

Psychological Problems Associated with Failed Assisted Reproductive Technologies Among Sudanese Couples in Khartoum State

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Received: 25 February 2019; **Accepted:** 15 March 2019

Citation: Hadeel M. Muayad Abdulsaid, Khalid Mohyeldin Eltayieb, Yassir Ali Ahmed Idris. Psychological Problems Associated with Failed Assisted Reproductive Technologies Among Sudanese Couples in Khartoum State. J Med - Clin Res & Rev. 2019; 3(2): 1-3.

ABSTRACT

Background: Having a lovely family was the trigger for a lot of couples around the world to seek assisted reproductive technologies (ART). However, failure may have devastating implications on couples, such as psychological distress, anxiety and depression. It has been recorded globally that 40.2% of ART clinics attendants had a psychiatric disorder.

Methods: This was a descriptive cross-sectional health facility-based study conducted in 6 infertility treatment centres in Khartoum in the period from October 2018 to December 2018. A simple random sampling technique was applied and a two-part questionnaire was used consisting of the socio demographic data and the second part was Hospital Anxiety and Depression Scale (HADS) standardized questionnaire. The data was analysed using statistical package for social sciences (SPSS) computer software to find the correlation between the various variables. Ethical considerations were maintained and ethical clearance was obtained from university of Khartoum.

Results: 102 women and 50 men participated in the study (response rate= 93%). According to HADS the prevalence of depression is 10.5% and 21.1% for anxiety, and it is lower than expected (lower than global statistics 17.0% for depression and 23.2% for anxiety). Reasons for that include the fact that couples have strong religious faith and effective self-counselling as well as family support. No significant association was found between socio-demographic information e.g. gender and psychological problems in term of anxiety and depression $p=0.32$, 0.72 respectively. On contrast there's significant association between number of pervious trails and anxiety $p=0.02$.

Conclusion: Attention must be paid to the infertile patient visiting assisted reproduction clinics. It is recommended that facilities must improve counselling efforts so that depression and anxiety levels reduce more.

Keywords

Anxiety, ART failure, Depression, Infertility, Psychological impact.

Introduction

Assisted reproductive technologies (ART) are medical methods used primarily to address infertility and become an important option for couples with fertility problems to have a baby [1].

It has captured the attention of the public since its sensational introduction in 1978, when Louise Brown the first IVF child was

born, practice is largely different from that used early [2].

In Sudan, where the prevalence of infertility estimated to be 11.5%, IVF provided in 11 fertility centres in different Khartoum localities [3-5]. Regardless of the cause IVF failure has negative psychological impact and it is associated with a deterioration of the emotional wellbeing.

In a study by Verhaak et al. in 2005, showed that over 20% of the women who did not achieve pregnancy showed depression and/or anxiety up to 6 months after treatment termination [6]. Regarding the psychological impact of IVF/ICSI failure in Sudan

is even worse due to the cultural and social norms. It is important that infertile couples attend IVF clinic should receive appropriate counselling with regard to coping with treatment failure to prevent further psychological effect [7,8]. Along with the realization of couples about their reproductive potential and having children is seen as a key lifetime achievement, having a lovely family is the meaningful life.

It is therefore not surprising that infertility has a profound psychological stressful effect on couples. Most look for therapeutic and medical intervention and many, including those in low resources settings are prepared to face catastrophic financial hardship in order to pay for ART and visiting fertility centres [9-11]. The dream of having biologically related baby, when the result isn't positive, may turn to become a source of frustration, hopelessness, depression, anxiety and tension [12,13].

Methods

Study setting and Design

This was a cross sectional health facility-based study, conducted in Khartoum state, Capital of Sudan, one of the largest countries in Africa. Unfortunately, out of 18 state, almost 90% of these centres located in Khartoum state only. Worth to mention that we have 11 centres, 6 of the most popular centres with high attendance rate were selected randomly to conduct the study. This study was approved by IRB, University of Khartoum.

Sampling methods and Sample size

A convenience sample of 102 women and 50 men attending the infertility treating centres invited to participate in the study. The inclusion criteria were all couples who had a failed trial of IVF/ ICSI or IUI during the study period from (Oct - Dec 2018) in the selected centre.

Couples who refused to participate as well as couples coming for follow up in pregnancy in these centres were excluded from the study.

Data collection

Using structured close ended self-administered Hospital Anxiety and Depression Scale (HADS) questionnaire, Arabic version. After participants provided informed consent, written and verbally.

The questionnaire consists of two parts: The first one for personal and demographic data (gender, age, educational level, occupation, annual income) infertility history (duration of marriage, indication of treatment, previous trials). Pre testing questionnaires were carried out to test the validity and consistency of the questionnaire, to yield out the expected results.

Results

102 women (67.1%) and 50 (32.9%) men participated in the study (response rate= 93%). The majority (44.1) between 35 - 45 years old.

According to HADS the prevalence of Depression was found to be

10.5%, and 21.1% for Anxiety.

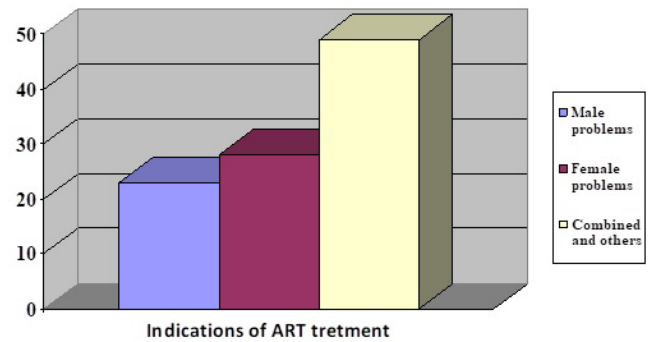


Figure 1: Indications of ART treatment.

	Anxiety	Depression
Normal	63.2%	74.3%
Borderline	15.8%	15.1%
Abnormal	21.1%	10.5%

Table 1: Levels of Anxiety and Depression.

	Anxiety	Depression
Gender	0.32	0.72
Indication of ART treatment	0.42	0.76
No. of previous ART trials	0.02	0.10
No. of previous failed ART trials	0.06	0.10
Presence of childred	0.70	0.23

Table 2: P value of Anxiety and Depression in relation to ART factors.

Conclusion

Although it's lower than expected (lower than global statistics 17.0% for depression & 23.2% for anxiety) still it is significant to address more care & interests to those couples. Reasons include the fact the couples have strong religious faith & effective self-counselling as well as family support.

According to our finding that highlights the prevalence of anxiety & depression it's relatively high among couples who had ART failure. Also, there was no active counselling efforts structured in the candidate's pathway.

Recommendations

Psychological & emotional needs should be addressed by the presence of psychiatrist or specialized social worker to provide a constrictive counselling effort. We also recommend monitoring and evaluation the psychological status of candidates throughout the process.

Acknowledgments

The authors would like to thank all the couples who participated in this study. We would like to extend our thanks to all doctors in the selected centers who offer the best cooperation; Dr. Mohammed Hafiz, Dr.Sulaiman, Dr.Mohammed Awad, and Dr. Hiba who extended grand assistance to along the process of this work. No words can describe my thanks to my father Mohammed Muayed,

who gave me valuable comments and support.

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