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ANALYZING THE RELATIONSHIP BETWEEN LIFE EXPECTANCY AND DEPRESSION, AND SEXUAL SATISFACTION IN INFERTILE WOMEN

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ABSTRACT:
The objective of this study is to analyze the relationship between life expectancy and depression, and sexual satisfaction in infertile women. The population of the study consisted of infertile women admitted in the delivery ward of Imam Khomeini Hospital located in Pole Dokhtar County in 1390 (2011) that was equal to 77 persons. Out of this population, total 67 peoples were selecttd by convenience sampling. Three questionanires inlcuding Larson's secual satisfacion, depression of Beck and life expectancy of Schnider were used as instruments. To evaluate the study hypotheses and analyze the results of a questionnaires, Pearson's correlation and regression methods were used. Results of data analysis showed a negative and significant relationship between depression and sexual satisfaction of infertile women and upon increasing the depression rate, sexual satisfaction is decreased. In another part of the study, it was concluded that there is a negative and significant associaton between depression and life expectancy of infertile women and upon increasing the depression, life expectancy is reduced. Finally, it was found that there is a positive and significant correlation between sexual satisfaction and life expectancy of infertile women and upon inreasing sexual satisfaction, life expectancy is upraised as well.

Keywords: Infertile, Life Expectancy, Sexual Satisfaction, Depression.

INTRODUCTION

One of expectations and goals of people from forming the family is having child that can strengthen the family foundation, meets the emotional and spiritual need of people and ultimately cause renewal and continuity of generation. Marital satisfaction is one of important factors effective on the women health and one of the most important indicators of satisfaction with life. Adjustment and marital satisfaction is a status therein the wife and husband in the most times feel happiness and satisfaction with each other that is made through mutual interest, taking care of each other, acceptance, mutual understanding and meeting the needs such as sexual need. The

compatible and satisfied with the marriage life couples are wives and husbands that have a lot agreement with each other, are satisfied with the type and level of their relationship, are satisfied with the type and quality of leisure time spending and plan for their time and financial issues well. On the other side, incompatibility in the couple's relationship results in disorder of social relations, tending to social deviances and drop of cultural values between wives and husbands and one of the and one of the greatest issues that more than everything affects the individual and social life of man is sexual desires. Sexual problems in the light of their importance are categorized as first grade issues of a marriage life and adjustment in the sexual relations and proportion and balance in the sexual desire in female and male are assumed as the most important causes of happiness and success in the marriage life. Problem in marital relations is assumed as the most important and frequent causes of sexual disorders and consequently sexual problem results in the new relational implications.

The most important purpose of sexual desire is reproduction and having child. The importance of having child and protection and emphasis of society in this case is so highly that if a couple voluntarily intend to control the number of their children for making interval between number of children and particularly marriage and production of first child, pressures of family members and the society cause the people to reconsider their decision (Asgari, 2005). In the patriarchal systems, motherhood is the origin of respect and power. The society valuates the woman that becomes mother.

The problem of infertility in the current world has been changed to a social concern that may lead to mental imbalance of couple, their divorce and cut of relationship between them. Infertility medically means "non-fertilization of a couple after one year regular sexual contact without use of contraception methods". The women and men equally face this problem. In general, 35% of infertilities are related to men, 35% to women, 20% to unknown factors that may be arising out of man or woman and 10% s referred to as preventable factors such as marriage age, infections, diseases such as tuberculosis and malaria, job type and environmental factors (Evans, 2004).

In the different societies, having child is assumed as an individual, social and cultural value. Infertile couples spend a lot cost and take many efforts for diagnosis and treatment of infertility. Infertility is deemed as a serious crisis in the life and incurs a severe psychological trauma on the couples. This stress affects the interpersonal, social and marital relationships and may result in mental imbalance, cut of relationship between them and divorce.

Despite the women and men equally may cause of infertility, nonetheless due to social prejudices, infertility is assumed as a womanly problem and therefore women commonly face familial and social problems more than en (Asgari, 2005). Reviewing the studies in many regions of the world indicates that the women sustain the major burden of infertility. This burden may include blame due to failure in child bringing, distress, anxiety, sorrow and sadness, fear, exclusion from the community, threatening to abandon and divorce or living in polygamy conditions. Iran is one of countries that child is considerably important therein socially, culturally and religiously. Public culture of Iranian society religiously and historically assumes the children as divine gift and supposed childlessness as an unpleasant matter. Term of "unfruitfulness" in Iranian society is applied to childless families. These norms applicable on the family generally have cultural background, whilst according to the statistics, Iran has one and half million infertile couples.

Differences existing in relation to effectiveness of infertile couples in the countries and different regions are under impact of specific kinship systems, marriage bond styles, moral and legal rules, religious rites and in general cultural factors. Therefore, the importance of the effect of these factors may not be ignored for perception and understanding of infertility, so that plenty of women to solve their problems resort to different ways and perhaps unhygienic styles, because attention to hygienic aspects is less important than motherhood and the need of community and family to the child, for them (Inhorn, 2003). Whereas infertility in the most cultures is highly

important, and the wish of having child is one of the most essential human stimulants, pregnancy and motherhood are evolutionary bases for the women and has been emphasized intensively in our culture (Akhundi, 2008). Therefore infertility is an individual and private problem as well as a public and social problem that the people throughout the world are involved therein and follow their own mental and social consequences. Unfortunately, mental and social aspects of infertility in the past often were neglected. Whereas infertility is one of the most important crises of life, the spouses that are exposed to this critical situation, more than others are exposed to depression and sexual dissatisfaction.

Infertility is one of the problems that not only has negative effects on the infertile person but also affects her relatives such as first priority of spouse and then on the immediate family. Infertile women due to their sensitive spirit, and problems such as depression, anxiety and sexual dissatisfaction generally will have problems in the marriage life. Principally, these peoples assume any behavior as sympathy and commiseration, thus psychologically are not able to have a safe communication with their relatives. In addition, due to having a sense of defect such as infertility are dissatisfied in the sexual communications. In case these persons are employed, another discussion is raised about formation of their subsequent problems in the working and social environment that will be the ground of new challenges and negligence thereof will definitely engender various psychological abnormalities.

Although the effect of psychological issues as ethologic factor of infertility is disputed, but certainly psychogenic variables and lifestyle are considerably effective on infertility, on the other side infertility itself may engender different psychological reactions such as depression (Sargolzaei, 2001). Prevalence of infertility in different countries is varied within 30-50%. Accordingly, there are more than 80 million infertile peoples in the world. In Iran, out of 72 million-population (18 million couples), more than 2 million couples face the problem of infertility (Akhundi, 2008).

WHO mentioned infertility as a major problem in the infertility heath that has physical, mental and social dimensions. Infertile women are assumed as the community members that are exposed to mental and personality harms. Lack of sense of ability in fertility and common social reactions in the society to these people may underlie for many mental pressures on this group.

Infertility not only has a deep effect on the psychological status of man, but imposes a great mental pressure on the relationships between women and men. Infertile woman due to failure in playing the individual and social role, feel imperfectness and incompleteness and the men feel shame and anger. The concept of social stigma that is arising out of failure in performance of social norms, in the infertile women and men includes a self-realization of deficiency, and reduction of respect (Bernez, 2000, quoted by Asgari, 2005). The concern and feeling of failure that comes thereafter particularly when pressures of family and society are much more, most times results in destruction of consistency between wife and husband and disruption of family (Alami, 2008). A course of treatment of infertility has 5-6 million Rials drug cost for the patient that payment of these costs will change the economic status of people and is contrary to the social justice. Imagine that the counseling and therapy costs of psychic disorders such as depression or sexual disorders are added to these costs. If attempting for childbearing is failed, it may be changed to a destructive emotional experience. On the other side, infertility can engender varied psychological reactions such as depression, failure, anxiety, anger and reduction of sexual satisfaction. Depression, anger, anxiety and fear may intervene in enjoying from sexual activity. Depression due to infertility and expensive and invasive treatments act as a catalyzer that reveals the sexual problems. Losing sexual desire, changes in reaching to the orgasm, reduction of intercourse times, and sexual dissatisfaction are supposed as prevalent problems of infertile couples (Bahrami & Satarzadeh, 2007).

One of essential points in evaluation of an infertile couple includes sexual problems and its disorders. A desirable sex may increase the probability of fertility and sexual psychological disorders in infertile couples are more than

other couples. Emotional factors due to sexual disorders may engender infertility (Keir, 1995 quoted by Sargolzaei, 2001). In a study, unconscious excitements in sexual emotions were reported about these persons. Therefore, according to the mentioned issues and problems, it is necessary to take an effective action in this relation.

As a result, psychologists accepted that life expectancy may be effective on psychiatric patient (Frank, 1978). Consequently, whereas life expectancy based on positive psychological approach instead of merely focus on human weaknesses considers its capabilities, we intended to use this method for reduction of psychological problems of infertile women. Thus, in this study, the researcher intends to analyze this subject that if life expectancy is associated with the depression or not? In addition, if life expectancy is associated with sexual satisfaction or not? And ultimately if depression is associated with sexual satisfaction or not? Accordingly, hypotheses of this study are as follows:

1- There is a relationship between life expectancy and depression in infertile women.
2- There is a relationship between life expectancy and sexual satisfaction in infertile women.
3- There is a relationship between depression and sexual satisfaction of infertile women.

METHODOLOGY

This study is a correlative research. Population thereof consisted of all infertile women admitted in genecology and obstetric ward of Imam Khomeini Hospital, Pole Dokhtar County in 2011 equal to 77 persons. The studied sample was calculated based on Cochrane formula with specified sample size and 64 peoples were selected based on convenience sampling. After approaching Imam Khomeini Hospital of Pole Dokhtar County and ordination with officials of this ward, the questionnaire was provided to the infertile women referring to this hospital and they were asked without mentioning their names and only inserting three particulars (age, field of study and job) to answer the questionnaires mark the options that are more consistent to their opinion with x. The examinees were asked to answer all questions and they were promised that their answers will be confidential. Ultimately, information of 50 questionnaires was filled and of which 56 questionnaires that were provided to infertile women were analyzed. Data was collected by following questionnaires:

Sexual satisfaction questionnaire:

It is a standard premade questionnaire in the name of ISS that Larson used it for measuring the sexual satisfaction of couples in his research. In the said study, academic validity of ISS was confirmed by Harison & Hadson and its reliability was confirmed by retesting at the same study. This questionnaire includes 25 questions that the 5 options were designed for answer of each question including never, rarely, sometimes, most times and always, and considering the selected option, a score of 1 to 5 is allocated to each question. In questions 1,2,3,10,12,13,16,17,19,21,22 and 23, the option of never obtained the score of 1, rarely (2), sometimes (3), most times (4) and always (5), whilst in other questions, always obtained the score of 1, most times (2), sometimes (3), rarely (4) and never (5). To determine the validity of data collection instrument, content validity method was used. Therefore, the researcher at first based on the library studies in relation to the research and using last papers, selected premade ISS questionnaire and translated, and upon approval of advisor, submitted to 10 academic members for analysis. After collection thereof and applying their ideas, the instrument was considered and confirmed by the research council of faculty. In this questionnaire, to determine the stability and reliability of instrument, retesting method was used, so that at first the questionnaire was submitted to 10 peoples that had the respective characteristics and after filling thereof, submitted the same questionnaire to the same group for filling 10 days later. Then, using or correlative tests reliability of questionnaire was measured and considering degree of

coefficient, 98% of its reliability was confirmed. The obtained validity in the present study for this questionnaire based on Cronbach's alpha was estimated 81.4%.

Beck's depression test (Iranian 13-item form):

The short form of this questionnaire (39 questions) due to acceleration (5 minutes for answering) and respecting moral observations (deletion of sexual questions) was used in this study. This test evaluates the following factors. 1- Feeling of sadness and sorrow, 2- disappointment and pessimism to the future, 3- feeling of failure, 4- dissatisfaction and not enjoying from life, 5- feeling of worthlessness and guiltiness, 6- feeling of self-hatred and hating, 7- Self-abuse and death of thoughts, 8- isolation, 9- lack of decision-making power, 10- feeling of unattractiveness, 11- feeling of difficulty and inability in working, 12- feeling of fatigue, 13- anorexia. This test may be applied individually as well as in group. The examinee is asked to supposed her feeling here and now and later to read the questions carefully and out of each group of questions, to choose only one sentence that is closer to her feeling and mark it. When the examinee answered all questions, the therapist, consultant to psychiatrist summates the numbers that are marked to obtain the sum total. This score shows the severity of depression.

Iranian normalization of questionnaire

Table (1): Iranian norm, 3-item questionnaire of Beck

Depression degrees	Scores range	Percent of each range	Percent of each degree
Nothing	0	4.85	Lack of depression 36.89
Almost nothing	1	11.02	
Insignificant	2-3	21.02	
Mild	4-7	25.86	Mild depression 25.86
Moderate more than mild	8-10	21.20	Moderate depression 33.22
Moderate less than mild	11-14	11.02	
Severe	15-26	4.85	Severe depression 4.85

Examining and norm selection of this test by Nadimi and Delkhamoush was implemented on a 200-people sample as per above table.

Setis (1970) and Tanakama Matsumi & Kamoka (1986) reported that validity of Beck questionnaire was confirmed through determination of its correlation with self-assessment scales of depression. Beck (1963) declared that coefficient correlation of Kruskal of this test is 31-68% and its reliability coefficient based on Spearman & Brown bisection method is 93%. Validity of Beck's questionnaire in this study based on Cronbah's alpha was estimated 79.1%.

Life expectancy questionnaire:

This questionnaire was made by Schneider et al (1991) for measuring the expectancy that was comprised of 12 terms and is implemented as self-assessment. These terms include 4 terms for assessment of factorial thought, 4 terms for assessment of strategic thought and 4 terms are diversional. To fill this questionnaire, 2-5 minutes are required. Questions 2,9,10 and 12 are related to factorial thought, question 1, 4, 6 and 8 related to strategic though, and questions 3,5,7 and 11 are related to diversional terms. Scores include completely true (4), partly true (3), partly false (2) and complete false (1). Whereas diversional terms obtain no scores means 4 questions out of 12, variations range of this questionnaire is within 8-32 that higher score shows more expectancy. In an analysis, total internal consistency was obtained within 74%-84% and reliability of test-retest was equaled to 0.80. Validity of life expectancy questionnaire in this study was calculated based on Cronbach's alpha equal to 72.3%. In the

present study, to analyze the relationship between study variables, statistical description tables including frequency, mean, standard deviation, standard error chart etc., and Pearson's simple correlation of coefficient, regression were used for analyzing the predicted hypotheses.

RESULTS:

Table (1): Summary of correlation coefficient for relationship between depression and sexual satisfaction

Variable		Depression
Sexual satisfaction	Pearson's correlation coefficient	-3.10
	Significance level (two ranges)	0.013

Results of table (1) indicate a significant and negative relationship between depression and sexual satisfaction in significance level 0.05 (r=-0.310, P=0.013). It shows that upon increasing depression, sexual satisfaction in infertile women in reduced.

Table (2): Summary of correlation coefficient for relationship between depression and life expectancy

Variable		Depression
Life expectancy	Pearson's correlation coefficient	-0.357
	Significance level (two ranges)	0.004

Results of table (2) indicate a significant and negative relationship between depression and life expectancy in significance level 0.05 (r=-0.357, P=0.004). It shows that upon increasing depression, life expectancy in infertile women in reduced.

Table (3): Summary of correlation coefficient for relationship between sexual satisfaction and life expectancy

Variable		Depression
Life expectancy	Pearson's correlation coefficient	0.295
	Significance level (two ranges)	0.018

Results of table (3) indicate a significant and positive relationship between sexual satisfaction and life expectancy in significance level 0.05 (r=-0.295, P=0.018). It shows that upon increasing sexual satisfaction, life expectancy in infertile women in upraised.

To respond this important question that "how much sexual satisfaction affects the prediction of self-esteem?", regression analysis was performed considering assumptions of variance linearity, normality and fixedness.

Table (4): Summary of significance of regression model for depression based on sexual satisfaction

Model	Variation source	Total squares	Degree of freedom	R	R^2	F	Significance level
Sexual satisfaction	Regression	168.608	1	0.310	0.96	6.575	0.013
	Balance	1590.002	62				
	Total	1758.609	63				

Supposing that R2 denotes common variance percent of sexual satisfaction in prediction of depression, summary of above table shows that total used variables predict 9.6% of depression variance in infertile women group. Since calculated F is significant in level lower than 0.05, thus linear regression model is significant for infertile women.

DISCUSSION

The relationship obtained between depression and sexual satisfaction of infertile women shows that there is a significant and negative relationship. It means upon increasing the depression, sexual satisfaction is reduced. According to the results of this hypothesis, the researcher found no research similar to this hypothesis, thus in the present discussion, similar methods were used. Summary of study applied by Rahmari (2003), Dafei (1997), Alizadeh (2003) and Bahrami (2007) almost confirms the results of this study. Bahrami (2007) understood that difference of depression score between females and males in two infertile and fertile groups was significant, but no significant difference was observed in sexual satisfaction between infertile and fertile men as well as the women in two groups. Mean depression score in infertile women was more than their husbands, but mean sexual satisfaction score showed no significant difference between infertile men and women. There was a negative significant association between sexual satisfaction and depression. Rahmati (2003) indicated that upon aging, depression and anxiety is increased in both infertile and fertile groups and depression and anxiety severity in infertile women in comparison to fertile women is higher, and this difference is significant and upon increasing the infertility period, anxiety is increased as well and is extremely significant, whilst depression is not increased so intensively and this difference is not significant statistically. Dafei (1997) indicated a significant relationship between use of coping methods and particulars such as age, job, education, infertility type, infertility period, character type, social activities etc., as well as between use of coping methods and mental health of infertile couples. Alizadeh (2003) indicated that there is an inverse and significant relationship between self-esteem and sexual elements, lifestyle without child, stress of women's infertility and infertile men and a significant relationship between external control resource and chance and social communication elements and need to parenthood of infertile women and men. In general, satisfaction with sexual relations may reduce the stress, anxiety and depression. It is found in infertile and fertile people and various and desirable sexual relations may reduce depression due to infertility.

The relationship between depression and life expectancy of infertile women shows a significant and negative relationship, meaning that upon increasing the depression, life expectancy is reduced. Considering the results of this hypothesis, the researcher found no research similar to this hypothesis, thus in the present discussion used similar researches including Gholami (2009), Shoakazemi (2009), Mohammadi (2010) and Trassy (2001) that confirm the results of this study in this section. Gholami (2009) indicated that logotherapy training may increase life expectancy and general health of major thalassemic patients. Mohammadi (2010) indicated no significant difference between life expectancy, anxiety and physical symptoms of employed and unemployed women, but this difference is significant about social function. Shoakazemi (2009) showed that there is a positive and significant relationship between quality of life and life expectancy in patients infected with cancer after surgery, so that whatever life expectancy is higher, quality of life will be more appropriate and vice versa. As a result, better quality of life may be predicted based on the life expectancy. Trassy (2001) showed that writing about the positive future life increases optimism and hope in test group people. Results indicated that the prospective oriented writing intervention is a promising way for increasing the hope to treatment and reduction of pain and pessimism in these patients. In consideration of the foregoing and previous researches, positivism, happiness and life expectancy are assumed as the most important factors that may reduce the depression in the most people, thus training the positivism and happiness and life expectancy may moderate the problems imposing on infertility.

The relationship between sexual satisfaction and life expectancy of infertile women shows a significant and positive relationship between sexual satisfaction and life expectancy score. It means upon increasing sexual satisfaction, life expectancy is also increased. No similar research was found in this connection, but according to the inferences of previous researches, it is concluded that one of instances of peaceful life is having healthy and cheerful sexual relations with the spouse, hence it engenders positivism, life expectancy and cheerfulness and happiness, thus it is inferred that satisfaction with sexual relations may increase and improve the life expectancy.

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