is not primarily suited to the objective of the study, as in the literature other more comprehensive tests already exist [2,4, 5].

We had discussed our methodology for this study directly with Prof. John Cox and then we planned our longitudinal study for infertile couples and future parents.