

## Kousha A, et al., *J Anal Res Clin Med*, 2014, 2(3), 94-8. doi: 10.5681/jarcm.2014.016, http://journals.tbzmed.ac.ir/JARCM



#### **Original Article**

# Homelessness, unemployment, and divorce among human immunodeficiency virus infected subjects in Tabriz, North West of Iran, 2012

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### Article info Article History:

Received: 09 May. 2014 Revised: 17 May. 2014 Accepted: 29 June. 2014 ePublished: 31 Aug. 2014

#### Keywords:

Human Immunodeficiency Virus, Acquired Immune Deficiency Syndrome, Tabriz (Iran)

#### **Abstract**

Introduction: Human immunodeficiency virus (HIV) attains high importance, because of its high fatality, disability, political, and socio-economic impacts. Individuals living with HIV infection are poorly affected in terms of their psychological and socioeconomic aspect of quality-of-life. The aim of this study was to identify residence, marital, and employment characteristics of HIV infected subjects and to compare these characteristics prior of getting infection.

*Methods:* This study was cross-sectional, conducted on 64 HIV infected subjects referring the Counseling Center of Behavioral Disease in Tabriz, Iran, 2012. Required data were collected using self-administered questionnaire, which was validated by experts and reliability was ensured through respondent validity method. Finally, data were analyzed with the help of SPSS for Windows.

**Results:** The result showed that 89.0% of patients were male. Mean age of participants was  $37.00 \pm 8.84$  years. Homelessness rate was 0.0% before acquiring infection when compared to 7.8% afterwards. The rate of unemployed was 3.8% that raised up to 62.5% after infection. Finally, it could be said that, after infection, divorced subjects increased from 0 to 27.6%, respectively.

*Conclusion:* The findings showed that, homelessness, unemployment, and divorce have increased dramatically among HIV infected subjects.

Citation: Kousha A, Shokri A, Safiri S, Saqib Lodhi F, Hakimi S, Abbasi Ghahramanloo A. Homelessness, unemployment, and divorce among human immunodeficiency virus infected subjects in Tabriz, North West of Iran, 2012. J Anal Res Clin Med 2014; 2(3): 94-8.

#### Introduction

Among many factors threatening human health, human immunodeficiency virus (HIV) infection, having high prevalence, incidence, disability, years of potential life lost, long incubation period and global epidemic, is considered as important health problem.<sup>1,2</sup> It can be said that, HIV affects political, social,

and health status of countries.<sup>3</sup> This disease leads to unemployment, poverty, orphaned child, divorce, and huge burden on medical care.<sup>4,5</sup>

From the psychological aspect, these people are confronted with many limitations in social and cultural contexts. HIV infected person often face with in his personal

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problems,<sup>6,7</sup> as well as in social life. A study has been carried out by Ramos-Gomez on 1400 HIV infected subjects in four countries of Sub-Saharan Africa found that, in comparison with healthy people, these subjects had low quality of life psychological, social, and economic aspects.8

In another study that has been done in Lorestan, Iran, Massoudi and Farhadi found that, infection with HIV/acquired immune deficiency syndrome (AIDS) has led to unemployment and divorce in 94.6% and 84.6% of subjects, respectively. Occurrence of such crises with reduced family support can lead to decreased motivation in prevention of HIV by subjects and increases the risk of infection spreading.9 On the other hand, unemployment and financial needs are the main risk factors for sex workers, both in males and females population.3

With increasing the quality of life in these infected persons, many of these problems could be prevented. According the study has been done by Nojoomi and Anbari providing job opportunity, financial supports specially for wives of infected person, and job security for infected subjects could led to betterment of quality-of-life.10 The aim of this study was to determine the changes of demographic status in some HIV infected subjects in Tabriz, Iran.

#### **Methods**

This study was cross-sectional, conducted on 64 HIV infected subjects referring to Counseling Center of Behavioral Disease in Tabriz, Iran, 2012. Sampling method was Self-administered census. questionnaire including three parts (housing, job, and marital status before and after acquiring HIV infection), were used to collect data.

For the validity of the instrument, modifications were done based on the feedbacks receiving from experts. Respondent validity method were used for assessing the validity and reliability of questionnaire, so that, during the interview, the level of the understanding by the interviewer from statements given by interviewee was being written at that time,

followed by these statements were returned back to interviewee for the final confirmation. Verbal informed consent were obtained from all the study participants, except six subjects, who failed to give consent and thus excluded from the study. The obtained data were analyzed by using SPSS for Windows (version 16, SPSS Inc., Chicago, IL, USA).

#### **Results**

Sixty-four HIV infected subjects were included in the study, 89.1% (57) were male. Mean age of participants was  $37.00 \pm 8.84$ years. Educational level was ranged from illiteracy to diploma, (illiteracy = 10.9%; elementary = 62.2%; and diploma = 26.6%). Their mean age at marriage was  $22.60 \pm 5.32$ years,  $(\min = 16, \max = 36)$ .

All the participants expressed that they were infected by sexual contacts with their husbands, whereas male participants reported to get infection mostly from intravascular drug use (73.7%), sexual contact (7.0%) and from other methods (7.0%). Remaining subjects were unaware of the cause of virus transmission. It is important to be noted that, monthly income of the majority of subjects (82.8%) were lower than 250000, and remained subjects had monthly income ranged from 250000 to 500000. According to respondents, unemployment rate prior to HIV infection was 3.8%, which later raised up to 62.5%. Similarly, before getting HIV infection none of the participants were homeless. Data also showed that divorced rate increased from 0.0 to 27.6% after HIV infection (Table 1).

#### Discussion

This study was carried out among HIV infected subjects and its aim was to assess the effect of HIV infection on their marital status, job, and housing. Findings of the study indicated that, 73.0% of subjects had educations lower than diploma and were infected by shared needles. HIV affects all of the aspects of life such as physical, psychological, and spiritual. Furthermore, Family members of HIV subjects may also be affected. Some studies have indicated that,

infections to HIV have been led to unemployment, divorce; and occurrence of such crises in presence of poor support of family, Demotivate people with HIV infection.<sup>11</sup>

Table 1. Description of measured variables before and after the being infected to human immunodeficiency virus

	Time of being infected		
Variable	Scale	Before	After
		Number (Percentage)	
Job	Unemployed	2 (3.8)	38 (62.5)
	Self-employed	21 (32.1)	7 (10.4)
	Worker	3 (5.7)	7 (10.4)
	Others	37 (58.3)	12 (18.7)
Housing			
	Homeless	0(0.0)	5 (7.8)
	Renter	6 (8.7)	17 (31.2)
	Homeowner	5 (7.5)	6 (6.3)
	Parental home	36 (81.1)	35 (53.1)
	Others	3 (5.7)	1 (1.6)
Married status	a. 1	25 (40.5)	25 (40.5)
	Single	26 (40.6)	26 (40.6)
	Married	38 (59.4)	21 (32.8)
	Divorced	0(0.0)	17 (27.6)

Due to stigmatization and fear of being excluded from their family, people with HIV infection try to hide the disease, which in turn becomes one of the major causes of infection transmission.<sup>11</sup> In this study, unemployment rate was high. According the studies has been done by Johnson et al. (72.0%),<sup>11</sup> Bazvand and Mehdipoor Khorramabad, Iran, (50.0%),12 and Khalatbari and Bazarganiyan in Gilan, Iran, (46.6%),13 unemployment rate was high. Studies has been done by Millan and India Ivory, Gine No;14 Webb and Simon, Northern Namibia;15 Cohen , Southern Africa;16 and Vitry-Henry et al.,17 have reported 40.0, 47.0, 39.0, and subjects as unemployment, of respectively. Studies have been done in Iran and foreign countries, are concordant with our study (62.5%). Discrimination, fatigue, and successive hospitalization could be considered factors related unemployment.18

For addressing this problem, not only employers should not consider the discrimination in hiring and promotion, but also they should consider modifications in condition of these subjects.<sup>17</sup> It is important to

be noted that, age of HIV infected subjects were in 15-49 years old, and unemployment in this active period of life have considerable effect on socioeconomic status. A study in India showed that, after diagnosing HIV infection in employers and that leads to end it having no jobs and that result in borrowing the money, and selling the household items for their survival.<sup>19</sup>

While, employed subjects, have good quality of life than unemployed ones. In fact, income affecting by job, promote the quality of life in subjects. Hence, employment and financial support especially for wives of subjects, and job security are factors promoting the quality of life. Regular access to care, effective using of antiretroviral drugs and some other services can promote the quality of life among HIV infected subjects; whereas, in the homeless HIV infected subjects, services could not be accessed due to their bad financial situations. <sup>20</sup>

Studies have been done that showed HIV infected subjects have high probability for homelessness. So that, a study has been done by Song, Los Angeles, found that about the 50.0% of HIV infected subjects have probability of homlessness.<sup>21</sup> Furthermore, Ospina and Foldy found that, if the needed facilities would not be provided, more than 44.0% of subjects will be homeless.<sup>22</sup> National Alliance to End Homelessness estimates that 3.4% of homelessness subjects were HIV positive,<sup>23</sup> and based on another reports from that union, 50.0% of HIV/AIDS infected were in risks of holelessness.<sup>24</sup>

According the studies of AIDS Housing of Washington, about 40.0% of HIV infected subjects had experienced homelessness at least one time,<sup>25</sup> and after infection to HIV, 7.8% added to homelessness subjects that lived in shelters. Unfortunately these subjects are not suitable for bathing and sleeping, and these conditions increases the probability of sexual contact, drug abuse and high risk behaviors.<sup>26</sup> The more important issue is that, homeless subjects have not enough access to health and educational services, and one study found that, survival of homeless HIV infected subjects were shorter than non-homeless

ones.<sup>27</sup> It is said, HIV and homeless are twin plagues make further difficulties in alleviating both conditions.<sup>18</sup> Studies have shown that, homelessness is related with many chronic health problems including: Drug abuse, psychological disorders, physical and sexual violence, and infectious diseases like the tuberculosis. Homeless subjects in comparison with another subjects, have more risk for infection to HIV (3-9 times), and are communicated with multiple sexual partners and unprotected sexual contacts.<sup>20</sup>

Therefore, delivering the health services and preventive measures to homeless subjects is important step in public health. Subjects infecting to HIV and their relatives may confront with emotional, social, problems. behavioral, and physical Relationship with mate, social status, sexual performance, iob, education, religious believes, and many characteristics may be changed, and these impose the high burden of the HIV infection. Whether it should be mandatory to text for HIV before marriage or optional is questionable. Some believes that, HIV infected subjects should not marry, and some of them express that, it is right of the mate to be informed of infection of her/his spouse.

Studies have shown that, married subjects sometime use condom as preventive strategy for HIV, while majority of females were loyal to mutual commitment. Partner is having extramarital relationships further increase HIV transmission. In worldwide, women are at risk of HIV through the relationship with their mates.<sup>28,29</sup> So, the protection of women's

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right in marriage and divorce is integral component of preventive strategy among women. In some studies, all of the women were infected by their infected mates. The mate of infected subject believed that, the only way to remain protected from HIV is divorce.<sup>30,31</sup> While this method may not be effective strategy for prevention of HIV infection, because divorcing increases the risk of unprotected sexual contact among the infected subjects.<sup>31</sup>

Gillespie in South Africa found that, rate of divorce in HIV infected subjects is 14.0% higher than common population, and divorce rate was 13.5 and 4.4% for females and males, respectively.<sup>32</sup> Our results about divorce rate is concordant with studies has been done by Bazvand and Mehdipoor. (12.7%);<sup>12</sup> Etemad et al. (22.2%);<sup>3</sup> Khalatbari and Bazarganiyan (23.3%);<sup>13</sup> and Nojoomi and Anbari (23.0%).<sup>33</sup>

#### Conclusion

The present study shows that, homelessness, unemployment, and divorce is more common among HIV infected subjects than general population, and this could accelerate the spread of infection. This study suggests that, officials in their visions, prevent unemployment of infected subjects due to psychological and physical disabilities, and with creating educational courses encourage them for getting new skills and jobs. Also with supporting infected subjects and their relatives, prevent them from homelessness and divorce.

#### **Conflict of Interests**

Authors have no conflict of interest.

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