Title: Pretreatment Beck Depression Inventory score is an important predictor for Post-treatment Beck Depression Inventory score in infertile patients: a before after study

Authors:

Afsaneh Khademi (afkhademi@sina.tums.ac.ir)
Ashraf Alleyassin (aaleyaasin_md@yahoo.com)
Marzieh Aghahosseni (aghahoseini_md@yahoo.com)
Seyed Ali Ahmadi Abhari (Art_of_IVF@yahoo.com)
Hasan Esfandi (Art_of_IVF@yahoo.com)
Koorosh Fakhimi Derakhshan (Art_of_IVF@yahoo.com)

Version: 2 Date: 23 February 2005

Author's response to reviews: see over
Dear the editorial team,
Here is my revised manuscript. Two covering letters are added for the reviewers. Thanks for your attention.
Sincerely yours,
Dr. A. Khademi.

Dear Dr. Yumi Nakano,
Thank you for your attention to our manuscript. I have pleasure in sending you my revised manuscript.
These items are changed:
1. Factors that affect BDI2: On page 3 line 22 “Up to now there is no study as a prospective cohort or before-after study which design to find predictors of depression of infertile patients after treatment except one (14). Ingrid et al showed that severity of depression following a failed treatment was positively associated with the duration of infertility. However the post-treatment BDI scores were not associated with type of infertility treatment received, age, education, cause of infertility and number of previous treatments received.” is added.

As I stated, there is only one article in relation to BDI after treatment.

2. Explanation of showing table “Comparison of demographic characteristics between pregnant and non-pregnant subjects” (which is named in new version as table 2):
   a. This table is a part of demographic data.
   b. I want to show that there is no obvious difference between pregnant and non-pregnant groups (before treatment) to explain the difference of BDI2 among them after treatment. I think the most important variable is BDI1 and the result of treatment. The difference of BDI1 and BDI2 in these subgroups is due to the difference between results of treatment.
   c. BDI2 is not associated with age which is significantly different in pregnant and non-pregnant groups.
   d. There was a brief explanation about duration of infertility and BDI score on page 10-11. Explanation about “duration of infertility” is added in the discussion more precisely on page 10 in new version.
   e. Table “Comparison of mean BDI1 and BDI2 in pregnant and non-pregnant subjects” (which is named in new version as table 4): There is no statistically significant difference between BDI1 (before treatment) in pregnant and non-pregnant subjects (P=0.28). Although there is
statistically significant difference between BDI2 (after treatment) in pregnant and non-pregnant subjects. This shows that factors which affect BDI2 could be the same in pregnant and non-pregnant before treatment.

3. Explanation of showing table “Mean score of BDI1 and BDI2 in relation to cause of infertility” (which is entitled in new version as table 3): Cause of infertility was one of our independent variables. As it is presented as four categories (male, female, both and unknown), we analyzed it separately. Another method of analysis was to put this variable in regression analysis; however our statistical manager emphasized that this method of analysis is better. BDI score was lower in male factor infertility than others. The discussion about this item is on page 11.

4. Analysis of BDI1: As BDI1 has the most influence on BDI2, it is possible that variables which have some effect on BDI1, could change BDI2. Other researchers can do work about this item. (If you think that this item is not important, the results about it can be omitted.) this item is explained in page 12:

Page12: “To answer two simple questions can conduct the physician to screen these women.

1. How much my patient is at risk of depression (due to BDI1 score) at the beginning of the treatment?

2. What will be the result of therapy?”

5. The conclusion of the abstract is corrected.

6. Multiple regression is used in the analysis.

7. The data of IUI cases are omitted and data were reanalyzed (due to comments of the other reviewer).

8. The style of language revised (due to comments of the other reviewer).

Dear Dr. Alice D. Domar,
Thank you for your attention to our manuscript. We have pleasure in sending you our revised manuscript.
These items are changed:
1. Cut-off point of BDI (in page 9 line 11): The sentence “We used the second version of score because it screens subgroups of depression more precisely.” is added.
2. Confusing phrase (in page 5 line 16): the sentence changed to “Ten patient who had score 47 or above, were informed about the score, due to rules of ethics. Eight from these 10 patients excluded from study because they request psychiatric consultation as soon as possible.”

3. IUI cases were excluded. The analysis is changed (only ART cases are included).

4. Use of beta hCG (in page 5 line 21): the cut-off is changed: “Patients who were candidate for IUI were excluded. So the sample size was 257. A positive result of treatment was defined as beta hCG≥200IU/ml at day 16 after embryo transfer.”

5. Second sentence of the first paragraph and the first sentence of second paragraph are original sentences of references. The language style is revised in other segments.

There are other minor changes in relation to other reviewer’s report.

Yours sincerely,

Dr. A. Khademi.