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Research Article

Comparison of the Quality of Life and Its Dimensions in Men and Women with HIV / AIDS in the High-Risk Behaviors Center of Shiraz

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Abstract

Background: In recent years, for the purpose of proper planning, the quality of life has been considered by researchers and clinical experts as one of the most important outcomes of chronic diseases. The aim of this study was to evaluate the quality of life and its dimensions in women and men with Human Immunodeficiency Virus (HIV) or Acquired Immunodeficiency Syndrome (AIDS) in the high-risk behaviors center of Shiraz.
Methods: In this cross-sectional study, we selected 224 patients (112 man and 112 woman) with HIV / AIDS from Behavioral Counseling Center of Shiraz through convenience purposive sampling method; we gathered data using quality of life Short-Form 36 (SF36) and a demographic questionnaire. Data were analyzed using a t-test.
Results: The mean score of general health (55.31±17.82) (P=0.367), physical health (287.85±81.16) (P=0.168), and psychological health of women (255.40±74.80) (P=0.207) was more than those with HIV/AIDS. The mean score of other quality of life dimensions in women was more than that of men; however, no significant differences were observed in other dimensions.
Conclusion: The average score of quality of life in women was better than in men, hence the necessity of promoting calm adherence to treatment.

Keywords: Quality of life, Men, Women, HIV, AIDS

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1. Introduction

Acquired Immunodeficiency Syndrome (AIDS) changes the way of life, reduces the self-esteem, and increases the feelings of vulnerability and turbulent thoughts (1). Quality of life is a set of living conditions that can be measured and influenced by social and economic conditions (2). It is important for people infected with the AIDS virus to be able to live with the disease. In fact, HIV/AIDS creates a condition that increases the sensitivity of a person to a variety of chronic diseases. Women are more vulnerable than men due to economic and cultural conditions, sexual violence, and unequal access to educational and health facilities (3).

A study by Van and colleagues showed that the mean score of physical health in women was higher than in men (43.80 vs 41.44) whereas their psychological health was lower (51.98) than men (53.25) (3). However, a number of studies such as those conducted by Louwagie and Peltzer indicated a low quality of life in men while others such as Wood showed a low quality of life in women (4, 5).

HIV / AIDS patients with adequate CD4 counts in the early stages of the disease have a better quality of life than other patients. Therefore, receiving treatment and social and psychological support can improve the obtained results of quality of life. The quality of life of patients with HIV / AIDS is affected by their illness and their experience of exclusion, stigma, and discrimination, which can entail physical, psychological, and social problems. Other issues faced by these patients can be frustration, lack of family support, unemployment and economic problems, and fear of revealing the disease status (6). While some studies reported a better quality of life in HIV-positive men compared to women, a few showed that women with HIV had a higher quality of life in certain domains. Employment status, higher education, and monthly income are generally related to a better quality of life (7). Studying the quality of life in these patients helps provide health and social services. Additionally, social and psychological support is vital in all areas of patients' life, with the latter having a much greater

impact on anxiety and depressive symptoms (8).

Quality of life can play a key role in mental and physical health; therefore, assessing the quality of life in HIV/ AIDS patients provides valuable information for healthcare providers.

Considering the limited number of studies conducted in this area in Shiraz, the researcher of this study decided to investigate the quality of life dimensions associated with the treatment.

The purpose of this study was to compare the quality of life and its dimensions in men and women with HIV / AIDSregistered in the High-Risk Behaviors Center of Shiraz

2. Methods

This cross-sectional descriptive-analytic study was conducted on 112 women and 112 men with HIV / AIDS registered, monitoring for HIV care and receiving antiretroviral therapy in the Behavioral Counseling Center in Shiraz. After The Ethics Committee of Shiraz University of Medical Sciences approved the study; the approval was sent to Behavioral Health Counseling Center of Shiraz with a letter of introduction to collect data for the implementation of the plan of study questionnaire with an ethical code number of 15355.

Sampling was based on convenience purposive sampling method. The population was selected from patients with AIDS/HIV at the Behavioral Counseling Center of Shiraz over five months (July–December of 2017). The study inclusion criteria consisted of informed consent, positive HIV test based on the patient's record, age of 18 years or more, and having an Iranian citizenship. Data analysis was performed using SPSS Statistics 23 software.

The research tools were the quality of life Short-Form 36 (SF36) and a demographic questionnaire.

The exclusion criterion was severe cognitive impairment, such as retardation and mental disorders. The data collection tools included a demographic questionnaire and a quality of life questionnaire.

The demographic questionnaire consisted of 48 researcher-made questions in three parts: personal data, sexual partner status, and sexual relationship and disease status. The Quality of Life Questionnaire (SF36), first introduced by Ware & Sherbourne, comprises 36 phrases. This questionnaire assesses eight areas of physical function, social functioning, role limitations caused by emotional problems, emotional dysfunction, psychological health, emotional well-being, physical pain, and general health. Furthermore, 36SF provides two general measurements of quality of life dimensions: the overall score of the physical dimension and the overall score of the psychological dimension (9).

The test score in each of these areas varies from 0 to 100, with higher scores showing better quality of life. The validity and reliability of this questionnaire was confirmed in the Iranian population (10), and the Coronbach's $\propto$ coefficients ranging from 0.77 to 0.90. The present study is based on the validity and reliability of Montazeri and colleagues's study (10).

Statistical Analysis

Assuming that the data are normality distributed, due to the fact that the sample was above 30 people, and description was performed using SPSS Statistics 23 software.

The quality of life variables were compared between men and women. Data analysis was performed using SPSS Statistics 23 software with a power of 90% and an SD error of 5%.

Ethical considerations

Prio to the study, we informed the subjects about the study plan, and written consent form was obtained. Moreover, the research units were informed about the objectives, confidentiality of information, and provision of information in general.

3. Results

According to the results of this study, mostmen had elementary school education (42%), and most were self-employed (89.3%). The majority of women with HIV had secondary school education (30.4%) and were housewives (77.7%). Considering the time of the *positive HIV test,* 41.1% of men had been diagnosed with HIV / AIDS ten to fourteen years ago, and 33.9% of the women were diagnosed with the disease from one to four years ago (Table 1). The highest difference between women and men was observed in the dimensions of physical function (79.64±25.20 vs. 75.74±27.40), role limitations due to physical problems (83.03±25.16 vs. 77.00±27.34), social functioning (76.45±34.78 vs. 65.29±36.40), physical health (287.85±81.16 vs. 272.90±80.51), and

Table 1: Distribution of HIV patients in terms of HIV positive test time

Index	Men N (%)	Female N (%)
Under one year old	16(% 14.3)	12 (% 10.7)
1-4	20 (% 17.9)	38 (% 33.9)
5-9	19 (% 17)	36 (% 32.1)
10-14	46 (% 41.1)	26 (% 23.2)
15≤	11 (% 9.8)	-
Total	112	112

*N: number, HIV: Human Immunodeficiency Virus

Table 2: The average score for the quality of life of men and women with HIV

Index	n=112 Mean±SD Male	n=112 Mean±SD Female	P value
1- Physical function	27.40±75.74	25.20±79.64	0.269
2- Role limitations due to physical problems	27.34±77.00	25.16±83.03	0.087
3- Role limitations due to emotional problems	22.11 ±72.05	22.90±72.61	0.851
4- Energy / Fatigue	21.30±51.38	23.19±52.36	0.742
5- emotional wellbeing	21.84±53.71	19.14±53.96	0.928
6- Social functioning	36.40± 65.29	34.78± 76.45	0.020
7- pain	30.02±67.03	29.66 ±69.86	0.487
8- General health	18.39±53.12	17.82±55.31	0.367
9- Physical health	80.51±272.90	81.16±287.85	0.168
10- Psychological health	78.25±242.44	74.80±255.40	0.207

*N: number, HIV: Human Immunodeficiency Virus

psychological health (255.40±74.80 vs. 242.44±78.25) (Table 2). There was only a statistically significant difference in the area of social functioning.

4. Discussion

41.1% of men had been diagnosed with HIV / AIDS ten to fourteen years ago, and the lowest number of men (9.8%) in our population have diagnosed with HIV positive test when more than 15 years passed from their infection. 33.9% of women had been diagnosed with the disease within one to four years and the lowest number of women (% 10.7) is related to the less than 1 year passed from their infection.

A similar finding was reported in Aljassem's study, where men had a longer duration of HIV infection (12 years versus 8 years) (11). Duration since HIV diagnosis affected the psychological dimension of the quality of life and patients experienced rejection reaction from family and society (12). However, in Yongfang's study, there was no significant difference between males and females regarding duration since HIV diagnosis (13).

In this study, the quality of life of women and men with HIV / AIDS was assessed. Dimensions of physical function, role limitations due to physical problems, energy and fatigue, emotional well-being, social functioning, pain, general health, physical health, and psychological health were higher in women compared to men.

In contrast, the results of Nojomi's study showed that women with HIV/AIDS had worse conditions in comparison with men in most aspects of life.This issue stems from the lack of positive perception of their role in the society, social and economic conditions, and the impact of factors such as violence against women and family support (14).

In Haseli's study, the mean scores of males and females' life quality were 47.7+16.2 and 59.5+20.4, respectively, which shows a statistically significant difference ($P<0.05$). These results are to some aspects similar to ours (15).

In the study conducted by Nojomi, a significant relationship was found between the quality of life and sex, which is in line with the findings of the present study (14).

The findings of the present study are also consistent with those of a study conducted by Mbada and colleages (16). That study was conducted on 37 HIV /

AIDS patients and controls to compare the physical functional capacity (exercise, walk test) and quality of life of HIV/AIDS patients with the control group. The results showed that women had a better physical function (53.92±5.99) compared to men (48.97±8.33) while men had a better psychological health(73.62±9.74) in comparison to women (72.58±15.3) (16).

The study carried out by Gebremichael and colleagues aimed to compare the quality of life of 520 HIV / AIDS men and women who received medication from treatment centers. They showed that women had a lower quality of life than men in all areas except for social functioning. The mean score of physical health was 15.3±3.2 in men and 13.9±2.6 in women whereas psychological health was 14.1±0.4 in men and 12.6±3.0 in women (P<0.001) (17).

In a study carried out by Dalmida and colleagues, the mean scores of physical health and psychological health were 42.8 and 48.5 in women and 51.8 and 51.2 in men, respectively(P=0.000) (18). In Dalmida's study, similar to Gebremichael, the dimensions of men's quality of life were better than women. Among the reasons for the difference between these two studies and the present one, one can point out the cultural differences between Iran and other countries. In fact, in our society, women with HIV / AIDS may appear to be more vulnerable than men; however, women are more likely to come up with this situation. Furthermore, women were more able to improve their quality of life through participation in classes and adherence to treatment to adapt to their illness. In addition, the results of the studies conducted by Galvão in Brazil, Mrus in Canada, and the World Health Organization multidisciplinary study on 900 patients indicated a worse quality of life in women than in men (19-21)

Women had better physical health althoughthey were imposed to more pressure from the community. However, in many societies, men have turned to high-risk behaviors such as drug injection and unprotected sexual relationship more than women, possibly due to the gender differences in high-risk behavior to overcome in stressful situations (22).

One study (2015) was carried out in south Ethiopia with the aim of assessing the quality of life in terms of gender differences in HIV/AIDS cases; it was shown that the mean score of physical health was 15.99±2.95 in women and 16.44±2.6 in men, respectively (P=0.037). Psychological health was 15.54±2.44 in women and 16.06±2.47 in men (P=0.01) (23). In fact, in the mentioned study, the quality of life of men improved more than that of women; however, in our study, the mean physical and psychological health scores of women were 28.88±81.66 and 2555.4±74.80, which was higher than men, (272.99±80.51) and (242.48±78.28), respectively. It seems that teaching women in this area in societies such as that of Ethiopia can partly resolve the differences between men and women regarding the quality of life. Vigneshwaran's study also underscored poor education as one of the important factors affecting the quality of life (24).

In order to solve the problem of access to patients in the community, sampling was done among patients referred to the center, which could be an obstacle to the generalization of the results to patients throughout the country. It is suggested that by setting up workshops, the healthcare staff be more in contact with patients.

Limitations

There is limited information available in this field due to the small amount of research . The sample size comprised only those registered at the High-Risk Behaviors Center of Shiraz who agreed to be interviewed.

Recommendations

It is necessary to conduct further research in this field due to the importance of this issue and its effects on the physical and mental health of HIV patients. Limitations of the present study must be further taken into account. It is also recommended that a similar study be conducted with a larger sample size on different groups of men and women with different cultures.

5. Conclusion

According to the results, it can be inferred that men were more involved with HIV/AIDS than women. On the other hand, the mean score of women's quality of life was better than that of men. The presence of family support and health care staff helped the subjects to cope with the problems caused by the disease. It is necessary to promote calm and adherence to treatment as they affect the quality of life; therefore, health care providers can gradually enhance the quality of life via monitoring the health status of people suffering from HIV/AIDS.

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Ethical Approval

This study was approved by the Ethics Committee of Shiraz University of Medical Sciences in 2018 (proposal no. 96-15355, ethics code: IR.SUMS.REC.1396.S735). The participants were informed about the study objectives and their written informed consent was obtained. They were also reassured that their participation in the study was completely voluntary and that they could withdraw from the study at any stage.

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Conflict of interest

The authors declared no conflict of interest.

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