

ORIGINAL RESEARCH

Stigma among healthcare providers towards people living with HIV/AIDS in India

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ABSTRACT

Background: The healthcare providers (HCPs) are the ones that provide People Living with HIV/AIDS (PLHIV) with medical care, psychological support, and counseling. However, HIV/AIDS-related stigma and discrimination have been extensively documented amongst them. **Objectives:** To investigate the perceptions and attitudes of HCPs towards PLHIV in India. **Methods:** This was a cross-sectional study conducted in a convenient sample of 208 healthcare providers working in a tertiary care hospital in Coimbatore district, Tamil Nadu, India. The data regarding the HCPs attitudes and acts towards PLHIV were collected using a self-administered questionnaire, and their stigma was quantitatively assessed with the help of the Sexually Transmitted Blood Borne Infection (STBBI) Stigma Scale. **Results:** A total of 208 healthcare providers participated in the study, of which, 142 (68.3%) were females, 111 (53.4%) were doctors, and 179 (86.1%) were of Hindu religion. Notably, only 13% of providers believed that they lack training required to handle HIV patients; however, 37% of the providers expressed their hesitation in dealing with them. The mean score of STBBI stigma scale was 2.71 +/- SD 1.08. The mean scores of stereotype, prejudice and discrimination subscales were 2.81 +/- SD 1.07, 2.57 +/- SD 1.19 and 2.78 +/- SD 1.37, respectively. Gender (male as compared to female), occupation (doctors as compared to nurses and other staff), and an experience of less than 5 years were significantly associated with presence of stigma. The ANOVA test was used to find the association between stigma and age, and it was deduced that the age group of 25 to 29 years was significantly associated with higher stigma scores as compared to other age groups. **Conclusion:** A large number of HCPs demonstrated stereotypes, prejudice and discrimination towards HIV patients, and this attitude can adversely affect the quality of care.

Keywords: PLHIV, Healthcare providers, Stigma, STBBI scale, Discrimination, Prejudice, India

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INTRODUCTION

Stigma is negative attitude, described as “a social process of devaluing persons, beginning with marking or labeling of differences, attributing negative connotations or values to those differences, leading to distancing and separation of the person and culminating in discrimination; whereas discrimination means the unfair and unjust treatment of an individual on the basis of a real or perceived status or attribute”.^[1] Stigma can be of various kinds: Primary stigma is experienced by the person living with the stigmatized condition, secondary stigma is experienced by associates of stigmatized person, perceived stigma is the perception of stigma

regardless of its presence, internalized stigma is the despair or self-loathing that the person experiences due to the environmental or societal stigma and symbolic stigma is the blame or prejudice attached to a particular disease or condition that is labeled as immoral.^[2] A disease that is attached to various types of stigma since the time of its discovery is Acquired Immuno-Deficiency Syndrome (AIDS) that is caused by Human Immunodeficiency Virus (HIV). The reasons cited for the stigmatization of people living with HIV/AIDS (PLHIV) include responsibility for its occurrence (promiscuous sexual behavior & drug abuse), potentially serious consequences for others (transmission to partner & child), diseased or

emaciated appearance, decreased competence (being tired most of the time), and its incurability.^[3] Such is the magnitude and impact of Stigma and discrimination that it has been termed the third phase of epidemic after HIV and AIDS,^[4] and rightly so because HIV stigma has repeatedly been associated with misery and suffering of PLHIV.^[5] Stigma affects PLHIV in many ways like, interfering with their decisions to seek HIV counseling and testing,^[6,7] deterring infected individuals from seeking timely medical treatment,^[8-10] lowering self esteem and causing depression,^[11,12] preventing them from disclosing their status to children or spouses that can increase the risk of transmission,^[13-17] and impeding their quality of life.^[18]

The HCPs are the ones that are supposed to provide PLHIV with medical care, psychological support and counseling. However, HIV/AIDS-related stigma and discrimination have been extensively documented amongst healthcare providers and although stigma and discrimination occur at each socio-ecological level of society, that in healthcare facilities is exceedingly harmful to health and wellbeing of PLHIV.^[19-24] Globally, the detrimental effect of stigma and discrimination has been documented on each step in the HIV care continuum like – HIV prevention, HIV testing, linkage and retention in care, adherence, compliance and viral suppression.^[25-31] A study done by Garumma et al.^[19] from Ethiopia has reported incidences of testing and disclosing HIV test results without consent, designating HIV clients and unnecessary referral to other healthcare institutions and refusal to treat clients. A study by Turan et al.^[32] from US has reported that perceived discrimination in healthcare settings is negatively associated with Anti-retroviral therapy (ART) adherence and positively associated with depressive symptoms. A study by Valencia-Garcia et al.^[33] on HIV positive women in Peru has reported that the most frequent and distressing experiences of stigma came from healthcare providers (e.g., doctors and nurses) when accessing treatment, especially during childbirth and after care.

To combat stigma and discrimination, it is important to explore their associated factors and to explore how they vary across cultural contexts within a country.^[34] Nevertheless, in Indian context, HIV stigma and discrimination studies have been conducted among the general population and PLHIV more frequently, as compared to that amongst healthcare providers. Even fewer studies have explored the predictors of stigma among HCPs. In this study, we selected medical staff members as participants, and investigated their perceptions and attitudes towards PLHIV with the help of a self-assessment tool. This study might provide a basis for counter measures to reduce stigma in medical institutions.

METHODS

This was a cross-sectional study conducted in a convenient sample of 208 healthcare providers working in a tertiary care hospital in Coimbatore district, Tamil Nadu, India. The study was approved by the Institute Human Ethics Committee (IHEC). The sample size was calculated according to the following formula: $n = z^2 p(1-p)/d^2$. Our study established a 95% confidence level (Z value of 1.96); tolerance was defined as 0.07. According to the pre-investigation results, the incidence of medical discrimination was 50%. The sample size calculated was 196, but to account for missing or incomplete data, a sample of 208 was taken.

The data regarding the HCPs attitudes and acts towards PLHIV were collected using a self-administered questionnaire, and stigma was quantitatively assessed with the help of the Sexually Transmitted Blood Borne Infection (STBBI) Stigma Scale. The STBBI stigma scale was developed as an adaptation of the Healthcare Provider HIV/AIDS Stigma Scale (HPASS).^[35] The original HPASS measure was approved by both a reference group and through member checking with the focus group participants. The STBBI Stigma Scale was developed in order to pose these same questions regarding other STBBIs and to adapt it for use with both healthcare and social service providers, condensing the measure from 30 to 24 items. Though the STBBI scale can be used to assess stigma towards most of the sexually transmitted or blood borne infections, we assessed the scale only with context to HIV/AIDS related stigma. The scale is further divided into three subscales measuring prejudice (n = 9 items), stereotyping (n = 9 items) and discrimination (n = 6 items). Each item was posed on a six-point Likert-type scale ranging from 1 = strongly disagree to 6 = strongly agree. The statements of the scale are negative, and a higher score suggests higher stigma. Internal consistency reliability for each total score and all subscales for each STBBI category were all acceptable to excellent, with that related to HIV being good (HIV from Cronbach's $\alpha = 0.809$ to 0.906). The data were analyzed using Statistical Package for Social Sciences v23 and the results were described through descriptive statistics (frequency distribution tables). Comparison of the means to determine the relationships was done. Statistical significance was taken at $p < 0.05$.

RESULTS

Socio-demographic characteristics: A total of 208 healthcare providers participated in the study, out of which 142 (68.3%) were females, 111 (53.4%) were doctors, and 179 (86.1%) were Hindu (**Table 1**). The mean age of the respondents was 28.69 +/- 6.9 years. When asked about whether they have ever treated or dealt with a patient of HIV/AIDS, 128 (61.5%) responded that they did. These 128 HCPs were further asked if they wore personal protective gear (like gloves, mask, apron etc.) for handling the patient, and

majority of them (93.0%) responded with a yes. Majority of the participants (145, 69.7%) replied that they will not hesitate to treat a patient with HIV/AIDS, but 43 (20.7%) participants responded that they might hesitate to treat such a patient and 20 (9.6%) participants responded that they will definitely hesitate. The various reasons that HCPs gave for hesitating to treat PLHA were; PLHA put them at the risk of acquiring the disease (45, 21.6%), they lack training required to handle HIV patients (27, 13.0%), and the patients have indulged in unethical behavior (5, 2.4%). The rest 131 (63.0%) of HCPs said there is no reason to hesitate.

Stigma of HCPs towards PLHA as evident from responses to STBBI Stigma scale: The mean score of STBBI stigma scale was 2.71 +/- SD 1.08. The mean scores of stereotype, prejudice and discrimination subscales were 2.81 +/- SD 1.07, 2.57 +/- SD 1.19 and 2.78 +/- SD 1.37, respectively.

a) Stereotype Subscale: In general, HCPs reported varying degrees of stigma. Less than half (40.9%) providers agreed that most HIV-positive patients acquired the virus through 'risky behavior' and they think patients with HIV/AIDS have engaged in risky activities despite knowing these risks. Almost one-fifth of the providers (22.1%) believed that people would not get HIV if they had sex with fewer people, and majority of the providers (56.7%) believed that people would not contract HIV/AIDS if they acted responsibly. A large proportion (38.5%) of the providers believed that Patients with HIV tend to have numerous sexual partners, and 56.3% providers agreed that many patients with HIV/AIDS are likely to have drugs/ substance abuse problems. Half (48.4%) of the providers agreed that the patients with HIV/AIDS should accept responsibility for acquiring the infection, and 36.1% of the providers believe that patients with HIV/AIDS have caused their own health problems. Only 16.3% of the providers tend to think that patients with HIV do not share the same values as themselves(**Figure 1**).

b) Prejudice Subscale: A large proportion of providers (46.6%) believed that patients with HIV posed a threat to their health and 38.0%

believed that they are a threat to the health of other patients. More than half of the providers (51.4%) worried about contracting HIV from their HIV positive patients, while only 27.9% providers reported that HIV positive patients make them feel uncomfortable. Another 21.6% of providers said that it would be hard to react calmly if a patient tells them that they have HIV/AIDS. More than one fourth of the providers (26.4%) would rather not come into contact with patients with HIV and 43.3% said that they would rather see a patient without HIV/AIDS than a patient with this infection. When it came to working with colleagues who were HIV-positive, 22.6% of providers reported that they would not be comfortable working alongside another colleague/ healthcare provider who has HIV/AIDS (**Figure 1**).

c) Discrimination Subscale: When asked about the patient care of HIV-positive patients, almost half of the providers (47.1%) admitted that they would avoid certain procedures with patients with HIV. The study participants gave various reasons for exercising their right to refuse to work with patients with HIV, like to protect themselves (41.3%), to protect other patients (36.1%), to address the concerns of other staff members (34.1%), their own concerns regarding legal liability (37.5%), and feeling uncomfortable (39.9%)(**Figure 1**).

Upon bivariate analysis, it was found out that the various factors that were significantly associated with stigma were gender (males had higher stigma scores as compared to females) and occupation doctors had higher stigma scores as compared to nurses and other paramedic staff(**Table 2**). Additionally, less than five years of experience and having treated a HIV patient were also significantly associated with high stigma scores(**Table 3**). The ANOVA test was used to find the association between stigma and age, and it was deduced that the age group of 25 to 29 years was significantly associated with higher stigma scores as compared to other age groups (**Table 4**).

Table 1: Distribution of demographic characteristics of healthcare providers in a tertiary care hospital, Coimbatore (N=208)

Characteristic	Frequency (n)	Percentage (%)	
Age	<25	30	14.4
	25 to 29	127	61.1
	30 or More	51	24.5
Gender	Female	142	68.3
	Male	66	31.7
Religion	Agnostic	1	0.5
	Christian	26	12.5
	Hindu	179	86.1
	Muslim	2	1.0
Marital status	Married	41	19.7

	Single	167	80.3
Type of HCP	Doctor	111	53.4
	Nursing & other staff	97	46.6
Work experience	Less than 5 years	174	83.7
	More than 5 years	34	16.3
Ever treated/ dealt with patient of HIV/AIDS	No	80	38.5
	Yes	128	61.5

Table 2: Comparison of stigma scores based on different characteristics (gender, occupation, religion and marital status) (N=208)

Score	Variable	N	Mean	Std. Deviation	Std. Error Mean	t	p value	95% Confidence Interval	
								Lower	Upper
Gender									
Stereotype subscale score (S score)	Male	66	3.189	0.7591	0.0934				
	Female	142	2.646	1.1520	0.0967	4.033	<0.001	0.2770	0.8075
Discrimination subscale score (D score)	Male	66	3.576	1.0056	0.1238				
	Female	142	2.415	1.3742	0.1153	6.858	<0.001	0.8263	1.4942
Prejudice subscale score (P score)	Male	66	3.057	0.8842	0.1088				
	Female	142	2.347	1.2527	0.1051	4.691	<0.001	0.4112	1.0085
Total score	Male	66	3.236	0.6899	0.0849				
	Female	142	2.477	1.1480	0.0963	5.915	<0.001	0.5063	1.0129
Occupation									
S Score	Doctor	111	3.304	0.7453	0.0707	7.778	<0.001	0.7775	1.3065
	Nurse or others	97	2.262	1.1205	0.1138				
D score	Doctor	111	3.581	1.0205	0.0969	11.367	<0.001	1.4134	2.0065
	Nurse or others	97	1.871	1.1490	0.1167				
P score	Doctor	111	3.232	.8829	0.0838	10.562	<0.001	1.1503	1.6784
	Nurse or others	97	1.818	1.0482	0.1064				
Total score	Doctor	111	3.346	0.6693	0.0635	11.122	<0.001	1.1092	1.5881
	Nurse or others	97	1.998	1.0172	0.1033				
Religion									
S Score	Hindu	179	2.829	1.0766	0.0805	0.344	0.731	-0.3500	0.4978
	Others	29	2.755	1.0588	0.1966				
D score	Hindu	179	2.821	1.3834	0.1034	0.977	0.329	-0.2741	0.8131
	Others	29	2.552	1.3386	0.2486				
P score	Hindu	179	2.579	1.1944	0.0893	0.176	0.861	-0.4299	0.5142
	Others	29	2.536	1.2074	0.2242				
Total score	Hindu	179	2.733	1.0878	0.0813	0.511	0.610	-0.3173	0.5390
	Others	29	2.622	1.0658	0.1979				
Marital Status									
S Score	Single	167	2.867	1.0708	0.0829	1.321	0.188	-0.1256	0.6182
	Married	41	2.621	1.0663	0.1665				
D score	Single	167	2.824	1.4015	0.1085	0.860	0.391	-0.2671	0.6800
	Married	41	2.618	1.2765	0.1994				
P score	Single	167	2.633	1.2084	0.0935	1.486	0.139	-0.1007	0.7171
	Married	41	2.325	1.1096	0.1733				
Total score	Single	167	2.769	1.1002	0.0851	1.378	0.170	-0.1118	0.6309
	Married	41	2.509	0.9952	0.1554				

Table 3: Comparison of stigma scores based on different characteristics (age, experience and having treated HIV patient) (N=208)

Score	Variable	N	Mean	SD	Std. Error Mean	F/t	p value	95% Confidence Interval	
								Lower	Upper
Age (years)*									
Stereotype subscale score (S score)	Less than 25	30	2.637	1.1057	0.2019	10.695	<0.001	2.224	3.050
	25 to 29	127	3.068	0.9766	0.0867			2.897	3.240
	30 or more	51	2.303	1.0930	0.1530			1.995	2.610
	Total	208	2.818	1.0719	0.0743			2.672	2.965
Discrimination subscale score (D score)	Less than 25	30	2.228	1.2141	0.2217	9.491	<0.001	1.774	2.681
	25 to 29	127	3.102	1.3529	0.1200			2.865	3.340
	30 or more	51	2.317	1.3116	0.1837			1.948	2.686
	Total	208	2.784	1.3773	0.0955			2.595	2.972
Prejudice subscale score (P score)	Less than 25	30	2.226	0.9448	0.1725	8.503	<0.001	1.873	2.579
	25 to 29	127	2.835	1.2056	0.1070			2.623	3.046
	30 or more	51	2.124	1.1241	0.1574			1.808	2.440
	Total	208	2.573	1.1933	0.0827			2.410	2.736
Total score	Less than 25	30	2.381	0.9381	0.1713	11.474	<0.001	2.030	2.731
	25 to 29	127	2.989	1.0450	0.0927			2.806	3.173
	30 or more	51	2.239	1.0508	0.1471			1.944	2.535
	Total	208	2.718	1.0829	0.0751			2.570	2.866
Experience									
S Score	Less than 5 years	174	2.889	1.0557	0.0800	2.165	0.032	0.0386	0.8241
	5 or more years	34	2.458	1.0971	0.1882				
D score	Less than 5 years	174	2.879	1.3457	0.1020	2.289	0.023	0.0812	1.0892
	5 or more years	34	2.294	1.4524	0.2491				
P score	Less than 5 years	174	2.668	1.1869	0.0900	2.643	0.009	0.1481	1.0179
	5 or more years	34	2.085	1.1202	0.1921				
Total score	Less than 5 years	174	2.804	1.0602	0.0804	2.631	0.009	0.1319	0.9214
	5 or more years	34	2.277	1.1065	0.1898				
Have you ever treated/ dealt with a patient with HIV/AIDS?									
S Score	Yes	128	3.059	0.9604	0.0849	4.103	<0.001	0.3243	0.9270
	No	80	2.433	1.1331	0.1267				
D score	Yes	128	2.974	1.3009	0.1150	2.492	0.014	0.1025	0.8871
	No	80	2.479	1.4482	0.1619				
P score	Yes	128	2.791	1.1592	0.1025	3.420	0.001	0.2402	0.8942
	No	80	2.224	1.1708	0.1309				
Total score	Yes	128	2.937	0.9769	0.0863	3.675	<0.001	0.2639	0.8781
	No	80	2.366	1.1556	0.1292				

* ANOVA test was applied to find score variations among different age groups

DISCUSSION

The current study aimed at assessing the prevalence of stigmatizing attitude and discrimination among HCPs towards PLHIV. The results reveal disturbingly high rates of stigma attitudes and intent to discriminate among doctors, nurses, and other staff in urban healthcare settings. The results might reflect a wider community norm as similar stigmatizing attitudes have been reported in studies conducted in other parts of the country.^[23,36] Notably only 13% of providers believed that they lack training required to handle HIV patients, but 37% of the providers expressed their hesitation in dealing with them. These stigmatizing

attitudes can contribute to missed opportunities for prevention, education, and treatment, and thereby undermine India's efforts to manage and prevent HIV. Since younger and less experienced HCPs expressed higher stigmatizing attitudes, there may also be a need to ensure that they are thoroughly trained in universal precautions until they are comfortable and confident in their ability to prevent transmission.

In the current study, a large number of providers stereotyped the HIV-positive patients for having engaged in risky activities despite knowing these risks, for having numerous sexual partners and for suffering from drug abuse. A study done by Hansoti et

al.^[37] has also reported that 76% of the providers agreed that most HIV-positive patients acquired the virus through 'risky' behavior, and 54.2% of providers agreed that people would not have HIV if they had sex with fewer people. In the present study, almost half of the providers believe that PLHIV poses a threat to their health and worried about contracting HIV from their patients. This fear instilled in them is the stem root of the prejudice that HCPs have towards PLHIV. Another study done by Vorasane et al.^[38] in Lao PDR has also reported that almost half of the HCPs (doctors and nurses) demonstrated high levels of stigmatizing attitudes towards PLHIV. In the presence of stereotype, prejudice and fear, the quality of care is bound to suffer. Also, if these concerns are expressed in front of the HIV patients, it will lead to internalizing of stigma and might deter them from receiving the treatment.^[39,40] Our fear of affected quality of care of HIV patients is further strengthened by the HCPs high expressed rates of intent to treat HIV positive patients differently from uninfected patients. A good number of HCPs expressed their intent of avoiding certain procedures with HIV patients and revealed that they would rather see patients that are not suffering from HIV.

The current study attempted to highlight determinants of stigma and discrimination among HCPs. It has been revealed that males had higher average stigma scores than women. This is in contrary to the study done by Ekstrand et al.^[23] in the United States of America, where female healthcare providers reported significantly more negative feelings towards PLHIV as compared to males. However, another study also reported that male doctors were more likely to exhibit internalized shame towards PLHIV than female doctors.^[38] The reason for males expressing higher stigmatized attitude could be because in a patriarchal society, males have a more conservative thinking and are too afraid to eliminate their stigma through open discussion. In the current study it was also seen that doctors, in general, had higher mean stigma scores than nurses and other paramedics. A study done by Vyas et al.^[36] in Gujarat, India, also suggested an inverse relationship between medical education and stigma scores. Another study reported that significantly more doctors than nurses and ward staff agreed with the statement that "healthcare workers should have the right to refuse to treat PLHIV".^[23] The findings from this study thus indicate that stigma reduction interventions need to target highly educated healthcare providers. Few studies have reported that medical education related to diseases like HIV is insufficient in terms of changing practices, and thus attitudes and cultural beliefs also need to be addressed.^[41-44] Another important determinant of stigma in this study was number of years of work experience. It was seen that the higher the work experience, the lower will be the stigma. Another study by Vorasane et al.^[38] in Lao PDR also reported that doctors with a higher work experience

showed lesser intent to discriminate the PLHIV. However, it was reported in the current study that HCPs who have treated or have dealt with HIV patients are more likely to have higher stigma scores. Contrarily, in other studies it was seen that more experience with PLHIV was associated with lower rates of stigma and discrimination.^[23,38] The reason for such findings in the current study could be the fear that is instilled against HIV among HCPs that might aggravate once they treat PLHIV. The HCPs who haven't come across HIV patients might be giving the responses ideally as they haven't been faced with the situation.

The present study is not without limitations. The small sample size is a limitation as the results might not project the realities of all regions or hospital settings. This study was done using a self-administered questionnaire and there is a chance of recall bias and social desirability bias. However, the study gives us a good insight into the subject of stigma and discrimination. Apparently, this is the first study in India that is being done on healthcare providers using the STBBI stigma scale. Thus, the biggest strength of the study is that it has tried to add to the scanty data in the field of stigma and discrimination among healthcare providers in India.

CONCLUSION

In conclusion, it can be stated that, though HCPs are usually more educated, more aware, and more experienced when it comes to PLHIV, they are as susceptible to stigma and discriminatory attitude as is the general population. The education and experience do not necessarily eliminate the fear, stereotyping, prejudice, or negative feelings that are associated with PLHIV. Thus, addressing HIV stigma in healthcare workers, requires a holistic approach that tackles their fear, creates a supportive environment for the consistent implementation of universal precautions, and addresses the socio-cultural aspects that shape stigmatizing attitudes and practices. Thorough training and a change in attitude are the keys to halt the fourth phase of HIV/AIDS pandemic i.e., stigma and discrimination. Additionally, there is a need for institutional level support in the form of personal protective measures, hand washing necessities, sharp boxes, and post-exposure prophylaxis. It should also include making sure relevant policies, hand-washing procedures, or other critical information in key areas in the healthcare setting are visible to support health workers. Much is at stake when people living with HIV perceive discrimination in a healthcare setting, so this issue must be addressed on a priority basis at the policy making and implementation level.

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CONFLICT OF INTEREST

None to disclose

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