Assessment of the psychological domain of the quality of life for infertile men

Abdul-Salam M. Dallak, PhD^{*} Rabia M. Al-Yiasri, PhD, Assistant Professor^{**}

الخلاصة

أجريت دراسة وصفية إستخدم فيها أسلوب النقيم للفترة من ١٩ تشرين الثاني ٢٠٠٢ ولغاية ٣٠ نيسان ٢٠٠٤ لتقييم الجوانب النفسية الاجتماعية لنوعية حياة المرضى الذين يعانون من العقم . تم اختيار عينة غَرضية مكونة من (٢٠٠) رجل عقيم من المعهد العالى لأبحاث الأجنة وعلاج العقم ومستشفى السامرائي في مدينة بغداد .

طورت استمارة الاستبيان لغرض الدراسة بعد تبنيها من مقياس نوعية الحياة الخاص بمنظمة الصحة العالمية (١٩٩٨م). تم تحديد الثبات والمصداقية للاستمارة الاستبيانية من خلال الدراسة التجريبية .

تم جمع البيانات من خلال استخدام الاستمارة الاستبيانية وتطبيق تقنية المقابلة ومراجعة سجلات الرجال الذين يعانون من العقم . كان تحليل البيانات عن طريق أسلوب تحليل البيانات الوصفي وأسلوب تحليل البيانات الاستنتاجي . بينت نتائج الدراسة ان الايجابية والسلبية ، التفكير ، وتقدير الذات تشترك بالتأثير على نوعية الحياة لحد ما . تأثرت نوعية الحياة للرجال الذين يعانون من العقم بشكل كبير من خلال مؤشرات المشاعر الايجابية والسلبية ، التفكير ، تقدير الذات .

بينت نتائج الدراسة أن الصفات الديموغرافية للرجال الذين يعانون من العقم ، كفترة العقم ، عمر الزوج ، طول فترة الزواج ، الزواج الأولي ، تكرار النشاط الجنسي ، عمر الزواج كانت لها علاقات ذات دلالة معنوية بالمشاعر الايجابية والسلبية للرجال الذين يعانون من العقم . بينت نتائج الدراسة ايضاً بان للصفات الديموغرافية للرجال الذين يعانون من العقم كالعجز الجنسي وعمر الزوج فقد كانت لها علاقة ذات دلالة معنوية عالية بالتفكير .

أشارت نتائج الدراسة بان الصفات الديموغرافية للرجال الذين يعانون العقم كالزواج الاولي ، نوع العقم ، فترة العقم لها علاقة ذات دلالة معنوية عالية مع تقدير الذات ، وعلاقة معنوية بين الحالة الاقتصادية والاجتماعية ، زيادة الوزن ، القذف السريع ، وتقدير الذات للرجال الذين يعانون من العقم .

بينت نتائج الدراسة بأن نوعية الحياة للرجال الذين يعانون العقم لها علاقة قوية مع المشاعر الايجابية والسلبية ، النفكير وتقدير الذات .

أوصت الدراسة الى تصميم وبناء ونتفيذ برنامج تثقيفي اجرائي للرجال الذين يعانون من العقم وزوجاتهم والذي يمكن من خلاله تقديم موضوعات ذات علاقة بالصحة والحياة . انشاء مراكز ذات تصميم جيد وتخصص متقدم للعقم تقديم علاج العقم والاستشارة النفسية والاجتماعية لكافة الرجال الذين يعانون من العقم وبتكاليف رمزية .

Abstract

A descriptive correlation study which was utilizing an assessment approach, was carried out from November 19th, 2002 through April 30, 2004 in order to assess the psychosocial domain of the quality of life for the infertile men.

A purposive sample of (200) men with infertility was selected from the High Institute for Embryo Research and Infertility Treatment and Alsamaraee Hospital in Baghdad city. A questionnaire was adoapted and developed of the World Health Organization quality of life scale for the purpose of the study. The questionnaire (WHOQOL) (1998)

Reliability and validity of the questionnaire were determined through a pilot study. Data were collected through the use of the questionnaire, the application of the interview technique and review of the infertile men records.

Data were analyzed through descriptive and the inferential data analysis approach.

The findings of the study showed that the positive and negative feelings , thinking and selfesteem had impact on the quality of life for the infertile men .

^{*}Department of Nursing/ Faculty of Medicine and Health sciences / University of Sanaa

^{**} Department of Maternity Nursing / College of Nursing/ University of Baghdad

The findings of the study showed that the demographic characteristics of the infertile men of infertility duration, age of husband, first marriage, frequency sexual activity, marriage age had a highly significant relationship to the sub-domain of positive and negative feelings of the infertile quality of life.

The findings of the study showed that there was a highly significant relationship between sexual impotence and the age of husband and the sub-domain of thinking of the quality of life .

The findings of the study showed that quality of life had a strong relationship with the subdomain of positive and negative feelings , thinking and self-esteem .

The study recommended that an interventional and education oriented program can be designed, constructed and administered to the infertile men and their wives through which health and life related issues can be presented. Well – structured and highly – specialized infertility center can be established to provide infertility treatment and psychological and social counseling to all infertile men with reasonable cost.

Introduction

Infertility is proposed to be a contributing stressor for couples suffering from involuntary childlessness (1). The negative emotional reactions found in infertile individuals have included frustration, fatigue, interpersonal disruption, obsessive thoughts, anxiety and depression (2).

Thinking negatively is common in people with depression, this affects the ability of infertile couples to focus on getting better and makes people vulnerable to unhealthy emotions⁽³⁾.

It is estimated that infertility is a life crisis which has a rippling on the areas of the life and it affects the self-esteem and self image of couples $^{(4)}$.

Inability to conceive a child to term can be stressful and embarrassing experience and can wreak havoc on man's self-esteem ⁽⁵⁾.

Failure to conceive certainly destroys self-esteem, self worth, and sexuality. In addition to that, it is common for a man to feel less of a man at least for a time when faced with infertility ⁽⁶⁾.

The objective of this study was

To asses the psychological domain of the infertile men quality of life through their positive and negative feelings, thinking and self-esteem. To determine the impact of such domain up on the quality of these men's life, and to predict the relationship between this domain and their demographic characteristics.

Methodology

Descriptive correlation study, used the assessment approach to assess the quality of life for infertile men at the infertility centers in Baghdad city.

The study was carried out during the period of November 19th 2002 through April 30, 2004.

The setting of the study included public institutes. The public institutes were the High Institute for Embryo Research and Infertility Treatment and Kamal Al-Samaraee Hospital which were located at Al-Rusafa Sector in Baghdad city. These Institutes presented outpatient facilities to infertile patients.

A purposive (non-probability) sample of (200) men with infertility was selected from the earlier stated centers and hospital according to the following criteria:

Those who have been married and unable to conceive after one year of unprotected intercourse and attended the reproductive centers and hospitals for therapeutic purposes.

A questionnaire interview form was designed and developed by the researcher to measure the variables underlying the present study.

Data were collected through the utilization of the developed questionnaire, interview technique with infertile men and review of the infertile men records. The data were gathered from the infertile men while they were attending the outpatient clinics to seek treatment at the early stated settings. Data were analyzed through the application of the two statistical approaches.

- 1. Descriptive Data Analysis (Frequency and percent)
- 2. Inferential Data Analysis (Alpha Correlation Coefficient, Stepwise Multiple regression and Pearson correlation coefficient)

Results

Table (1): Assessment of the infertile men quality of life sub-domain of positive and
negative feelings

Desitive and Negative Faciling		Never		Sometime		Always	
Positive and Negative Feelings	F	%	F	%	F	%	
1. I think that infertility could be treated like any other disease	2	1	158	79	40	20	
2. I feel depressed	29	14.5	102	51	69	34.5	
3. I am afraid of the future	10	5	85	42.5	105	52.5	
4. I feel that I became abnormal man	43	21.5	84	42	73	36.5	
5. I feel that I have a gloomy mood	30	15	96	48	74	37	
6. I feel nervous and anxious	1	0.5	92	46	107	53.5	
7. I feel that I have Failure because I am unable to achieve pregnancy	28	14	99	49.5	73	36.5	
8. I have sense of pain when I see children	9	4.5	78	39	113	56.5	
9. I feel distress when others talk about reproduction	7	3.5	66	33	127	63.5	
10. I blame myself what did I do to deserve that	37	18.5	106	53	57	28.5	
11. I feel that technological development give me a chance to reproduce	4	2	164	82	32	16	
12. I feel that I am semideath because I am unable to reproduce	98	49	77	38.5	25	12.5	

This table revealed that the majority of these men had responded as sometimes for "they think that infertility could be treated like any other disease" (79%), (51%) for "they feel depressed", "(42%) for "they feel they became abnormal man", (48%) for "they feel they had a gloomy mood", (49.5%) for "they feel they are Failure because they were unable to impregnate their spauses, (53%) for "they blame them selves, what did they do to deserve that" and (82%) for "they feel that technological development give them a chance to reproduce and (always) for "they feel nervous and Qnxious,(53.5%),(56.5%) for "they had sense of pain when they see children", (63.5%) for "they feel distress when other talk about reproduction", (52.5%) for "they were afraid of the future and never to "they feel they were semi -dead because they were unable to reproduce" of the positive and negative feelings.

Thinking		Never		Sometimes		Always	
Thinking	F	%	F	%	F	%	
1. I think that I am of separated and isolated from others	25	12.5	92	46	83	41.5	
2. I think of the future of my health status	2	1	30	15	168	84	
3. I think of that who will bear my name	6	3	10	5	184	92	
4. I think of that who will take care for me in the future	5	2.5	11	5.5	184	92	
5. I think of long-term of treatment	1	0.5	85	42.5	114	57	

Table (2): Assessment of the infertile men quality of life sub-domain of thinking

This table indicated that the majority of these men had treated as (always) for "their thinking of their health condition in the future" (84%), for "their thinking of whom will bear their name" (92%), for "their thinking of whom will care for them in the future" (92%), for their thinking of long-term treatment(57%) and some of them had responded as sometimes for "their being separated and isolated from others" (46%).

of sen – esteem						
Salf astaom		Never		Sometimes		vays
Self – esteem	F	%	F	%	F	%
1. I suffer of losing my real value among others	29	14.5	112	56	59	29.5
2. I feel that I am inactive person	31	15.5	107	53.5	62	31
3. I suffer of isolation	21	10.5	107	53.5	72	36
4. I feel that I can achieve my duties	7	3.5	68	34	125	62.5
5. I am satisfied about my health	81	40.5	117	58.5	2	1

 Table (3): Assessment of the infertile men quality of life sub-domain

 of self – esteem

This table depicted that the majority of these men had responded as (sometimes) to "their suffer losing their real value among others" (56%), "their feeling as inactive persons" (53.5%), "their suffering of isolation" (53.5%), and "they were satisfied about their health"(58.5%) while the highest percentage of these men responded as (always) for their feeling that they can achieve their duties(62.5%).

Table (4): Correlation Coefficients for the relationship between the quality of life and its sub-domain of positive and negative feelings , thinking and self- esteem for men with infertility

	Correlation coefficient						
	0.94	0.85	0.71				
Quality of Life	Positive and Negative feelings	thinking	Self-esteem				

P≤0.01

The correlation coefficient of this figure reported that the quality of life had strong relationship with the sub-domain of positive and negative feelings (r=0.94), thinking(r=0.85), self-esteem(r=0.71).

Table (5): Stepwise multiple regression for the relationship between the infertile
men demographic characteristics and the positive and negative feelings sub-
domain of the quality of life

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Predictors	Beta	t	Р			
Infertility duration	1.978	8.107	0.000			
Age of Husband	0.609	8.036	0.000			
Marriage length	1.511	6.230	0.000			
Primary marriage	.303	5.505	0.000			
Frequency of sexual activity	.251	4.331	0.000			
Age of Marriage	0.247	3.263	0.001			

Dependent variable: Positive and negative feelings, Beta: Standardized coefficients, t:t – value, P: Probability level

The results of this table revealed that the demographic characteristics of infertility duration, marriage length, primary marriage, age of husband, age at marriage and frequency of sexual activity had highly significant relationship to the positive and negative feelings of the quality of life domain.

Table (6): Stepwise multiple regression for the relationship between the infertile
men demographic characteristics and the sub-domain of thinking of quality of life

Predictor	Beta	t	Р
Sexual impotence	1.056	3.125	0.002
Age of husband	.180	2.571	0.011

Dependent variable: Thinking, Beta: Standardized coefficients, t: t - value, P: Probability level

This table presented that there was a highly significant relationship between sexual impotence and the age of husband and the sub-domain of thinking of quality of life. A significant relationship was determined between erectile dysfunction and such domain.

Table (7): Stepwise multiple regression for the relationship between the infertile men demographic characteristics and the sub-domain of self – esteem of quality of life

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Predictors	Beta	t	Р
Infertility type	186	- 2.843	0.005
Premature ejaculation	145	-2.038	0.043
Body mass index	134	-2.093	0.038
Primary marriage	230	- 3.324	0.001
Infertility duration	238	-2.810	0.006
Socioeconomic status	.141	2.239	0.026

Dependent variable: Self – esteem, Beta: Standardized coefficients, t: t – value, P: Probability level

This table presented that there was a highly significant relationship between the demographic characteristics of primary marriage, infertility type and infertility duration and self–esteem. Significant relationship was found between the demographic characteristics of socioeconomic status, body mass index and premature ejaculation and the sub-domain of self– esteem of quality of life.

Discussion

Part I: Assessment of the infertile men psychological domain of the quality of life *1. Positive and negative feelings*

Concerning the sub-domain of positive and negative feeling, the majority of the infertile men had experienced negative feelings of being concerned about their future, they had expressed episodes of nervousness and anxiety, they had painful sense when they meet children, and they felt distress when they had talk with others about reproduction. But sometimes they experienced degrees of positive and negative feelings with regard to their way of thinking that infertility is a treatable health problem, they developed stages of depression, they experienced a sense of abnormality, they had a gloomy mood, they felt that they had a sense of failure because they were unable to achieve pregnancy, they blamed themselves that may be they were punished because that they had done some thing wrong, and they believe that technology advancement may solve their problem. Most of them had a positive feeling that they were still living beings and the problem did not influence their conception of being like dead bodies (Table 1). By virtue, such feelings can normally emerge as an outcome for this type of life – harming experience (7,8).

As a matter of fact it was reported that distress, anxiety, loneliness, grief and marital stress can occur in many men with infertility who were retrying to conceive with or without medical assistance (9). In addition, emotional experience of infertility is a compilation of the distressing feeling of anger, grief, depression, self – blame and being out of control (10). Furthermore, infertile men had considered infertility was the most upsetting life–related experience (11). Infertile men expressed feelings of anger, pain and disappointment which was often the cause of greatest frustration (12). Infertile men had an increasing feeling of personal inadequacy and defectiveness (13).

2. Thinking

Relative to the sub-domain of thinking, (Table 2). Such thoughts had emerged due to the impact of infertility upon their perception and conception of the problem as long – term ones and they approach their thinking to present almost all of their concerns. As a matter of fact, most of the infertile men wanted to have a child because they had an interest to fulfill the meaning of having a family and being engaged in a parenthood mode ⁽¹⁴⁾. In addition, infertile men increased their thinking about treatment, especially when they had limited financial resources and no health insurance coverage ⁽¹⁵⁾. In India, infertile men did not only have the societal pressure to bear a child but they had also a desire to bear a male child who will continue the name and legacy of the family and may provide physical and financial security to the parents when they run into the old age ⁽¹⁶⁾.

3. Self-esteem

With respect to the infertile men self – esteem, (Table 3). These findings presented a clear image of the degree to which these individuals self – esteem had reached a devastating extent due to the infertility. Recent studies had revealed that the experience of infertility is linked with emotional responses, such as decreased self – esteem. Infertility had negatively affected self – esteem. Furthermore, it was noted that infertility created low self – esteem among the childless ⁽¹⁷⁾. It was highlighted that people who had reached a stage in their lives when they felt ready to have a child, it was devastating to discover that what they had always thought of as an apparently complete natural and easy process for others is best for them by the problem. They were not only

disappointed when a pregnancy was not achievable. But as a normal reaction, they felt a sense of failure that affected their self – esteem $^{(19)}$.

Part II : The correlation coefficient for the relationship between the quality of life and the psychological domains for the infertile men with infertility

The findings out of such correlation provided evidence by which conclusion was driven in terms of that the quality of life was greatly influenced by the infertile men positive and negative feelings, thinking, self – esteem.

Positive and negative feelings had a great impact upon the infertile men's quality of life which was manifested through the development of emotional distress as a result of the inability to achieve pregnancy. Some couples found themselves estranged from each other and stayed wounded by the experience of infertility for many years. Stress, isolation and low self – esteem were predicted ⁽¹⁶⁾.

As long as the infertility was considered a life related crisis, it generated a system of thoughts that presented the nature of the dilemma of infertility as stress producing event. Infertile men approached their thinking as individuals who lacked the ability to conceive or unbegetting. Clear evidence was presented to support this result that infertile men had negative thoughts and feelings from time to time which led to problems with relationships, pressures at home or at work and worries about investigation and treatment expenses (20).

Such self – esteem had emerged due to their feelings of inadequacy and failure to achieve pregnancy that impacted upon their dignity, self – concept and self – image. The result of present study was consistent with that infertility threatened people's life dreams for their future. However, they developed low self – esteem and isolation from others ⁽²⁰⁾.

Infertility affected couples quality of life when their marriage and social relationships became at risk. As a result, they started to isolate themselves from others and they limited their social interaction to avoid being blamed by others and to avoid being exposed to children or questioned for reproduction.

Part III : The relationship between the infertile men Socio-demographic characteristics and the psychological domain

With regard to the relationship between the demographic characteristics and the sub-domain of positive and negative feelings, the findings depicted that infertility duration and age of husband had positively influenced the infertile men positive and negative feelings (Table 5). This can be interpreted in away that the higher or the greater the infertility duration and the age of husband, the infertile men experienced more positive and negative feelings because they lost the hope of having children . This finding was consistent with that infertile individuals who had advanced infertility or consumed more time for diagnosis and treatment of infertility had feeling of loneliness and markedly greater distress ⁽²¹⁾. Furthermore, as men become older, the chance of having a baby is lower which can lead to a major heath problem and initiates heavy burden in terms of psychological impact on these men ⁽²²⁾.

Marriage length, primary marriage, frequency of sexual activity and age of marriage had highly significant negative impact upon the infertile men's positive and negative feeling (Table 5).

From a logical and personal point of view, marriage length may cause emotional disturbances, such as anger and depression; primary marriage can increases the negative feelings of these men because they start to blame themselves for being in a state of failure to impregnate even if they had desirability towards frequent sexual activity, they

experienced negative feelings due to the nonproductive outcome of such activity; and delay of marriage with advanced age may minimize the possibility to have a child, which increases the negative feelings of these men.

Concerning the relationship between the infertile men demographic characteristics and the sub-domain of thinking (Table 6).

This issue can be interpreted in a way that their inability to conceive can definitely increase their thinking about the unknown future of their health condition, family and soul life. Men who think of look upon themselves as impotent were putting themselves down and suffered unhappy situation to some degree (23).

In addition, age of husband had a significant positive effect on the infertile men. This means that the older is the husband, the greater is opportunity to express feeling and concerns relative to the future of health, life and social well-being.

Relative to the relationship between the infertile men demographic characteristics and the sub-domain of self-esteem, the data depicted that men with primary marriage, primary infertility and advanced infertility duration had experienced extremely low self-esteem (table 7). Primary marriage creates psychosocial impairment for infertile men and this impairment is associated with advanced duration of infertility.Emotional reactions of infertile men vary with differences in duration and number of existing children. Primary infertility is considered a direct assault for the men self-esteem ⁽²⁴⁾. However, they describe their self-esteem as incompetent and unable to do something. Then they start to withdraw from others, because they do not fell confident enough about them .

Infertile men, who had low socioeconomic status, were found to have low selfesteem.Such a result existed because the majority of the infertile men were low educated and earning barely sufficient income. As a matter of fact, Men with low income, poor academic and economic achievement had lower self-esteem ⁽²⁵⁾.

With respect to the infertile men's body mass index, the study presented that the body mass index had significant negative influence on these mens self-esteem. In other words, Obese men had experienced low self-esteem than other (Table 7). As far as we are concerned there was an inverse association between self-esteem and body mass index in males ⁽²⁶⁾.

Premature ejaculation of the infertile men had a negative and singnificant impact upon their self-esteem(Table 7). This lack of sexual performance resulted in low self-steem that affected existing relationships. Furthermore estimated that premature ejaculation caused sexual dysfunction and impacted on the men self-esteem ⁽²⁷⁾.

Recommendations

- **1.** An interventional and education oriented program can be designed, constructed and administered to the infertile men and their wives through which health and life related issues can be presented.
- **2.** Well-Structured and highly-specialized infertility center can be established to provide infertility treatment and psychological and social counseling to all infertile men with reasonable cost.

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