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Comparison of HIV- Related Stigma in People with Substance Abuse and Health Care Providers

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Abstract

Human immunodeficiency virus is one of the most severe perils of modern times people affected with this virus face strong stigma. Stigma leads to discrimination and stress which adversely affect their quality of life and creates obstacles in treatment. Present study aimed to explore HIV related stigma in individuals with substance abuse problems and their health care providers. For this purpose a sample of 155 participants was studied including 95 individuals getting treatment for substance abuse and 60 healthcare providers working in the substance abuse rehabilitation units. The sample was selected through non probability purposive sampling and included both male (n= 104) and female (n= 51) participants. Healthcare providers showed significantly higher levels of HIV stigma ($p<0.01$) than individuals with substance abuse. Findings also revealed significant gender difference ($p<0.01$) with females scoring significantly higher on stigma scale compared to male participants. Results also showed some interesting associations between HIV stigma and personal demographic variables. The findings were discussed with reference to international and local research context.

Key words: *HIV/AIDS, Stigma, Substance Abuse, Healthcare Providers.*

Introduction

Human immunodeficiency virus (HIV) which causes an immune system disease Acquired immunodeficiency syndrome (AIDS) has been around for many decades and is described as one of the deadliest diseases of modern times. There are various modes of transmission of HIV from one human to another. Unprotected sex, transfusion of infected blood, shared needles and transmission from mother to infant are the main modes of spread of this virus (Babaei et al., 2019). The modes of transmission differ significantly across countries (Babaei et al., 2019), in Pakistan unprotected sex and sharing needles has become one common mode of rapid spread of HIV (Khan et al., 2018). Although, Pakistan has observed significant increase in the number of confirmed HIV/AIDS cases in past few decades, people still lack even basic knowledge of the condition and its modes of transmission.

The prevalence of HIV /AIDS epidemic in general population of Pakistan is less than 0.1% (Wali et al, 2019). However, the reliability of reported data is frequently challenged and real rates of HIV in Pakistan are believed to be much higher. Main reasons of under- reporting of HIV rates in Pakistan includes but not restricted to threat of social stigma, social isolation and lack of knowledge about HIV (Haider et al., 2019). Governments throughout the world have invested many resources to reduce the stigma and discrimination against HIV in general public, yet people living with HIV and their caregivers often report experiencing stigma and discrimination (Stringer et al., 2016).

Stigma against people living with HIV can be of different forms but prejudice, avoidance, stereotypical perception, social rejection, segregation, social devaluation, discrimination, intolerance and violence are most common expressions of stigma (Parker & Aggleton, 2003) particularly manifested in developing countries (Genberg et al., 2008; Vorasane et al., 2017). HIV related stigma can be perceived or internalized stigma, both these types are related yet distinct and each type may possibly influence wellbeing through distinct mechanisms (Earnshaw et al., 2013).

Stigma is a complex phenomenon and a set of various personal characteristics such as age, gender, religion, ethnicity, social status and disability contribute significantly to the complexity of stigma (Li et al., 2020). Considerable research based evidence describes rural areas (Vlassoff et al., 2012) lack of education and poor households as associated with higher stigma towards HIV (Amuri et al., 2011; Tenkorang, & Owusu, 2013). Other than the personal characteristics, HIV-related stigma also comes from a powerful blend of fear, shame (Piot, 2001), lack of knowledge and misconceptions regarding modes of transmission of HIV and protective practices (Amuri et al., 2011; Tenkorang, & Owusu, 2013).

Process of stigma usually operates on three levels namely micro (like beliefs and attitudes), meso (social and community norms) and macro (policies and laws, health and social service systems) (Logie et al., 2011). This multilevel nature and interaction with various other forms of stigma increase the complexity of HIV related stigma many folds making it hard to understand and identify.

Stigma and discrimination are frequently described as significant obstacles in identification and treatment of HIV/AIDS and reported to have strong adverse effects on quality of life of people living with HIV (Ugarte, et al., 2013). Stigma mostly lead to negative attitudes and even rejection of people with HIV and their family members because of which many people living with HIV/AIDS avoid getting tested and do not disclose their status and therefore make people around them more vulnerable ((Logie et al., 2011; Ugarte, et al., 2013). HIV related stigma may also easily result in homophobia and transphobia which is likely to end even in violent attitudes towards people living with HIV and their families. Because of stigma it is more difficult to build social support due to the social threats involved such as loss of relationships, incomes, and further disclosures of one‘s illness for those people which are suffering with HIV-related stigma.

Though, world has witnessed many fold increase in prevalence of HIV/AIDS, people generally lack significant knowledge about it and many misconceptions are clouded around it (Haider et al., 2019). Lack of knowledge and high stigma is not only reported in general public but also among health care providers (Khalil et al., 2015; Noman et al., 2015).

From past few decades, Pakistan has witnessed substance abuse as a fast growing problem, leaving serious impact on well-being of individuals, families, and communities. Individuals involved in substance abuse and their families face lots of stigma and discrimination in Pakistan and being at high risk of HIV makes these groups more vulnerable to discrimination. Although, substance abusers remain at a very high

risk of HIV, they and their families generally lack knowledge about transmission of HIV/AIDS and also hold stigma related to HIV.

Health care providers are expected to provide support to people living with HIV to ensure better quality of life and to help decrease the HIV related stigma. However, literature has extensively documented HIV related stigma among health care providers which many at times is associated with severe cases of medical discrimination against people living with HIV and their families. (Banteyerga et al., 2005). In Pakistan, the rapidly increasing trend of using needles among substance population has significantly increased the vulnerability of many towards HIV/AIDS. This serious situation requires to not only study the spread of HIV but also different aspects likely to influence quality of life of those who have contracted the virus. Stigma is one very important problem directly contributing to quality of life and services available to HIV infected people and their families that present study attempted to find answers to some very relevant questions. The questions were whether substance abusers and their healthcare provider held any stigma against HIV, if the two groups differed in their stigma believes about HIV and what were the demographic variables that were significantly related to HIV stigma? Accordingly, present study was designed in the light of literature and significance of this topic as discussed earlier with the focus on following objectives.

1. To assess HIV related stigma in substance abusers and their health care providers.
2. To compare the HIV related stigma in substance abusers and their health care providers.
3. To explore the relationship of HIV related stigma with significant demographic variables in substance abusers and health care providers.

Literature Review

Many researchers have shown interest in studying the factors associated with HIV in order to develop better understanding in this complex phenomenon affecting not only the lives of those affected by it but also those who provide care to them. HIV related stigma is one pertinent factor strongly affecting various aspects of lives of people living with AIDS and their care providers and is an area of interest for many researchers.

Stringer et al. (2016) studied HIV stigma among health care providers in America and concluded stigma as an important barrier to quality treatment. A large majority of their sample reported to have at least one stigmatizing attitude. They also reported male gender, white race and protestant religion having the highest stigma scores compared to other participants in the relevant cohort. They didn't observe any significant differences in stigma with reference to education and age.

Yin et al. (2021) provided a different cultural context of factors associated with HIV stigma by studying it in Chinese nurses. They assessed HIV related stigma in a sample of nurses selected through random cluster sampling from Liangshan, China. They found significantly higher scores of stigma in nurses working in tertiary hospitals, having higher education and more clinical experience. They highlighted the significance of culturally congruent training of HIV care and knowledge. These findings are somewhat different from findings of studies conducted in Africa and America which had reported positive association of education and clinical experience with lower levels of HIV/AIDS stigma.

Dong *et al.* (2018) had studied HIV stigma in 972 Chinese healthcare providers. They reported that most of the healthcare providers were involved in medical discrimination against people living with HIV. They described administering procedures without consent, refusing treatment, disclosed information and differential treatment as common forms of discriminatory practices employed by the research

participants. Low HIV knowledge, dissatisfaction with occupational protective procedures and fear of getting HIV from patients were identified as significant predictors of medical discrimination against HIV people in this sample.

Li et al., (2020) studied the influence of multilevel stigmatization on mental health of people living with HIV and using drugs in Vietnam. They used structural equation modelling to assess the associations of different layers and forms of stigma with mental health status. They found that people living with HIV and drug use experienced internalized and perceived stigma related to drug abuse and HIV. HIV-related stigma shown to have negative association with mental health status but relationship between drug-related stigma and mental health was not significant.

Many researchers have studied HIV/AIDS and related issues in Pakistan, however, not many researchers attempted to study HIV related stigma in those who are more vulnerable to HIV and their healthcare providers which helped conceptualizing present study. The results of the study would be helpful to develop better understanding into the phenomenon and can also be useful in designing psychoeducational programs to develop empathetic understating of HIV and related issues. The results could also provide effective assistance to healthcare providers to have insight into their behaviours and attitude towards those affected by HIV/AIDS and would be helpful for them to relate with the patients and provide them better health services.

Method

Cross sectional research design was employed to achieve research objectives. Sample was selected through purposive sampling and consisted of 155 participants including 95 individuals admitted for treatment of substance abuse and 60 health care providers (*n* = 16 doctors; *n* = 44 nurses) from various substance rehabilitation units of Lahore. There were 51 women (33%) and 104 men (67%) in the sample, mean age of participants was 32.23 years (*Sd* = 10.56) and eighteen percent of the participants were uneducated, 31 percent were educated till 10^{th} grade, 35 percent were graduates, 5 percent post graduates and 10 percent were medical graduates. In substance abuse group, majority (41%) was on poly substance abuse, 39% abused heroin and 20 % were abusing cocaine. The duration of substance abuse ranged from 1 year to 17 years.

Measures

Study used specially designed demographic form and HIV/AIDS knowledge and stigma scale. Demographic from recorded participant's age, gender, education, profession, family system and income, marital status and other important information.

HIV/AIDs Knowledge and Stigma Scale developed by Nazim (2010) is a self-reported instrument was used to measure the stigma related to HIV/AIDS in drug addicts and health care providers. This scale consisted of 82 items divided in two parts. First part included 39 items assessing knowledge of HIV and AIDS. Second section included 43 items which assessed stigma about HIV/ AIDS. The scale was in Urdu language and reported to have good psychometric characteristics as reliability and validity indices ranged from 0.86 to 0.93. Item from section-2 which assessed HIV related stigma were used in the present study to quantify stigma.

Procedure

After approval of the research design and procedures from research review board formal permission to collect data was taken from concerned authorities. Participants were approached in addiction rehabilitation units in public hospitals and private sector in Lahore. Participants were briefed about the nature and purpose of study and after taking their consent, demographic form was filled. Later, they filled HIV/AIDS Knowledge and Stigma Scale. After seeking permission, the measures were administered on all participants individually. After administering research tools all the participants were thanked for their cooperation.

Special care was taken to ensure the confidentiality and safety of the participants. The participation was based on free will and informed consent was taken from the institutes and individual participants. Participants were informed of the research objectives and purposes prior to data collection. Any psychological or physical harm to the participant was avoided during data collection.

Results

The data were analysed through SPSS using both descriptive and inferential statistical procedures. In total 55 percent of participants were married, 25 percent were unmarried and 20 percent were divorced. A large majority of the sample was living in joint family (80 %) and included representation of businessmen (14 %), skilled workers (13%), doctors (10%), nurses (28%), those who were doing office jobs (19%) and unemployed (15%).

Table 1. Mean Score differences in Stigma Scores of HCPs and Substance Abusers

	Substance Abusers (*n*= 95)		Health Care Providers (*n*= 60)				*95% CI*
Variables	*Mean*	*SD*	*Mean*	*SD*	*t*	*P*	*LL - UL*
Stigma Score	56.65	5.27	73.43	20.11	7.7361	0.0001	12.49 - 21.07

Note. CI= class interval; Df=153.

The stigma scores of participants in substance abuse group were compared with those in health care providers group through independent sample t test. Participants in both groups differed significantly ($p<0.01$) in their scores for stigma about HIV which was observed to be significantly higher among health care providers.

Table 2. Correlation between HIV Related Stigma and Demographic Variables

	Substance Abusers	Health Care Providers
Variables	*R*	*r*
Age	-.45**	-.48*
Education	.64**	.51*
Income	-.42**	-.48**
Family system	.30**	.52**
Marital status	-.38**	-.39**

** Correlation is significant at the 0.05 level (2-tailed).*
*** Correlation is significant at the 0.01 level (2-tailed).*

One objective of the present study was to assess the association of stigma scores with basic demographic variables including education, income, age, marital status and family system. HIV related stigma was observed to be lower in married participants in both groups. Better income was also noted to be associated with lower levels of stigma in participants of both groups. Participants living in joint family system revealed lower levels of stigma. Participants with more education showed higher levels of HIV stigma.

Table 3. Mean differences in Stigma Scores Across Gender

	Females (n= 51)		Males (n= 104)				*95% CI*
Variables	*Mean*	*SD*	*Mean*	*SD*	*T*	*P*	*LL - UL*
Stigma Score	69.17	14.39	60.29	17.05	3.20	0.0017	3.39 - 14.36

Note. CI= class interval ; Df=153.

The mean stigma scores of male and female participants assessed through t-test revealed significant differences ($p<0.01$) in scores of male and female participants. Female participants scored significantly higher compared to male participants indicating lower levels of stigma towards HIV.

Discussion

Regardless of the progress in identification and treatment procedures of HIV and efforts invested in community education, HIV-related stigma and consequent discrimination continues to prevent people from accessing HIV preventive and care services. Even healthcare facilities and healthcare providers are not free of HIV related stigma which significantly contribute to poor health outcomes for people with HIV (Kinsler et al., 2007).

Contrary to the general assumptions many previous studies from Pakistan (Khalil et al., 2015) and other countries identified significant stigma against people living with HIV among healthcare providers (Fauk et al., 2021). Current findings support this trend as high levels of stigma were observed in healthcare providers which seems inconsistent with general assumption that healthcare providers would always be non judgemental and completely free of biases. This might be due to the fear of being vulnerable and contracting virus by coming in contact with the infected people as was also reported by some previous researchers (Fauk et al., 2021). Another possibility of high stigma might be the possibility of having anger towards people with HIV positive status for increasing the vulnerability of healthcare providers towards HIV. People involved in substance abuse are considered at high risk of HIV transmission, one study previously conducted in Pakistan even reported that 95% of their HIV positive sample had a long history of substance abuse and more than half of the participants used shared needles often to inject drugs (Khan et al., 2018). Interestingly, participants in substance abuse group also showed high score on stigma regardless of having high vulnerability towards HIV. This might be due to the tendency of distancing one's self from the risk which is an influence of strong feelings of invulnerability. This might have made them displaced their negative feelings on HIV positive people and judging their behaviours negatively.

Most of the literature identified lower levels of stigma among those who are more educated (Amuri et al., 2011; Tenkorang, & Owusu, 2013). Present findings, however, are not in line with this and rather showed opposite direction of association between these two variables. Educational level of health care providers was higher compared to those in substance abuse group, yet healthcare providers showed significantly higher levels of stigma. The correlation between stigma scores and education also showed that the more educated participants had higher stigma scores, this can however be supported by some studies

conducted in developing countries, for instance the one conducted in Kenya which reported higher education failed to reduce stigma levels (Mugoya, & Ernst, 2014). This might be due to the fact that high education does not necessarily ensure better knowledge of HIV. Rather, at times more educated people assume that they know almost everything when in fact their knowledge does have significant gaps which may have resulted in more stigma as is described in literature (Ugarte et al., 2013).

As far as the income is concerned present findings are not in line with the findings of previous studies revealing lower levels of HIV related stigma in high income cohorts (Amuri et al., 2011; Tenkorang, & Owusu, 2013). Increasing age (Vlassoff et al., 2012) and being married were found to be associated with less stigma in the present sample which is supported by the findings of a study conducted in China which concluded the same pattern of relationship in these variables (Li et al., 2018). The increased age may help people respond to negative events with more mature attitudes. Older people are also likely to have less judgemental and more empathetic response towards those in difficult situations.

Presence of a marital partner in intact marriages might have provided the emotional support helping people develop relatively positive attitude and outlook of life and thus having low stigma (Li et al., 2018). Joint family system is more common in Pakistan than nuclear family system and was observed to be related with lower levels of HIV related stigma in current sample. Previous studies have not only described this family system as the preferred choice of many in Pakistan but also described it as being perceived more supportive and helpful by people (Nazim, Khalid, 2018). Many people find the presence and availability of other family members comforting in context of stressful experiences and the family members usually extend their emotional support along with financial and behavioural assistance to vulnerable or distressed family members in times of need. All these factors may help people develop more empathetic and understanding attitude towards distressed family members which is also likely to be generalized outside the family as well resulting in less negative attitude.

Present study also assessed gender differences related to HIV stigma. Literature generally report gender as a significant factor associated with stigma related to HIV/AIDS (Mugoya & Ernst, 2014). However, literature on HIV presents mixed findings about gender differences related to HIV stigma. Some reseaches reported males participants having significantly greater levels of HIV related stigma (Stringer et al., 2016) whereas, others reported females holding more stigma towards HIV (Loutfy et al, 2012). Findings of the present study get support from previous studies reporting higher levels of HIV stigma in females compared to males (Loutfy et al, 2012; Ugarte, et al.,2013). Behaviours and attitudes of females are generally judged in the light of stereotypical gender based behavioural norms which presents women as caregivers, nurturers, as having more empathetic and positive attitudes, but their behaviors aren't necessarily in line with these stereotypical norms, which do not support the findings where female revealed to have significantly greater HIV related stigma. Another possibility might be that females often use emotional focused coping strategies to deal with distressing or difficult situations (Ataro et al., 2020), this might have contributed to higher levels of stigma among female participants compared to males.

The study was carefully planned, still it has some limitations. One of which is the relatively small sample size, future researchers should try increasing the sample size and incorporating drug abusers and healthcare providers from many different areas. That heterogenous sample would give better representation of different socioeconomic strata. A larger data set would also be more suitable to study the impact of different demographic variables on HIV stigma and factors likely to mediate the relationship of stigma with different factors. Literature also revealed a strong relationship of stigma with HIV related knowledge, stereotypical social and religious believes. This relationship could not be explored for

narrowed scope of present study, therefore, it is suggested that future researches should consider these significant variables.

Conclusion

HIV related stigma is likely to be present even in people at high risk of HIV and their health care providers. Social and personal demographic factors like family system, age and gender have notable relevance to stigma related to HIV.

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