

ASSESSMENT OF SOCIO-DEMOGRAPHIC CHARACTERISTICS AND SELF-ESTEEM AMONG INFERTILE MALES

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ABSTRACT

Typical reactions for infertile males that include loss of self-esteem, self-confidence, and frustration as well as shock, grief, depression and anger and a sense of control over one's destiny. **Aim:** This study was aimed to assess socio-demographic characteristics and self-esteem and determine relationship between clinical, socio-demographic characteristics and self-esteem of infertile males. **Design:** A descriptive correlational design was utilized in this study. A purposive sample of 150 subjects with 100 was studied group and 50 was control group. **Settings:** The study was conducted at the outpatient clinic of andrology and STDs in Assiut University Hospital. Tool for data collection consisted of three parts: 1-Demographic and clinical data sheet 2- Socio-economic status data scale, 3- Modified form of Rosenberg Self-Esteem Scale (RSES). **Results:** The study results revealed that. The most of fertile and infertile age groups was from 28 to <38 years old. 65% of infertile males and 58% of fertile males were from rural area. About 63% of infertile males were primary infertility. As well as 56% of infertile males were 1-3 years. About 74% of infertile males were smoked. There was highly statistically significant difference between level of self-esteem among infertile and fertile males ($p=0.000^{**}$). **Conclusion:** The study concluded that, infertile males were having low self-esteem more than fertile males. There were no statistically significant differences between self-esteem and levels of socio-economic status related to infertile males. **Recommendations:** A psychosocial counseling program should be provided for infertile males to improve their self-esteem and help them cope successfully.

Keywords: *Self-Esteem, Infertile Males*

INTRODUCTION

Infertility is a global phenomenon that affects between 60 million and 168 million people worldwide. Infertility is defined as the inability to achieve a success- full pregnancy after 12 months of unprotected intercourse or therapeutic donor insemination (Practice Committee of the American Society for Reproductive Medicine, 2013).

Worldwide infertility is generally reported as occurring in 8-12% of all couples. An estimated 15 % of the world populations including 6 million couples in the USA are affected by infertility. A male factor is responsible in about 50% of infertility cases; it is the sole reason in about 20% of the cases and is a contributory factor in 30–40 e prevalence of infertility

using world heal% of the cases (Orisakwe, 2014).

The infertility can be broadly divided into two types namely the one type is primary infertility, which is defined as inability to conceive or carry a pregnancy successfully to full term, while other type is secondary infertility, which is defined as difficulty in conceiving after already having previously conceived (either carrying a pregnancy to term or a miscarriage) (Olpin & Kennedy, 2011).

Self-esteem is an essential element in an individual's mental and physical health. Self-esteem defined as a positive or negative attitude towards oneself based on evaluation of self-characteristics, including feelings of self-satisfaction and self-acceptance. High self-esteem means that the individual respects the self, considers the

self-worthy, does not necessarily consider the self-better than others, but does not consider the self-worse, either. The person with high self-esteem recognizes her own limitations and expects to grow and improve. On the other hand, low self-esteem implies self-rejection, and self-dissatisfaction (Hewitt & John, 2009).

Infertility has important effects on self-esteem. Infertility as an emotional crisis for most, with anger, guilt, depression, and loss of self-esteem. Self-esteem is linked to productivity and that illness, pain, and infertility is associated with low level of self-esteem. Low self-esteem followed by a sense of hopelessness and despair. Poor self-esteem is one of the main dynamics in depression (Leanza *et al.*, 2007).

Self-esteem often is the commonest casualty in male infertility. The feeling of inadequacy as a man dents his self-image, and psychological stress is a natural outcome of this state of mind. (Wischmann, 2010) People experiencing infertility have feelings of anger, hurt, fear, frustration, depression, sadness, grief, loss, isolation, lowered self-esteem, relationship distress, and sexual dissatisfaction (Daniluk & Tench, 2007).

The inadequacy in infertile men stems from social ridicule and often results in low self-esteem. Fatherhood is traditionally a sociocultural determinant of masculinity in the Middle East and subcontinent of India, Pakistan, and Bangladesh. Consequently, these societies look down upon men deprived of fatherhood. This stigma leads them to lose their self-esteem and inculcate a belief as a second-grade citizen not being able to prove their masculinity (Wischmann, 2010). Being defined as a man because of one's children can be culturally thematic. Indeed, the lack of reproductive success has been viewed as emasculating in some communities. Paternity can be perceived as a significant achievement and source of male identity. Men in the Muslim Middle East can demonstrate their masculinity by producing the most valued of children, sons. In these cultures, the man who fails to father is seen as fragile and ineffectual and will seek to hide his infertility from those closest to him. Similarly, on the Indian subcontinent, many men are disgraced by their infertility (Dudgeon *et al.*, 2009). Despite the correlation between different dimensions of socioeconomic circumstances, their components may impact fertility by different mechanisms. Income allows easier or faster access to health services, namely infertility clinics and also to

material resources as better food or service promoters of better health. Occupation may also be related to infertility pressure, working schedules and psychosocial stress or exposure to environmental pollutants known to decrease chance of fertility (Correia, Rodrigues & Barros, 2014).

Significance of the study

In Egypt, the prevalence of infertility using world health organization (WHO) definition has been estimated to be between 10% to 15% among married couples (Mokhtar, Hassan & Mahdy, 2012). Infertility is a condition that causes psychological distress to the couples. Both men and women may have problems that result in infertility. Almost one-third of infertility problems are due to women, another one-third of cases are caused by men and the other one-third of cases are caused by a combination of both women and men problems or by unknown reasons (Resolve, 2015). The prevalence of infertility differs greatly from one country to another, being 15% globally, > 30% in some developing countries, 2 and 17- 28% in industrialized countries (Al-asadi & Hussein, 2015). The prevalence of infertility has no difference among ethnic and racial groups (Ali, 2015). Only few studies have included male participants, the present study aim to assess socio-demographic characteristics & self-esteem and determine relationship between clinical, socio-demographic characteristics and self-esteem of infertile males.

Aim of study:

The current study aimed to assess socio-demographic characteristics and self-esteem of infertile males and determine relationship between socio-demographic characteristics and self-esteem of infertile males.

Research questions

- What is the socio-demographic characteristics and self-esteem of infertile males?
- What is the relationship between socio-demographic characteristics and self-esteem of infertile males?

RESEARCH METHODOLOGY

Research design:

A descriptive correlation design was used to conduct this study.

Study setting:

The study was conducted at outpatient clinic of andrology and Sexual transmitted diseases (STDs) of Assiut University Hospital. This clinic is the main largest clinic in Assiut receives cases of infertility and an inflow of patients from Assiut, cities, villages contiguous to Assiut governorate.

Study subject:

A purposive sample of 150 subjects, 100 was studied group & 50 was control group.

Inclusion criteria

- All infertile males who attended the out-patients clinics of andrology and STDs in Assiut University Hospital during six months, from December 2015 till end of May 2016.
- Fifty normal fertile males who attended to the clinics related to other causes as control group.
- Fertile age and married

Exclusion criteria

- Patients with another comorbidity.
- Patients with psychotic disorder or mental disorders.

Tools for data collection: The study tool consisted of three parts:

Tool I: The Demographic and Clinical data sheet.

This sheet was developed by the researcher. It includes:

Demographic data: as age, address, religious, occupation, level of education.

Clinical data: as types and duration of infertility, previous operation for infertility, previous ICSI, semen data for azoospermic or non azoospermic and special habits.

Tool II: Socio-economic Status data Scale.

This scale was designed by Abd-El-Tawab (2004) to assess socioeconomic status of the family and consists of 4 dimensions, which include the following:

- Parent's level of education it included 8 items.
- Parent's occupation it included 2 items.
- Total family monthly income it included 6 items.
- Life style of the family it included 3 items. Accordingly, classification of the patients in this study was as follow:

- High socioeconomic class scores are more than 103
- Middle socioeconomic class scores range between 58 and 103
- Low socioeconomic class scores are less than 58

The scale was reported to have high reliability as evidence by Cronbach's Alpha was $r = 0.90$ for the total scale.

Tool III: Modified form (Rosenberg Self-Esteem Scale (RSES)).

This scale was adopted from (Rosenberg, 1965). This questionnaire is modified by Savard *et al.*, (2000). Is obviously the most widely used instrument in field of scientific research and clinical practice for the measurement of global self-esteem, understood as a person's overall evaluation of his or her worthiness as a human being (Mcmullen & Resnick, 2013). Which composed of 10 items, 5 positive and 5 negative and scored on a 4 points likert Scale which are: Strongly agree, Agree, Disagree and strongly disagree.

Scores are calculated as follows:

For items 1,2,4,6 and 7: Strongly agree=3, Agree=2, Disagree=1 and strongly disagree=0.

For items 3,5,8,9 and 10 (which are reversed in valence): Strongly agree=0, Agree=1, Disagree=2 and strongly disagree=3. Scoring (add the SS below will give you an idea of the level of self-esteem:

The scale ranges from 0-30. Scores 'between' 15 to 25 are within normal range; Scores 'between' 25-30 are within high self-esteem, scores below 15 suggest low self-esteem.

The scale was reported to have high reliability as evidence by Cronbach's Alpha was $r = 0.73$ for the total scale (Arafa, Ibrahim & Farouk, 2015).

The Arabic translation and validation were done by (Arafa, Ibrahim & Farouk, 2015), Women College, Ain Shams University.

Ethical consideration

An official permission was obtained from the director of the out-patient clinics of andrology and STDs in Assiut University Hospital to conduct the current study. A meeting was scheduled with the director of out-patient clinics to present the research project. Once all necessary consent was granted, a date was chosen to conduct the study according to the available time of

participants. They were informed that participation in the current study was voluntary and that the data collected would only be used for research purpose. The confidentiality and anonymity of each participant would be protected by assigning a code number to each response. Participants were informed that they could withdraw at any time during the study without giving reasons. The confidentiality was confirmed, and participants were informed that the content of the tools would be used for research purposes.

Field work

To carry out the study, the researchers conducted visits to the head of outpatient clinics to explain the aim of the study and to gain her cooperation and permission to collect the data. The questionnaire sheets were provided to patients who agreed to participate in the study after obtaining their oral informed consent for participation in the study and being informed about the aim of the study. The researchers helped patients to complete the questionnaire if they were unable to read. The tools were filled by the researchers through an interview with subjects, 3 days/week. The average time to complete the questionnaire was ranged from 30 minutes to one hour. Data collection was carried out over a period of 6 months, from December 2015 till end May 2016.

Pilot Study

Before starting the actual study, a pilot study was conducted on 10% (15 patients) of total sample to evaluate the clarity and relevance of the tools, in addition to estimate the required time for data collection. The researchers asked participants to fill in the questionnaire and to note any questions that were confusing or hard to answer. The necessary modifications were done, namely rephrasing, utilizing simpler semantic for the statements. These infertile men were excluded from the main study sample.

Statistical design

The data were tested for normality using the Anderson-Darling test and for homogeneity variances prior to further statistical analysis. Categorical variables were described by number and percent (N, %), where continuous variables described by mean and standard deviation (Mean, SD). Chi-square test and fisher exact test used to compare between categorical variables where compare between continuous variables by *t*-test. Pearson

correlation coefficient used to assess the association between continuous variables. A two-tailed *p*<0.05 was considered statistically significant. All analyses were performed with the IBM SPSS version 20.0 software.

RESULTS

The main results yielded by this study were.

Table 1 showed that demographic data of the infertile and fertile males. The mean age of infertile males was 35+7.6 compared with the 33.2+7.3 mean age of fertile males. The most of fertile and infertile age groups were from ranged 28 to <38 years old. While 65% of infertile males and 58% of fertile males were from rural area. More than one quarter (28%) of infertile males were farmers while 24% of fertile males were employee and 24% manual workers. About 31% of infertile males graduated from secondary schools while 42% of fertile males graduated from university. There was no statistically significant difference between infertile and a fertile male regarding all demographic data.

Table 1: Demographic data of the infertile (N=100) and fertile males (N=50)

Demographic data	Infertile males (Studied group) N=(100)		Fertile males (Control group) N=(50)		P value
	No.	%	No.	%	
Age, Mean ± SD	35+7.6		33.2+7.3		0.172
Age groups					
18 - < 28 years	24	24.0	11	22.0	0.578
28 - < 38 years	52	52.0	23	46.0	
≥38 years	24	24.0	16	32.0	
Residence					
Urban	35	35.0	21	42.0	0.403
Rural	65	65.0	29	58.0	
Occupation					
Not work	13	13.0	7	14.0	0.545
Student	5	5.0	4	8.0	
Employee	20	20.0	12	24.0	
Manual work	26	26.0	12	24.0	
Professional work	8	8.0	7	14.0	
Farmer	28	28.0	8	16.0	
Level of education					
Illiterate/read & write	23	23.0	7	14.0	0.220
Primary	10	10.0	5	10.0	
Preparatory	12	12.0	4	8.0	
Secondary	31	31.0	13	26.0	
Universal	24	24.0	21	42.0	

Table 2 Illustrated that clinical data of infertile males. Which indicated that 63% of infertile males had primary infertility. Mean±SD according to duration of infertility was 3.95±2.8 years. Regarding duration of infertility, more than half (56%) of them were 1-3 years. The 25% of infertile males were having previous operations for infertility. While 23% of them were having previous intracytoplasmic sperm injection. Regarding of semen analysis, about 20% of infertile males were azoospermic semen analysis. According to special habits, 74% of infertile males were smokers.

Table 2: Clinical data of infertile males (n=100)

Clinical data	Infertile males (Studied group) N=(100)	
	No.	%
Type of infertility		
Primary	63	63.0
Secondary	37	37.0
Duration of infertility		
Mean ± SD	3.95±2.80	
1-3 years	56	56.0
4-6 year s	26	26.0
≥7 years	18	18.0
Previous operations for infertility		
Yes	25	25.0
No	75	75.0
Previous ICSI		
Yes	23	23.0
No	77	77.0
Semen analysis		
Azoospermic	20	20.0
Non Azoospermic	80	80.0
Special habits		
Not smoking/drugs	22	22.0
Smoking	74	74.0
smoking/drugs	4	4.0

Figure 1 showed distribution of levels of socio-economic status among infertile and fertile males the most of infertile and fertile males with moderate level of socio-economic status (89% and 80%) respectively. There were no statistically significant differences

between infertile and fertile males according to their socio-economic status data scale.

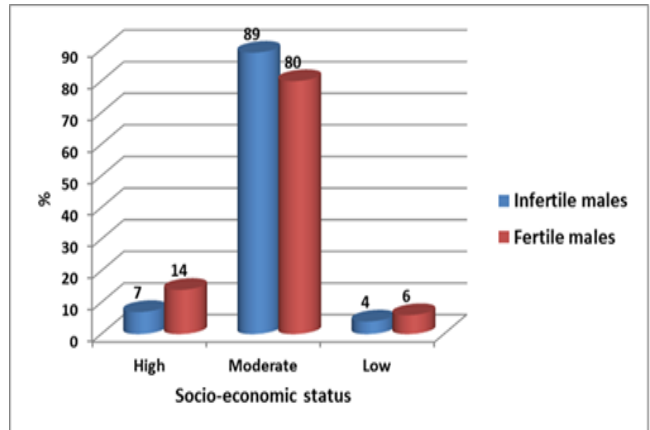


Figure 1: Distribution of levels of socio-economic status among infertile (n=100) and fertile males (n=50)

Figure 2 illustrated that distribution of levels Rosenberg self-esteem among infertile and fertile males, 47% of infertile males were low self-esteem while 49% of infertile males had normal self-esteem. The most of fertile males were normal self-esteem (80%). There was highly statistically significant difference between level of self-esteem among infertile and fertile males ($p=0.000^{**}$).

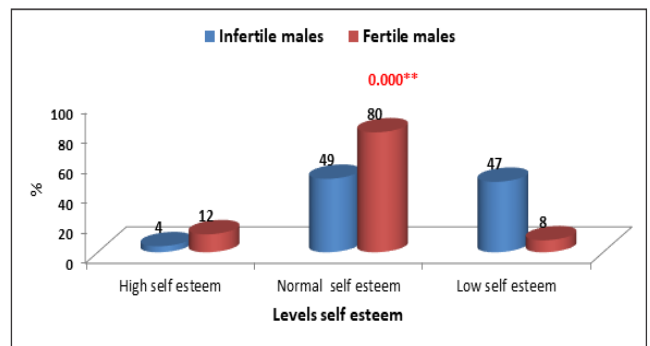


Figure 2: Distribution of levels of self-esteem among infertile (n=100) and fertile males (n=50)

Table 3 illustrated that, statistically significant differences between demographic data and levels of socio-economic status among infertile males except residence. While there were no statistically significant differences between demographic data and levels of socio-economic status among fertile males.

Table 3: Relationship between demographic data and levels of socio-economic status among infertile (n=100) and fertile males (n=50)

Demographic data	Infertile males (Study group n=100)						Fertile males (Control group n=50)						P value
	Socio-economic status						Socio-economic status						
	High		Moderate		Low		High		Moderate		Low		
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
Total	7	7.0	89	89.0	4	4.0	7	14.0	40	80.0	3	6.0	
Age groups													
18 - < 28 years	5	71.4	19	21.3	0	0.0	1	14.3	9	22.5	1	33.3	0.756
28 - < 38 years	2	28.6	46	51.7	4	100.0	3	42.9	18	45.0	2	66.7	
38 years and more	0	0.0	24	27.0	0	0.0	3	42.9	13	32.5	0	0.0	
Residence													
Urban	4	57.1	31	34.8	0	0.0	2	28.6	18	45.0	1	33.3	0.684
Rural	3	42.9	58	65.2	4	100.0	5	71.4	22	55.0	2	66.7	
Occupation													
Not work	1	14.3	10	11.2	2	50.0	0	0.0	7	17.5	0	0.0	0.347
Student	2	28.6	3	3.4	0	0.0	0	0.0	4	10.0	0	0.0	
Employee	1	14.3	19	21.3	0	0.0	2	28.6	9	22.5	1	33.3	
Manual work	0	0.0	26	29.2	0	0.0	1	14.3	9	22.5	2	66.7	
Professional work	1	14.3	7	7.9	0	0.0	3	42.9	4	10.0	0	0.0	
Farmer	2	28.6	24	27.0	2	50.0	1	14.3	7	17.5	0	0.0	
Level of education													
Illiterate/read & write	0	0.0	21	23.6	2	50.0	0	0.0	7	17.5	0	0.0	0.475
Primary	0	0.0	8	9.0	2	50.0	0	0.0	5	12.5	0	0.0	
Preparatory	0	0.0	12	13.5	0	0.0	1	14.3	3	7.5	0	0.0	
Secondary	3	42.9	28	31.5	0	0.0	1	14.3	10	25.0	2	66.7	
Universal	4	57.1	20	22.5	0	0.0	5	71.4	15	37.5	1	33.3	

Table 4 showed, no statistically significant differences between clinical data and socio-economic status of infertile males except special habits (p=0.000).

Table 4: Relationship between clinical data and levels of socio-economic status among infertile males (n=100)

Clinical data	Socio-economic status						P value
	High		Moderate		Low		
	No.	%	No.	%	No.	%	
Total	7	7.0	89	89.0	4	4.0	
Type of infertility							0.250
Primary	5	71.4	54	60.7	4	100.0	
Secondary	2	28.6	35	39.3	0	0.0	
Duration of infertility							0.312
1-3 years	6	85.7	48	53.9	2	50.0	
4-6 years	0	0.0	24	27.0	2	50.0	
≥7 years	1	14.3	17	19.1	0	0.0	
Previous operations for infertility							0.493
Yes	2	28.6	23	25.8	0	0.0	
No	5	71.4	66	74.2	4	100.0	
Previous ICSI							0.158
Yes	2	28.6	23	25.8	0	0.0	
No	5	71.4	66	74.2	4	100.0	
Semen analysis							0.135
Azoospermic	0	0.0	23	25.8	0	0.0	
Non Azoospermic	7	100.0	66	74.2	4	100.0	
Special habits							0.000**
Not smoking/drugs	4	57.1	18	20.2	0	0.0	
Smoking	3	42.9	69	77.5	2	50.0	
smoking/drugs	0	0.0	2	2.2	2	50.0	

Figure 3 showed that, no statistically significant differences between self-esteem and levels of socio-economic status related to infertile males. While among fertile males there were highly statistically significant differences in relation to socio-economic status between levels of self-esteem.

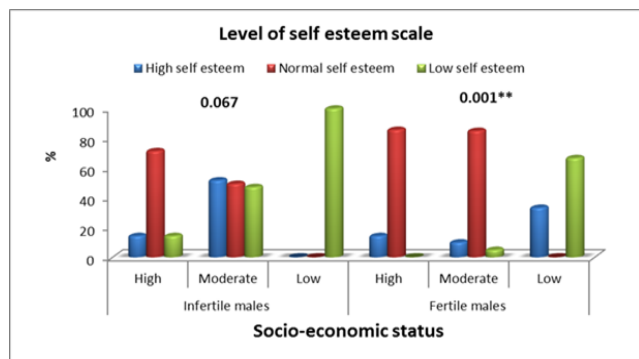


Figure 3: Relationship between levels of socio-economic status data scale and levels Rosenberg self-esteem scale among infertile (N=100) and fertile (N=50) males

DISCUSSION

There were typical reactions for infertile males that include loss of self-esteem, self-confidence, and frustration as well as shock, grief, depression and anger and a sense of control over one’s destiny (Pattnaik, Gharai & Samantaray, 2016).

The current study findings showed that most of fertile and infertile age groups was from 28 to <38 years old. That may be because this is the reproductive age and during this age couples desire to have a child with probability and expectation for therapy being high for infertile males. In respect with previous studies reported by Abolfotouh *et al.*, (2013) found that high percent of fertile and infertile age groups were between 25 and 39 years old. While, Gao *et al.*, (2013) found that the most of fertile and infertile age groups were between 20 and 29 years old. Sultan & Tahir (2011) found that the majority of fertile and infertile age groups were between 20 and 40 years old.

The current study showed that about more than one quarter of infertile males were farmers and labour. While, one quarter of fertile males were employee. Ali *et al.*, (2016) found that around half of the infertile males were not working. Also, Mazeed *et al.*, (2015) &

Abolfotouh *et al.*, (2013) found that majority of infertile and fertile males were employee. As well as, Gao *et al.*, (2013) found that the most of infertile and fertile males were farmers. In the same context, Holter *et al.*, (2007) found that the most of infertile males were worker.

The current study showed that mean of duration of infertility were 3.95±2.8 years. Whereas, about more than half of them reported 1-3 years of infertility. This could be explained as most people who seek medical services for treatment of infertility are in this range of age and they desire to have children and build up a family. This provide an evidence that currently married couples do not wait for more than two years to do investigations to know the cause of infertility.

These findings are similar with previous study reported by Galhardo *et al.*, (2013) who found that mean duration of infertility were 3.35±2.53 years. While, about more than half of them were 1-3 years of duration of infertility. While, Galhardo, Cunha & Pinto-Gouveia, (2011) found that mean duration of infertility were 4.4±3.6 years. Also, Mazeed *et al.*, (2015) & Bolsoy *et al.*, (2010) found that about half of them were 1-5 years of duration infertility.

The present study showed that about more than two thirds of infertile males were smokers. As smoking adversely influence semen quality specialty among heavy smokers. These finding were similar with previous studies reported by Gao *et al.*, (2013) and Ahmadi *et al.*, (2011) who found that about more than two thirds of infertile males were smokers. Also, these findings disagreed with other study reported by Zorn *et al.*, (2008) that reported that about one thirds of infertile males were smokers.

The current study showed that most of the infertile and fertile males had moderate level of socio-economic status. This may be since more than half of study subject were farmer and labor worker with non-stable monthly income. These findings are similar with previous studies reported by Abolfotouh *et al.*, (2013) that showed that most of the infertile and fertile males had moderate level of socio-economic status. Other studies reported by Sahraian *et al.*, 2016; Alosaimi *et al.*, 2015; Wang *et al.*, 2015; Ahmadi *et al.*, (2011) stated that majority of the infertile males had moderate level of socio-economic status. While, these findings were not supported by

Zhang, 2016; Yusuf *et al.*, 2012 & Gulec *et al.*, (2011) who found that most of the infertile males showed low level of socio-economic status.

The present study revealed that less than half of the infertile male showed low self-esteem. While, the most of fertile males had normal self-esteem. This may be due to the reason that infertility has deep effect on male self-esteem. This can be explained that when the male face the problem of infertility, their self-esteem and self-image are threatened, as well as low self-esteem lead to a feeling of inadequacy and a feeling of inferiority. However, there is statistically significant difference between level of self-esteem among infertile and fertile males ($p=0.000^{**}$). These findings are similar with Sultan & Tahir, (2011) who showed that high percent of the infertile male had low self-esteem compared to fertile males. Also, Wischmann *et al.*, (2014) found that half of the infertile males showed low self-esteem. While, these findings are contradicted with other study reported by Keramat *et al.*, (2014) who stated that, most of the infertile males had normal self-esteem.

The present study showed that there was statistically significant relation between socio-economic status with each occupation and level of education among infertile males. These findings agree with Elsehrawy *et al.*, (2015) who found that statistically significant relation between socio-economic status and occupation. While Sahraian *et al.*, (2016) concluded that, there were statistically significant relation between socio-economic status and level of education among infertile males.

The current study showed that, there statistically significant differences between demographic data and levels of self-esteem among infertile males except age group. Otherwise, there were no statistically significant differences between demographic data and levels of self-esteem among fertile males.

The previous results supported by Sultan & Tahir, (2011) who showed that, there no statistically significant differences between age group and self-esteem among infertile and fertile males. While, there was statistically significant differences between education level and self-esteem among infertile compared with fertile males there were no statistically significant differences. In other hand Xing *et al.*, (2013) found that, there no statistically significant differences between age group and self-esteem among infertile males. While, there

were statistically significant differences between education level and self-esteem among infertile males. In other contrary Keramat *et al.*, (2014) disagreement with current study whose found that, there was no statistically significant differences between demographic data (age group, residence, occupation and educational level) and self-esteem among infertile males.

The present study suggested that there were no statistically significant differences between self-esteem and levels of socio-economic status related to infertile males. While among fertile males there were highly statistically significant differences between levels of self-esteem and levels of socio-economic status. Infertile males who had low socioeconomic status and have low self-esteem. Such a result existed because most of the infertile men were less educated and earning barely sufficient income. As a matter of fact, males with low income, poor academic and economic achievement lead to lower self-esteem. These results are consistent with study of Sultan & Tahir, (2011) who reported that there were no statistically significant differences between self-esteem and socio-economic status related to infertile males. While among fertile males there were highly statistically significant differences between self-esteem and socio-economic status. Another study done by Keramat *et al.*, (2014) found that no statistically significant differences between self-esteem and socio-economic status among infertile males.

In contrast, Dalluk, (2005) found that statistically significant relation between self-esteem and socio-economic status among infertile males.

CONCLUSION

Based on the result of present study it can be concluded that, infertile males were having low self-esteem than fertile males. The majority of infertile males were smokers and living in rural area. There was no relation between socioeconomic statuses and self-esteem among infertile males. While there was a relation among fertile males and socioeconomic status.

RECOMMENDATIONS

Based on the current study findings, the following recommendations are suggested

- Psycho-educational program should be designed, constructed and administered to the infertile males

- to improve self-esteem & quality of life.
- Establish highly specialized infertility clinic to provide psychological support or counseling to infertile males.
- Rehabilitation program should be provided to improve patient's psychological status.

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