

A Study of the Attitude of AIDS Patients Regarding Mass Media and its Impact on Patients' Anxiety

¹Mohammad Mahboubi, ¹Babak Rastegari Mehr, ¹Zinab Mirzai Dostan,
¹Atefeh Zahedi, ¹Sasan Ghorbani Kalkhaje and ²Mohsen Mohammadi
¹Student Research Committee, Abadan School of Medical Sciences,
Abadan University of Medical Sciences, Abadan, Iran

²Student Research Committee, Kermanshah University of Medical Sciences, Kermanshah, Iran

Abstract: This study was conducted with the aim of exploring the impact of mass media on AIDS from the perspective of individuals with AIDS and its impact on the anxiety of these individuals in the city Abadan. This cross-sectional study was conducted on individuals with AIDS in a sample of 15 individuals. The sampling was done using convenience method and included all individuals that had AIDS and were willing to participate in the study. The data collection tool was questionnaire. In this study most of the participants were female (71.4% female against 26.7% male) and in the 30-40 years old age group (60%). About 42.9% of the participants. A higher percentage of the women had anxiety, compared with men. The mean and standard deviation of the extent of dealing with AIDS by the mass media were 11.46 ± 3.77 . The extent of using AIDS related media programs was 13.53 ± 4.56 . As the mass media has an important role in giving information to people and increasing the knowledge of people including AIDS patients and as knowledge can be accompanied by reduction of anxiety, it is recommended that some actions be done for production of educational programs on AIDS and the ways for coping with stress in different groups of people in the society.

Key words: AIDS, mass media, anxiety, groups, Iran

INTRODUCTION

Acquired immune Deficiency Syndrome (AIDS) is the most advanced stage of infection with Human Immunodeficiency Virus (HIV). HIV is a retrovirus that infects, destroys or makes dysfunctional the immune system cells. When the infection becomes advanced the immune system becomes weaker and the individual is more exposed to infections. The progress of HIV infection into AIDS can take 10-15 year. The consumption of antiviral medications can make this process slow. HIV can be transmitted through unprotected sexual intercourse, infected blood, using contaminated syringe, from mother to child during pregnancy, childbirth and breastfeeding.

About 78 million individuals have been infected with HIV and about 39 million individuals have died, since the outbreak of AIDS. About 35 million individuals with HIV lived in the world in the year 2013. It is estimated that 0.8% of the adults ages 15-49 in the world have HIV. Although, the extent of this disease has changed in different regions, the disease is highly prevalent in sub-Saharan Africa where about 1 in every 20 adults has AIDS which is nearly 70% of the cases of AIDS in the world.

Based on the statistics provided by WHO there are 80,000 individuals with HIV in Iran (Fallahi *et al.*, 2014). Based on the statistics provided by WHO the number of infections with HIV in Iran has almost doubled from 2001-2007. About 65% of the individuals with AIDS in Iran are injection drug users (Haghdoust *et al.*, 2010). According to a report by Iran's Ministry of Health which was presented in 2013 most cases of HIV transmission have been by needle sharing and sexual intercourse, respectively (Haseli *et al.*, 2014).

Considering the statistics of the individuals with HIV in Iran, paying attention to programs for prevention of transmission of the disease through sex is necessary in order to prevent another wave of the epidemics of the disease (Fallahi *et al.*, 2014).

Though the affliction with HIV is decreasing in some countries, it is an increasing trend globally and it has become a health, social, economic, cultural and political challenge in human societies. The prevalence in the total population is <1% but it has reached 5% in some high-risk groups such as injection drug users. Paying attention to individuals with HIV, identification of high-risk groups and paying attention to AIDS epidemics in the country and the changes of its pattern over time are highly important for effective management and planning for

prevention and control of HIV. Despite the increase of knowledge on HIV, there is no precise statistics on the prevalence of HIV in many countries including Iran and this problem can be explained by the long incubation period and the iceberg characteristic of this disease (Haghdoost *et al.*, 2011).

Correction of the necessary guidelines for achieving a generation free from AIDS is unique for any country. However, some evidence-based guidelines are common for many countries. These include: reviewing the guidelines of early start of antivirus treatment, taking measures for prevention of transmission of AIDS from mother to child, keeping all HIV positive women alive and healthy and increase of annual budget for HIV programs (Lane *et al.*, 2016).

Prevention is one of the most important and a major factor in dealing with HIV epidemics in the world and one of the obstacles for prevention is the lack of knowledge on AIDS and its transmission ways. As a high percentage of the Iranian population is in the age range of 15-49 years old, the implementation of continuous and purposeful educational programs for prevention of the increasing trend of HIV transmission is highly necessary (Haghdoost *et al.*, 2010). Mass media has had significant efforts in the knowledge of people on AIDS including its transmission ways and its prevention in a way that currently over 90% of the population know the basic facts on AIDS. Most media programs so far have been focused on the general or the young population but this special attention has not been paid to high-risk groups (Bertrand *et al.*, 2006).

As the increase of knowledge can impact the individual's anxiety level, the present study aimed to explore the role of mass media in the knowledge of individuals with AIDS in the city Abadan and to explore the status of anxiety in individuals with AIDS and the relationship between these factors.

MATERIALS AND METHODS

This cross-sectional analytical study was conducted on 15 AIDS patients with the aim of exploring the impact of mass media on AIDS from the viewpoint of the individuals with aids and also its impact on anxiety of these patients in the city Abadan. The sampling was done using convenience sampling and the sample included all individuals who were willing to participate in this study and who visited the Center for Behavioral Diseases for receiving services. Only those individuals were selected who had entered the stage of AIDS diseases ($CD4 \leq 200$). The form of confirmation of the disease for these individuals verified by a specialist doctor was in the

files of these individuals. The individuals were assured that the participation in the study was optional and that their information will be confidential. The study tools employed for this study were two questionnaire titled "the impact of mass media on AIDS and multidimensional anxiety questionnaire. The questionnaires were given to the participants and completed by them after they were given necessary information about the objective of the study. The AIDS anxiety dimensions questionnaire consisted of 39 questions and the following dimensions: physiological arousal (10 questions), cognitive worry (9 questions), sexual inhibition (8 questions), avoiding the discussion of AIDS (6 questions) and fear of AIDS (5 questions). The scoring was done using a 4-point Likert-style scale (it is completely my characteristic (score 4) and it is not my characteristic at all (score 0)) in a way that a higher score in any section indicated a higher level of anxiety in the individual. The reliability and validity of this questionnaire was explored and verified by Eskandari *et al.* (2014). Its reliability was explored and verified in this study too (Cronbach's alpha = 0.96). The questionnaire for the assessment of the impact of mass media on AIDS included the following dimensions: the amount mass media deals with the subject of AIDS, the amount of using media programs related to AIDS, the type of the mass media for gaining knowledge on aids and the format of the media programs. Scoring was done using a 5-point Likert-style scale (very low, score 1; very high, score 5). In order to explore the validity, the questionnaire was given to 5 experts and was verified by them. The reliability of this questionnaire was explored and verified using Cronbach's alpha (0.88). The demographic information of the individuals such as age, sex and level of education were also explored.

The collected information was coded and entered into SPSS. Data analysis was done using appropriate statistical tests such as descriptive statistics (mean and standard deviation, percentage and frequency), Chi-square and logistic regression.

RESULTS AND DISCUSSION

About 15 patients with HIV and AIDS were explored in this study. Most of the participants were female (71.4% female against 26.7% male) and in the age group 30-40 years old (60%). Most of the participants (84.6%) had an education level of below diploma. One of the factors that was explored in this study was the prevalence of anxiety in the participants. The results indicated that 42.9% of the participants had anxiety. The prevalence of anxiety was 25% in men and 50% in women. 25% of the individuals aged under 30 and 50% of the individuals

Table 1: The relationship of anxiety with age and sex

Variables	OR	95% CI	df	p-value
Age	3	0.22-39.6	1	0.4
Sex	3	0.22-39.6	1	0.4

Table 2: Mean and standard deviation of anxiety dimensions

Anxiety dimensions	Physiological arousal	Cognitive worry	Sexual		
			inhibition of AIDS	Avoiding discussion	Fear of AIDS
Mean±SD	26.71±7.98	8.01±2.5	5.2±20.3	5.08±14.3	4.14±13.42

Table 3: The relationship between the amount of using mass media and anxiety

Variables	OR	95% CI	df	p-value
The amount of using mass media	0.7	0.49-1	1	0.05

aged over 30 had anxiety. The relationship of anxiety with age and sex was explored by no significant relationship was observed (Table 1). The mean of anxiety dimensions which included physiological arousal, cognitive worry, sexual inhibition, avoiding the discussion of AIDS and fear of AIDS was explored (Table 2). Another factor that was explored in this study was the impact of mass media on AIDS which included several domains. The results indicated that the mean and standard deviation of the amount of dealing with the subject of aids by mass media were 11.46±3.77 they were 9.75±3.3 and 12.4±4.08 for males and females, respectively. The amount of using media programs related to AIDS was 13.53±4.56 which was higher in women than in mean (14.5±4.76 vs. 11.5±4.43). The type of the media used for obtaining knowledge was also explored in this study. The amount of using TV and satellite channels was 40%, virtual media and internet 13.3% and seminars was 46.7%. The type of the media programs that were used for obtaining knowledge by the participants more were: documentary (33.3%), interview (26.7%) and educational advertisement and news (20% each). Based on sex, these results were documentary (25%), interview (50%) and educational advertisement (25%) in men and documentary (40%), news (30%) and interview (20%) and educational advertisement (10%) in women. The study of the relationship between the amount of using mass media and anxiety indicated that with the increase of the amount of using mass media the anxiety level is decreased (Table 3).

Young individuals are at a higher risk of AIDS globally. Therefore, training preventive methods is one of the main factors in reduction of the risk of infection with HIV in young individuals (Sayede *et al.*, 2009). In this study, the amount of dealing with the subject of AIDS by the mass media was explored from the viewpoints of those with AIDS and the results indicated that the main sources of obtaining information from the perspective of individuals with AIDS were seminars (46.7%) and TV (40%). This issue has been explored in different studies

and in different groups and the results of them are consistent with those of the present study and some of these studies are pointed out below. In a study that was conducted on students it was revealed that TV, newspapers, magazines, pamphlets and books were the sources that provided highest amount of information on AIDS (Majidpour *et al.*, 2006). The results of a study that was conducted on the spouses of self-referred addicts indicated that the sources that provided more information on information about AIDS were: mass media, health staff and friends and acquaintances (Niknami *et al.*, 2007). In a study that was conducted on students the source of obtaining information on AIDS were: the mass media (TV, internet, radio, book, journals, friends and acquaintances, educational resources, seminars and public sessions, Persian magazines and books) and, among these, radio, TV and satellite channels were the main sources for obtaining information on AIDS (Sadeghi *et al.*, 2012).

In a study that was conducted in the medical and health centers it was revealed that radio and TV were the main sources for obtaining information on HIV and AIDS (Jafari *et al.*, 2007).

The main sources for gaining information from the perspective of soldiers in a training unit, who can be at risk due to lifestyle, were: the related lessons and teachers (85.3%), family, friends and acquaintances (75.4%), newspapers and magazines (68.8%) and radio and television (30.8%) (Mazloumi and Abbasi, 2005).

In a study by Nasri in Sudan, the main sources for gaining information on AIDS and HIV were speech (61%), radio and television (44%) and medical staff (39%). In several other studies television has been the main source of obtaining information on AIDS (Majidpour *et al.*, 2006; Sadeghi *et al.*, 2012; Mohammadpour and Poosh, 2005; Niknami *et al.*, 2005; Mozafar and Vahdaninia, 2008). In the study by Rafsanjani *et al.* (2013) family (1.62%) had the lowest share in providing information.

In this study documentary was the most frequently used program. In the study by Majidpour, among the TV programs, speech (32.1%) and among the visual educational advertisements, poster (73%) had the greatest share in increasing knowledge of individuals (Majidpour *et al.*, 2006).

One of the other variables that was explored in this study was anxiety. The prevalence of anxiety disorders in HIV positive individuals has been estimated to be over 38%. One of the main sources of anxiety in these individuals is the fear of death (Basu *et al.*, 2005). In the study by the prevalence of anxiety in HIV positive individuals was reported to be 30.5% (Qiu *et al.*, 2014).

About 43% of the participants had anxiety in the present study. A higher percentage of women had anxiety, compared with men. The study of the relationship between anxiety and the use of mass media indicated a positive relationship.

CONCLUSION

As the results of the present study and those of other studies indicate that mass media has an important role in providing and increasing individuals' knowledge and as knowledge can impact individuals' preventive behavior and thus their level of anxiety, it is recommended that some actions be done for production of educational programs on AIDS and the ways for coping with stress in different groups of people in the society.

ACKNOWLEDGEMENTS

This study is the result of the research design with the ethical code IR.ABADANUMS.REC.1394.40. Also, the researchers thank all individuals who cooperated in this study.

REFERENCES

- Azizi, A., F. Amirian and M. Amirian, 2008. Effects of peer education, education by physician and giving pamphlets on HIV knowledge in high school students: A comparative study. *J. Hayat*, 14: 5-12.
- Basu, S., L.A. Chwastiak and R.D. Bruce, 2005. Clinical management of depression and anxiety in HIV-infected adults. *Aids*, 19: 2057-2067.
- Bertrand, J.T., K. Oreilly, J. Denison, R. Anhang and M. Sweat, 2006. Systematic review of the effectiveness of mass communication programs to change HIV/AIDS-related behaviors in developing countries. *Health Educ. Res.*, 21: 567-597.
- Eskandari, N., Z. Alipour, M. Lamyian and T.A.E.H.A.I. Ahmari, 2014. Reliability the persian version of multidimensional AIDS anxiety questionnaire-(MAAQ-P) in Iranian student population. *J. Res. Behave Sci.*, 11: 448-454.
- Fallahi, H., S.S. Tavafian, F. Yaghmaei and E. Hajizadeh, 2014. Perceived susceptibility to aids in men living with HIV: A qualitative research. *Payesh*, 13: 357-365.
- Haghdoust, A.A., E. Mostafavi, A. Mirzazadeh, S. Navadeh and A. Feizzadeh *et al.*, 2011. Modelling of HIV/AIDS in Iran up to 2014. *J. AIDS HIV Res.*, 3: 231-239.
- Haghdoust, A., A. Pourkhandani, P.S. Motaghi, B. Farhoodi and N. Fahimfar *et al.*, 2010. Analysis of knowledge and attitudes towards HIV and AIDS in Iranian population: Systematic review and meta-analysis. *Iran. J. Epidemiol.*, 6: 8-20.
- Haseli, N., F. Esmaealzadeh, F. Ghahramani, Y. Alimohamadi and R. Hayati *et al.*, 2014. Health-related quality of life and its related factors in HIV+ patients referred to Shiraz behavioral counseling center, Iran in 2012. *Med. J. Islamic Republic Iran*, Vol. 28,
- Jafari, F., N. Kholdi, N. Falah and A. Mahmudpour, 2007. Factors associated with knowledge and attitude about AIDS. *Bimonthly Off. Publ. Med. Daneshvar*, 14: 1-8.
- Lane, J., A. Verani, M. Hijazi, E. Hurley and A. Hagopian *et al.*, 2016. Monitoring HIV and AIDS related policy reforms: A road map to strengthen policy monitoring and implementation in PEPFAR partner countries. *PloS One*, Vol. 11,
- Majidpour, A., S. Habibzadeh, F. Amani and F. Hemmati, 2006. The role of media in knowledge and attitude of students about AIDS. *J. Ardabil Univ. Med. Sci.*, 6: 67-72.
- Mazloumi, M.S. and S.M. Abbasi, 2006. Knowledge and attitude survey of high school students of Yazd province of Iran about HIV/AIDS. *Zahedan J. Res. Med. Sci.*, 1: 53-63.
- Mohammadpour, M.A. and E.M.H. Poosh, 2005. The survey of knowledge and attitude of a training unit soldiers about HIV/AIDS in a central district of Iran. *J. Mil. Med.*, 7: 101-107.
- Mozafar, Z.S. and M. Vahdaninia, 2008. AIDS literacy among female high school students: A cross-sectional study from Iran. *Payesh*, 7: 173-180.
- Nasir, E.F., A.N. Astrom, J. David and R.W. Ali, 2008. HIV and AIDS related knowledge, sources of information and reported need for further education among dental students in Sudan-a cross sectional study. *BMC. Public Health*, Vol. 8, 10.1186/1471-2458-8-286
- Niknami, S., A. Hatami and A. Heidarnia, 2007. The effect of health educational program on preventing AIDS in self-reported addicts wives (Kermanshah 2004). *J. Kermanshah Univ. Med. Sci.*, 11: 120-129.
- Qiu, Y., D. Luo, R. Cheng, Y. Xiao and X. Chen *et al.*, 2014. Emotional problems and related factors in patients with HIV/AIDS. *J. Cent. South Univ. Med. Sci.*, 39: 835-841.
- Rafsanjani, P.L., A. Ravari, M. Rezaeian and J. Akbarinasab, 2013. Sources of information, about aids transmission and prevention in non medical students in rafsanjan (2011). *J. Rafsanjan Univ. Med. Sci.*, 12: 46-56.
- Sadeghi, L.N., J.H. Sedghi and K. Ahmadi, 2012. The role of mass media in awareness and prevention of AIDS among students. *Med. Stud. J.*, 8: 119-132.
- Sayede, S.K., 2009. High school students knowledge and attitude about AIDS-Ferdows 2008. *Mod. Care J.*, 5: 40-45.