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Mental Health Status of Patients With HIV/AIDS in the South of Iran

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Background: Acquired Immune Deficiency Syndrome (AIDS) is a fatal disease that is caused by Human Immune Deficiency Virus (HIV). Information about the mental health status of patients with HIV/AIDS and its correlates is critical and provide proper palliative care and other supportive services.

Objectives: Considering the high prevalence of mental and psychological disorders among people living with HIV/AIDS, the present study aimed to investigate the mental health status of people with HIV/AIDS in the south of Iran.

Patients and Methods: This descriptive-cross sectional study was conducted on 95 HIV-positive patients referred to Bandar Abbas Behavioral Diseases Counseling Center in 2012. Data were collected using a General Health Questionnaire-28 (GHQ-28). The HIV/AIDS subjects with total scores of ≤ 23 were classified as nonpsychiatric. Data were analyzed using SPSS-16 by applying descriptive statistics and the chi-square test.

Results: Results of this study showed that 85.3% of the participants scored above the screening threshold for mental health disorders. There was no significant relationship between mental health disorders and age, gender, marital status, employment status, level of education, drug abuse history, area of living and clinical stages of HIV/AIDS cases. Moreover, 95.1% of participants had anxiety symptoms, 85.2% had depression, 87.7% had social dysfunction, and 80.2% had somatic symptoms.

Conclusions: The prevalence of mental disorders among the HIV-positive patients in Bandar Abbas City, Iran, was high. The findings of this study demonstrate the need for more attention to improve mental health status of individuals with HIV/AIDS and further research on the mental health status of HIV-positive patients.

Keywords: Mental Health; HIV; Acquired Immunodeficiency Syndrome; Mental Disorders; Iran

1. Background

There is enough evidence that people with chronic conditions, especially those with Human Immunodeficiency Virus and Acquired Immunodeficiency Syndrome (HIV/AIDS) have higher rates of poor psychological and psychiatric disorders (1). Poor mental health in individuals with HIV/AIDS has been indicated to be related to many variables including employment status, lack of emotional support, lack of high quality health services, intravenous drug use, lower household income, gender, etc. (2, 3).

In Iran, a rapid growth in the number of individuals with HIV/AIDS was seen after the first case of HIV which was reported in 1987 (4), which indicates an important attention to Iranian cases with this pandemic disease. It is suggested that by 2014 about 106000 individuals in Iran will be living with HIV infection and there are estimated to be approximately 7000 new cases annually. However, little is known about the mental health status of individuals with HIV/AIDS in Iran. Information about the status of mental health and its correlates is critical and provide proper palliative care and other supportive services (1).

2. Objectives

As the mental health status of individuals seriously ill with HIV/AIDS might vary among communities (1) and to expand our knowledge about the mental health status of HIV/AIDS patients in the south of Iran, this study was conducted to examine the variables correlated with the mental health disorders of patients with HIV/AIDS in Bandar Abbas City, the south of Iran.

3. Patients and Methods

This cross-sectional study was conducted on 95 persons living with HIV/AIDS who referred to the counseling Center for behavioral patients in Bandar Abbas City, Iran, in 2012. Individuals with HIV/AIDS with the age of more than 15, who had a positive retrovirus antibody through an Enzyme-Linked Immunosorbent Assay (ELISA) method, were recruited to participate in the study. Therefore, 123 patients (83 men and 40 women) were identified. However, only 95 of them consented to participate in the study.

We used the General Health Questionnaire (GHQ) to

quantify the risk of developing psychiatric disorders among our subjects. This questionnaire is a standard instrument developed by Goldberg and Williams in 1972 to screen individuals for psychiatric disorders (5). In this study, we used the GHQ-28. The GHQ-28 has been divided into four subscales, thus assesses four aspects of distress. 1) somatic symptoms (items 1 - 7), 2) anxiety (items 8 - 14), 3) social dysfunction (items 15 - 21) and 4) depression (items 22 - 28). All items have a 4-point scoring options that ranges from "Better than usual", "Same as usual", "Worse than usual", to "Much worse than usual". Participants with total scores of 23 or below were classified as nonpsychiatric, while participants with scores 24 and more were classified as psychiatric (6, 7). There are two possible methods of scoring the questionnaire. In this study, we used the likert scoring method (0, 1, 2, 3). This method scores of 0 for choice 1, score of 1 for choice 2, score of 3 for choice 3 and score of 4 for choice 4 (7).

The data remained confidential and all participants signed an informed consent. Data were analyzed by SPSS version 16 software, NY, USA, using descriptive statistics and chi-square test. The P values less than 0.05 were considered as statistically significant.

4. Results

The mean age of the participants was 36 ± 6.3 (age range, 21 - 51 years old) and 64 cases (67.4%) were male and 31 (32.6%) were female. Of those, 45 cases were married, 28 were single, 14 were divorced and 8 were widowed. Seventy-one (74.7%) participants had degrees below the equivalent of high school diploma, 11 (11.6 %) had a high school diploma and none of them had an academic degree. As indicated in table 1, the employment status of participants indicated that the majority of them were self-employed (34 = 35.8%). Eighty-five (89.5%) individuals with HIV/AIDS were living in urban areas and 10 (10.5%) were living in rural areas.

Moreover, 59 (62.1%) participants had drug abuse history while, 36 had no drug abuse history. More victims who were infected with HIV/AIDS were as a result of using common syringes (85 = 61.1%), followed by risky sexual behaviors (36 = 37.8%) and blood transition (1=1.1%). Moreover, the clinical stages of the disease indicated that 75 participants had AIDS (78.9%), one person was in symptomatic phase (1.1%) and 19 persons (20%) were in the latent phase (asymptomatic HIV disease stage). There was no significant difference between the stage of the disease and mental health disorders (P = 0.640).

The most frequent symptoms in HIV/AIDS cases were anxiety symptoms (n = 77, 95.1%) followed by social dysfunction (n = 71, 87.7%), depression (n = 69, 85.2%) and somatic symptoms (n = 65, 80.2%).

Eighty-one (85.3%) individuals with HIV/AIDS had psychological disorders and 14 (14.7%) had a score below 23, which indicated that they had no symptoms of psychiatric disorders. Results indicated that there was no significant relationship between age groups and mental health disorders (P = 0.769). Moreover, the chi-square test indicated that there was no significant relationship between the mental health disorders and gender of the patients (P = 0.377) and also area of living (urban or rural) (P = 0.655).

Married participants had greater psychiatric disorders, followed by single participants and there was no significant difference between the marital status and mental health problems (P = 0.659). Participants with educational level below high school diploma had greater psychiatric disorders. However, there was no significant relationship between the educational level and mental health disorders (P = 0.854).

Findings indicated that there was no significant relationship between job status and psychiatric disorders (P = 0.758). According to the results, 86.4% of the participants with drug abuse history and 83.3% of the participants without drug abuse background had mental health problems. Moreover, there was no significant relationship between drug abuse history and mental health disorders in HIV/AIDS cases (P = 0.679).

5. Discussion

Due to the growth in the number of patients with HIV in Iran, understanding the mental health status of people with HIV/AIDS was of high importance. This study indicated that the majority (85.3%) of HIV/AIDS cases had psychological disorders. Anxiety symptoms were more prevalent than social dysfunction, depression and somatic symptoms among subjects, respectively. The results of this study showed no significant relationship between the mental health status of cases with HIV/AIDS and the studied variables in the study including, stage of the disease, gender of patients, area of living, marital status, educational level, job status and drug abuse history.

Our study indicated that there was a high rate of mental health disorders in our population, which this finding is in accordance with other studies in developing countries (2, 8, 9). For instance, a research on African people indicated that about half of patients with HIV had some of psychiatric disorders and that depression was the most common individual problem (2). In African HIV/AIDS setting receiving poor-quality health services and a lack of emotional support from the society were associated with greater psychiatric problems (2). The mental health problems of HIV/AIDS patients may vary in different communities. Due to the low social supports of HIV/AIDS patients in developing countries, the mental health disorders of these patients are usually higher than industrial countries. This also may be argued that this is due to low social supports in developing countries and that this may be influenced by the social-economical and cultural characteristics of each community.

Table 1. Factors Related to the Mental Health Disorders of HIV/AIDS People in the South of Iran[a, b]

Factors	Score		Total	P Value	df	χ^2
	≤ 23	24 >				
Age groups, yr				3	1.135	0.769
20-30	4 (4.2)	15 (15.8)	19 (20)			
31-40	8 (8.4)	47 (49.5)	55 (57.9)			
41-50	2 (2.1)	18 (18.9)	20 (21.0)			
51-60	0 (0)	1 (1.1)	1 (1.1)			
Gender				0.377	1	0.781
Male	8 (8.4)	56 (58.9)	64 (67.3)			
Female	6 (6.3)	25 (26.4)	31 (32.7)			
Marital status				0.659	3	1.601
Married	6 (6.3)	39 (41.1)	45 (47.4)			
Single	3 (3.1)	25 (26.4)	28 (29.5)			
Divorced	3 (3.1)	11 (11.5)	14 (14.7)			
Widowed	2 (2.1)	6 (6.3)	9 (8.4)			
Level of education				0.854	2	0.316
Illiterate	2 (2.1)	11 (11.6)	13 (13.7)			
Below of high school diploma	11 (11.6)	60 (63.1)	71 (74.7)			
Diploma	1 (1.1)	10 (10.4)	11 (11.6)			
Employment status				0. 758	3	1.178
Unemployed	3 (3.1)	27 (28.5)	30 (31.6)			
Self-employed	5 (5.3)	29 (30.6)	34 (35.8)			
House keeping	5 (5.3)	22 (23.1)	27 (28.4)			
Worker	1 (1.1)	3 (3.1)	4 (4.2)			
Drug abuse				0.679	1	0.172
Abused	8 (8.4)	51 (53.7)	59 (62.1)			
Not abused	6 (6.3)	30 (31.6)	36 (37.9)			
Area of living				0.655	1	0.200
Urban areas	13 (13.7)	72 (75.8)	85 (89.5)			
Rural areas	1 (1.1)	9 (9.4)	10 (10.5)			
Stage of disease				0.640	2	0.894
Patients with AIDS	10 (10.5)	65 (68.4)	75 (78.9)			
Symptomatic HIV disease	0 (0)	1 (1.1)	1 (1.1)			
asymptomatic HIV disease	4 (4.2)	15 (15.8)	19 (20)			

[a] Data are presented as No. (%).
[b] Abbreviations: df, degrees of freedom; AIDS, Acquired Immunodeficiency Syndrome; HIV, Human Immunodeficiency Virus.

Mental health problems were not associated with the age groups in our study, while a number of studies showed an association with younger age and older age (10). Moreover, Noorbala (2011) also showed that risk of mental disorders increased with age (9). Moreover, our study also didn't find an association between education level and mental health disorders. This was consistent with other studies. One study in Nigeria also indicated no relationship between the level of education and mental problems (11), while people with higher education tended to have fewer mental disorders in Switzerland (12). Although level of education might have a high influence on physical and mental health, one may declare that due to the features of some acute diseases such as AIDS and cancer, level of education might have little influence on the mental health status of cases with HIV/AIDS.

Our study indicated that there was no association between mental health disorders of people with HIV/AIDS and marital status. One study in Kenya and Zambia, showed that married adolescent girls in urban centers

had higher rates of HIV infection than do sexually active unmarried girls due to many reasons, such as the unprotected sex with partners that is the decrease in condom use (13). Maybe due to the cultural variance of the Iranian population and the limitations in premarital sex, the number of married HIV/AIDS individuals was lower than unmarried cases in Iran.

Mental health disorders in people with HIV/AIDS living in rural areas and small towns have been shown to be higher than urban areas due to many reasons, such as the reduced access to medical and mental health care (14, 15), while our study showed no relationship between place of living and mental health disorders. Although further studies on large number of subjects is required to see if there is a relationship between the place of living and mental health disorders in Iran, the place of living may have a weak relationship with mental health disorders in Iranian population.

Further research should be carried out in other areas of Iran to identify factors related to mental health disorders of patients with HIV/AIDS.

In conclusion, the prevalence of HIV/AIDS people with mental health disorders was high in the studied subjects. This study may have some important implications for clinical management of patients with HIV/AIDS in Iran. Psychiatry and mental health disorders in people with HIV/AIDS may impair quality of life. It seems essential to actively identify and manage those individuals at risk and with common mental disorders. Health authorities should facilitate easy access to psychiatric care and supports and use of health services for patients with HIV/AIDS. More attention and budgeting and resource allocation might be required to decrease the mental health problems of people living with HIV/AIDS.

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Authors' Contributions

All authors developed the original idea and the protocol, collected, abstracted and analyzed the data and wrote the manuscript.

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