

Social stigma, discrimination, and their determinants among people living with HIV and AIDS in Sudurpashchim Province, Nepal

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Abstract

Introduction: Human immunodeficiency virus (HIV)-related stigma and discrimination adversely affect health, quality of life, social support, and well-being of people living with HIV/acquired immunodeficiency syndrome (AIDS) (PLWHA). This study assessed the perceived stigma and discrimination, and their determinants among PLWHA living in Sudurpashchim Province of Nepal.

Material and methods: This study adapted cross-sectional survey in 2020 to sample 167 PLWHA using semi-structure questionnaire. Information about socio-demographic characteristics, stigma domain, and discrimination domain were obtained through face-to-face interviews. Bivariate and multivariate logistic regression models were applied to identify factors associated with perceived stigma and discrimination among PLWHA.

Results: The overall stigma was 70%, and discrimination was 34%. In the multivariate logistic regression, male gender (AOR = 2.4; 95% CI: 1.04-6.62%; p -value = 0.009), age (AOR = 1.09; 95% CI: 1.03-1.15%; p -value < 0.001), high level of public health concerns (AOR = 12.9; 95% CI: 8.9-37.5%; p < 0.001), and high level of negative self-image (AOR = 10.3; 95% CI: 8.8-39.6%; p < 0.001) were factors significantly associated with higher perceived stigma. Similarly, female gender (AOR = 15.4; 95% CI: 8.2-35.3%; p < 0.001) and high level of perceived community support (AOR = 8.86; 95% CI: 3.86-32.1%; p < 0.001) were factors significantly associated with higher perceived discrimination.

Conclusions: Stigma and discrimination remain pervasive among PLWHA in Sudurpashchim Province and most originate from communities, presenting negative impacts on PLWHA. Unprecedented measures to enhance the awareness of PLHIV, their families, and community about perceived stigma and associated factors are needed to reduce stigma, and to achieve the commitments of fast-tracking towards ending the AIDS epidemic.

HIV AIDS Rev 2022; 21, 3: 230-238

DOI: <https://doi.org/10.5114/hivar.2022.117230>

Key words: stigma, discrimination, PLWHA, Sudurpashchim Province, Nepal.

Introduction

From the start of the acquired immunodeficiency syndrome (AIDS) epidemic, stigma and discrimination have

increased the transmission of human immunodeficiency virus (HIV) and greatly improved the negative impact associated with the epidemic [1, 2]. HIV-related stigma and discrimination continue to be manifested in every region

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Article history:
Received: 05.06.2021
Revised: 11.09.2021
Accepted: 19.09.2021
Published: 08.04.2022

International Journal
of HIV-Related Problems

HIV & AIDS
Review

of the world and in every age groups [2, 3], creating major barriers to preventing further infection, alleviating impact, and providing adequate care, support, and treatment [2, 4]. HIV-related stigma and discrimination refer to bigotry, adverse attitudes, and exploitation directed at people living with HIV and AIDS (PLWHA) [1, 4].

HIV-related stigma among PLWHA is the foremost barrier to HIV prevention, treatment, care, and support [4, 5]. There is growing recognition that gaps across the cascade of HIV prevention, testing, and treatment services are determined by stigma and discrimination faced by PLWHA who are at high-risk of HIV infection [5, 6]. Studies on stigma, discrimination, and health-seeking behavior show that PLWHA who perceive high levels of HIV-related stigma are more likely to delay enrolment in care until they are very sick [2, 5, 7]. HIV-related stigma is a social phenomenon, in which a person is considered to possess a discrediting attribute and thus, deemed tainted, ruined, or flawed by others [4, 8]. In fact, studies conducted in various regions of the world demonstrated that HIV-related stigma independently contributes to psychological distress over and above health status and HIV-related symptoms [8, 9].

Perceived stigma and discrimination greatly affects quality of life of PLWHA, their family members, communities, and healthcare providers who work with them [1, 4, 6]. Shame, loss of self-efficacy, low self-esteem, low self-confidence, and hopelessness associated with perceived stigma combined with side effects from ART, lead to poor adherence to ART, treatment failure, emergence of drug-resistant HIV strains, and even deaths [5, 6]. Stigma, discrimination, abuse, and violence may occur in healthcare settings among PLWHA, which refrain them from obtaining health services or quality healthcare [4, 10]. PLWHA and other key affected populations are ignored by families, peers, and wider community, while others face poor treatment in educational and work settings, erosion of their rights, and psychological damage that limit access to HIV testing, treatment, and HIV interventions [10, 11]. Gender and intersectionality of stigma and discrimination are of major concerns in Nepal; gender inequities and poverty have increased women's vulnerability to HIV risk behaviors and exposure [8, 11, 12]. Women's role in the community, low standing in social hierarchy, low control in decision-making, economic dependence, and low level of literacy, have made them more prone to stigma and discrimination at the community and family level as well as by health personnel [12].

Sudurpashchim Province had comparatively lower human development index (HDI), literacy rate, and socio-economic status, and has poor health system and healthcare utilization compared to other provinces. Sudurpashchim Province comprise of high number of underprivileged, marginalized population [13-15], and is also home for large number of male Indian labor migrants and their families, who are consider key population for HIV, contributing to higher proportion of the total known HIV infections in the country [16-18]. In this region, stigma and discrimination are a complex issue that has deep roots in the domains

of gender, race, ethnicity, class, sexuality, and culture [13, 14]. Accessing stigma and discrimination experienced by PLWHA in the region is significant and vital, as there are lack of studies on stigma and discrimination in this remote region of Nepal. Therefore, the present study assessed HIV/AIDS-related stigma and discrimination as well as factors associated with these domains among PLWHA in Sudurpashchim Province of Nepal.

Material and methods

A descriptive cross-sectional study was conducted to identify the perceived stigma and discrimination among PLWHA. Eligible PLWHA were patients diagnosed with HIV/AIDS, who were under antiretroviral therapy in ART centers for at least six months in Sudurpashchim Province. With standard formula, the sample size of 167 PLWHA was estimated, given margin of error $\alpha = 0.05$, prevalence = 0.29 [11], 95% confidence level of reported PLWHA cases = 313, and non-response rate = 5%. A list of PLWHA from ART centers was created, and 167 PLWHA were selected using systematic random sampling. Information on socio-demographic characteristics were collected through face-to-face interviews that were conducted by trained field workers in the local language, Nepali, using a structured questionnaire. Revised HIV stigma by Bunnis was applied to measure four dimensions of perceived HIV-related stigma among persons living with HIV: (1) personalized stigma: consequences of other people knowing their status; (2) disclosure concerns; (3) negative self-image: not as good as others, shame, and guilt; and (4) public attitudes: what people think about HIV [7, 19]. Discrimination scale consisted of 16 items divided in three domains, including: (1) association with shame, blame, and judgement: intended to evaluate feelings and opinions regarding behaviors or groups associated with HIV/AIDS; (2) personal support of discriminatory actions or policies: aimed to assess personal thoughts of how people living with HIV/AIDS should be treated, and (3) perceived community support of discriminatory actions or policies: aimed to evaluate personal thoughts on how the community treats people living with HIV/AIDS [20]. The instrument includes 32 statements related to HIV stigma, and 16 statements related to HIV discrimination, which are completed on a four-point Likert scale, ranging from 1 = 'completely disagree' to 4 = 'completely agree'. Item scores for each sub-scale are summed into sub-scale scores. Higher scores indicate higher levels of perceived stigma for all four sub-scales. Ethical clearances were obtained from institutional review committee of the Nepal Health Research Council. Verbal informed and witnessed consent was obtained from all PLWHA prior to the interview. Stigma and discrimination score was attained by summing up responses of each item of sub-scale and later, mean was computed from the composite value of each sub-domain by the number of items corresponding to each sub-scale to obtain a comparable figure. In assessing mean difference of stigma scores, the higher the mean value, the higher the stigma level. Mean score ≥ 2.5 was considered

Table 1. Socio-demographic characteristics of PLWHA in Sudurpashchim Province ($N = 167$)

Factors	
Age, years (mean, SD)	41.43 (11.28)
Gender, n (%)	
Male	101 (60.5)
Female	65 (38.9)
Transgender	1 (0.6)
Religion, n (%)	
Hindu	161 (96.4)
Buddhist	1 (0.6)
Muslim	1 (0.6)
Christian	4 (2.4)
Marital status	
Married	135 (80.8)
Unmarried	13 (7.8)
Widow(er)	19 (11.4)
Education	
Illiterate	37 (22.2)
Informal	32 (19.2)
Primary	27 (16.2)
Lower secondary	33 (19.8)
Secondary	29 (17.4)
Intermediate and above	9 (5.4)
Occupation	
Agriculture	40 (24.0)
Homemaker	32 (19.2)
Service	77 (46.1)
Business	12 (7.2)
Aboard	1 (0.6)
Others	5 (3.0)
Time of HIV diagnosis	
≤ 1 year	8 (4.8)
1-2 years	28 (16.8)
3-5 years	48 (28.7)
> 5 years	83 (49.7)
Reason for HIV testing	
Before employment	3 (1.8)
During treatment of other illness	61 (36.5)
Spouse tested positive	59 (35.3)
Need to know	29 (17.4)
Others	15 (9.0)

as high-level, and < 2.5 as low-level stigma to measure stigma and discrimination level, according to previous studies [7, 19]. Bivariate analysis (χ^2 test and independent t -test) was used to examine the association between socio-demographic

factors, stigma domain, and discrimination domain with overall stigma and discrimination among PLWHA. A p -value of less than 0.05 was considered statistically significant. Logistic regression analysis was performed to examine the effects of determinants on the outcomes. Initially, explanatory determinants were included in the model one at a time to examine their univariate relationship with the outcome. Multivariate logistic regression models were then applied to identify the most important determinants for each outcome. A p -value of less than 0.05 was used to define statistical significance. Adjusted odds ratio (AOR) as well as its' 95% confidence interval (95% CI) were used to depict the independent relationship between predictors and dependent variables. All statistical analyses and graphs for this study were conducted using R program.

Results

Table 1 presents the percentage of distribution of PLWHA by socio-demographic characteristics, time of HIV diagnosis, and reasons for testing. The mean age and standard deviation of PLWHA was found to be 41.4 ± 11.2 years. More than half (60%) of PLWHA were males. Most of PLWHA were Hindu and ever married. More than one-fifth of PLWHA (22%) were illiterate. The occupation of less than one-half of PLWHA were service (46%), followed by agriculture (24%). Nearly half of PLWHA (49.7%) had been diagnosed with HIV for more than five years. The reason for HIV testing were during treatment of other illness (36.5%) and spouse tested positive (35.3%).

Perceived HIV-related stigma is measured as an index that evaluate PLWHA in four domains, including personalized stigma, disclosure concerns, negative self-image, and public attitudes. Figure 1 shows the stigma domain and overall stigma among PLWHA. Majority of PLWHA presented high level of personalized stigma (87%) and public attitude concern (89%). More than half of PLWHA had disclosure concerns (62%) and negative self-image (59%). High level of overall stigma level was as high as 70%.

HIV/AIDS-related discrimination was also measured in three domains, including: (1) association with shame, blame, and judgement; (2) personal support of discriminatory actions or policies; and (3) perceived community support of discriminatory actions or policies. Figure 2 shows the discrimination domain and overall discrimination among PLWHA. Nearly five percent of PLWHA had high level of personal support of discriminatory actions or policies, and eight percent presented high level of association with shame, blame, and judgment. However, more than half of PLWHA (52%) had high levels of perceived community support of discriminatory actions or policies. The high level of overall discrimination level was 34%.

Table 2 presents the factors associated with stigma in bivariate and multivariate analysis. The findings revealed that age, gender, marital status, occupation, public health concerns, and negative self-image were statistically significant in overall stigma ($p < 0.05$). In the multivariate logistic regres-

sion, the factors that were significantly associated with stigma after controlling for other factors, included age, gender, public health concerns, and negative self-image ($p < 0.05$). Multivariate analyses revealed that males were more likely (AOR = 2.42 (95% CI: 1.04-6.62%; p -value = 0.009) to have higher perceived stigma compared to females. One-unit increase in age yields a higher odds of perceived stigma (AOR = 1.09; 95% CI: 1.03-1.15%; p -value < 0.001). PLWHA who had high level of public health concerns were 13 times more likely to perceive stigma than those with low level of public health concerns (AOR = 12.9; 95% CI: 8.9-37.5%; $p < 0.001$). Similarly, PLWHA who had high level of negative self-image were 10 times more likely to perceive stigma than those with low level of negative self-image (AOR = 10.3; 95% CI: 8.8-39.6%; $p < 0.001$).

Table 3 presents the factors associated with discrimination in bivariate and multivariate analysis. The findings revealed that gender, marital status, education, occupation, personalized stigma, negative self-image, perceived community support, and stigma were statistically significant for overall discrimination in bivariate analysis ($p < 0.05$). In multivariate logistic regression, factors that were significantly associated with discrimination after controlling for other factors, included gender, perceived community support, and stigma ($p < 0.05$). Females showed higher odds of discrimination compared to males (AOR = 15.4; 95% CI: 8.2-35.3%; $p < 0.001$). PLWHA who had high level of perceived community support were more than 8 times more likely to perceive discrimination than those with low level of perceived community support (AOR = 8.86; 95% CI: 3.86-32.1%; $p < 0.001$).

Discussion

It is well documented that PLWHA experience stigma and discrimination on regular basis in developing countries, such as Nepal. In line with previous studies in the country [7, 11, 15, 17], our findings showed that there is a high level of perceived stigma and moderate level of perceived discrimination among PLWHA. The sub-scale scores for sigma domains showed highest percentage for public attitude concerns, followed by enacted stigma and disclosure concerns. Negative self-image showed the least percentage among the four domains. Recent studies in Pokhara Valley and Southern part of India demonstrated that public health concerns and enacted stigma variation was highest among PLWHA [7, 21]. The higher proportion of public attitude and personalized stigma showed that the level of community HIV acceptance was low and the level of refusal was high towards PLWHA by community members of the province. Studies have found that family caregivers and community exhibit stigma and prejudice attitudes towards their own family members who are HIV/AIDS-positive [7, 9].

Social determinants were associated with perceived stigma as consistent with numerous studies [22, 23]. Studies found that older PLWHA were more affected by stigma. Older PLWHA perceived HIV-related stigma often pre-

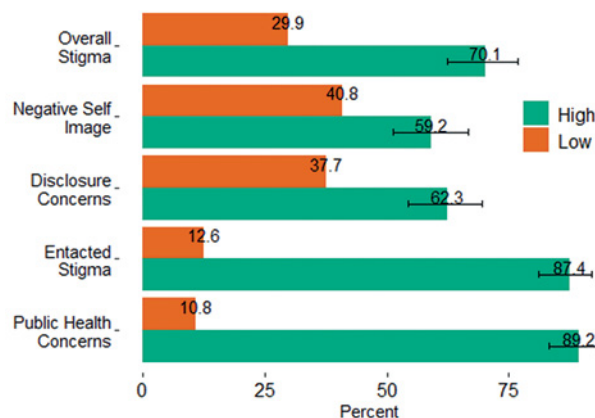


Figure 1. Perceived four domains of stigma and overall stigma level of people living with HIV

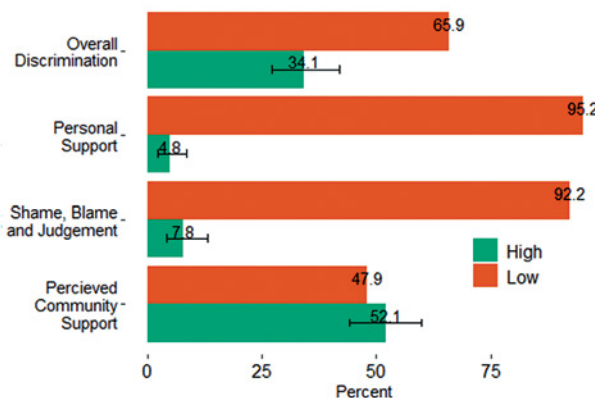


Figure 2. Perceived three domains of discrimination and overall discrimination level of people living with HIV

vents HIV interventions as most of HIV interventions target younger groups considered to be at higher risk [21, 23, 24]. The feeling of guilt and low self-esteem among PLWHA as they grow old, isolation from families and communities increase the risk of getting stigmatized [24]. Males had higher risk of perceived stigma than females. The higher risk among males could be attributed to the fact that men have a wider mobility, and in this region, most of them are migrants, taking medications regularly at their workplace, and travelling to India; they disclose their HIV status and this might lead to stigma [12, 17]. In addition, this study demonstrated evidence of workplace stigma in the context of HIV, as stigma was higher among PLWHA whose occupation was service. Studies had confirmed that workplace employees face HIV/AIDS-related stigma from their co-workers and supervisors (such as social isolation and ridicule), or experience discriminatory practices (e.g., being fired from their jobs due to HIV-positive status) [4, 21, 25]. PLWHA who were married have shown higher HIV stigma and discrimination as compared to those who were unmarried or widowed [21, 22]. Due to increased social

Table 2. Factors of overall stigma based on socio-demographic characteristics, stigma domain, and discrimination domain

Characteristics	Overall stigma		Test stat (p-value)	COR (95% CI), p-value	AOR (95% CI), p-value
	Low (n = 50, 30%)	High (n = 117, 70%)			
Age					
Mean (SD)	35.5 (14.4)	43.9 (8.5)	4.6 (p < 0.001)	1.07 (1.04-1.10%), p < 0.001	1.09 (1.03-1.20%), p < 0.001
Gender					
Male	23 (22.8)	78 (77.2)	6.3 (p = 0.012)	Ref.	Ref.
Female	27 (40.9)	39 (59.1)		2.43 (1.22-4.84%), p = 0.013	2.42 (1.04-6.62%), p = 0.009
Marital status					
Ever married	41 (26.6)	113 (73.4)	3.5 (p = 0.003)	Ref.	Ref.
Unmarried	9 (69.2)	4 (30.8)		0.16 (0.05-0.55%), p = 0.004	0.42 (0.04-14.42%), p = 0.467
Education					
Illiterate	8 (21.6)	29 (78.4)	1.57 (p = 0.210)		
Literate	42 (32.3)	88 (67.7)			
Occupation					
Agriculture	7 (17.5)	33 (82.5)	23.5 (p < 0.001)	Ref.	Ref.
Homemaker	17 (53.1)	15 (46.9)		0.19 (0.06-0.55%), p = 0.002	2.12 (0.16-28.10%), p = 0.569
Service	15 (19.5)	62 (80.5)		0.88 (0.33-2.36%), p = 0.795	2.50 (0.35-17.70%), p = 0.359
Others	11 (61.1)	7 (38.9)		0.13 (0.04-0.47%), p = 0.002	1.10 (0.08-15.10%), p = 0.944
Time of HIV diagnosis					
Less than two years	7 (19.4)	29 (80.6)	2.4 (p = 0.121)		
More than two years	43 (32.8)	88 (67.2)			
Personalized stigma					
Low	18 (85.7)	3 (14.3)	2.5 (p = 0.610)*		
High	32 (21.9)	114 (78.1)			
Disclosure concerns					
Low	49 (77.8)	14 (22.2)	2.3 (p = 0.560)*		
High	1 (1.0)	103 (99.0)			
Public attitudes concerns					
Low	14 (77.8)	4 (22.2)	22.0 (p < 0.001)	Ref.	Ref.
High	36 (24.2)	113 (75.8)		10.9 (3.40-35.50%), p < 0.001	12.9 (8.90-37.50%), p < 0.001

Table 2. Cont.

Characteristics	Overall stigma (n = 117, 70%)		Test stat (p-value)	COR (95% CI), p-value	AOR (95% CI), p-value
	Low (n = 50, 30%)	High (n = 117, 70%)			
Negative self-image					
Low	37 (74.5)	31 (25.5)	32.0 (p < 0.001)	7.9 (3.72-16.70%), p < 0.001	10.3 (8.80-39.60%), p < 0.001
High	13 (26.5)	83 (73.5)			
Association with shame, blame, and judgment					
Low	44 (28.6)	110 (71.4)	8.9 (p = 0.212)*		
High	6 (46.2)	7 (53.8)			
Personal support of discriminatory actions or policies					
Low	47 (28.7)	117 (71.3)	0.9 (p = 0.260)*		
High	3 (100.0)	0 (0.0)			
Perceived community support of discriminatory actions or policies					
Low	20 (25.0)	60 (75)	1.8 (p = 0.180)		
High	30 (34.5)	57 (65.5)			

*Fisher's exact test

responsibility among married PLWHA, they are more likely to come in contact with more people, which might be a reason for increased stigmatization. On the contrary, unmarried or widowed PLWHA residing with their parents, children, or relatives, have a socially secure environment, and have lesser stigmatization [23, 26].

With regard to discrimination, HIV/AIDS-positive females had higher perceived discrimination compared to males. Females living with HIV and AIDS may be blamed and shamed for HIV infection due to lasting assumptions of 'deviant' sexual behavior (e.g., sex work, promiscuity), and viewed as having been promiscuous [12, 18, 26]. In this region, women's risk of HIV infection is partially determined by sexual risky behaviors of their husbands. They are referred as spouses of migrants, they acquired the infection from their husbands or male partners, who are migrants and get infected with HIV by unsafe sexual practice with female sex workers in India [14, 16, 18]. Women are considered as caregivers, mothers if viewed as ill/diseased, and therefore a failure in personal, family, and social roles can exacerbate discrimination. Specifically, women living with HIV may be more susceptible to HIV discrimination as a result of being subjected to gender, caste discrimination, and having fewer economic resources. This finding is in line with another outcome revealing that discrimination was higher among women as homemakers, who were generally confined to their homes [21, 24]. Education was associated with discrimination, this is consistent with previous studies among PLWHA [22, 24, 26], in which high education level and financial difficulties were associated with greater perceived discrimination. This may be explained that PLWHA with a higher education may be more likely to be concern about the damage to social position brought by HIV infection, thus leading to more concern about HIV disclosure [27, 28]. Moreover, the guilt of high-risk behavior in the past, which becomes the reason for not only acquiring HIV/AIDS, but also transmitting the disease to their spouses, could be the reason for discrimination.

The study found that public health concerns were associated with perceived stigma, and perceived community support were related with perceived discrimination. Sudurpashchim Province is regarded as least developed comparing with other provinces, with low human development index, poverty, low literacy rate, and low socio-economic status [14, 17]. Due to low socio-economic status and lower literacy rate, people in this community may have impression that HIV is a contagious disease that can be contracted through physical and emotional contacts with an infected individual. Moreover, HIV and AIDS are thought to be associated with people who lead promiscuous behaviors, including bisexuality, drug abuse, and prostitution [10, 18]. Like in other developing settings, the gender and intersectionality difference, such as caste, ethnicity, rural residence, and education in many Nepali communities play a key role in stigma and discrimination associated with HIV [10, 12, 15]. Negative self-image was associated with perceived stigma in this Prov-

Table 3. Factors of overall discrimination based on socio-demographic characteristics, stigma domain, and discrimination domain

Characteristics	Overall discrimination		Test stat (p-value)	COR (95% CI), p-value	AOR (95% CI), p-value
	Low (n = 110, 66%)	High (n = 57, 34%)			
Age			1.2 (p = 0.213)		
Mean (SD)	42.2 (8.6)	39.9 (15.1)			
Gender					
Male	94 (84.6)	7 (15.4)	84.0 (p < 0.001)	Ref.	Ref.
Female	16 (24.4)	50 (75.6)		11.90 (6.19-28.70%), p < 0.001	15.40 (8.20-35.30%), p < 0.001
Marital status					
Ever married	106 (68.8)	48 (31.2)	0.011	Ref.	Ref.
Unmarried	4 (30.7)	9 (69.3)		4.97 (1.46-16.93%), p = 0.001	0.13 (0.10-3.86%), p = 0.245
Education					
Illiterate	16 (43.2)	21 (56.8)	10.8 (p = 0.001)	Ref.	Ref.
Literate	94 (72.3)	36 (27.7)		0.29 (0.14-0.62%), p = 0.001	1.36 (0.12-15.41%), p = 0.804
Occupation					
Agriculture	21 (52.5)	19 (47.5)	48.0 (p < 0.001)	Ref.	Ref.
Homemaker	8 (25.0)	24 (75.0)		3.32 (1.20-9.13%), p = 0.02	1.94 (0.11-32.30%), p = 0.643
Service	70 (90.9)	7 (9.1)		0.11 (0.04-0.29%), p < 0.001	1.01 (0.09-11.06%), p = 0.995
Others	11 (61.1)	7 (38.9)		0.70 (0.23-2.18%), p = 0.543	0.47 (0.01-12.09%), p = 0.649
Time of HIV diagnosis					
Less than two years	19 (52.7)	17 (47.3)	3.5 (p = 0.061)		
More than two years	91 (69.4)	40 (30.6)			
Personalized stigma					
Low	19 (90.4)	2 (9.6)	6.5 (p = 0.011)	Ref.	Ref.
High	91 (62.3)	55 (37.7)		5.74 (1.29-25.60%), p = 0.011	21.40 (0.39-16.28%), p = 0.132
Disclosure concerns					
Low	32 (50.7)	31 (49.3)	10.2 (p = 0.001)	Ref.	Ref.
High	78 (75.0)	26 (25.0)		0.34 (0.18-0.67%), p = 0.001	1.10 (0.60-9.52%), p = 0.0625
Public attitudes concerns					
Low	15 (83.3)	3 (16.7)	2.7 (p = 0.098)		
High	95 (63.7)	54 (36.3)			

Table 3. Cont.

Characteristics	Overall discrimination (n = 110, 66%)		Test stat (p-value)	COR (95% CI), p-value	AOR (95% CI), p-value
	Low (n = 110, 66%)	High (n = 57, 34%)			
Negative self-image					
Low	15 (22.1)	53 (77.9)	60.0 (p < 0.001)	Ref.	Ref.
High	95 (96)	4 (4)			
Association with shame, blame, and judgment					
Low	101 (65.6)	53 (34.4)	1.0 (p = 0.31)*		
High	9 (69.2)	4 (30.8)			
Personal support of discriminatory actions or policies					
Low	108 (65.8)	56 (34.2)	1.0 (p = 0.51)*		
High	2 (66.7)	1 (33.3)			
Perceived community support of discriminatory actions or policies					
Low	77 (96.2)	3 (3.8)	63.0 (p < 0.001)	Ref.	Ref.
High	33 (37.9)	54 (62.1)			
				12.00 (2.25-24.90%), p < 0.001	8.86 (3.86-32.10%), p < 0.001

*Fisher's exact test

ince confirming findings of some previous studies [21, 29]. PLWHA are still believed that they are responsible for acquiring the disease and consequences of HIV. Negative self-image among PLWHA directly or indirectly relates to ill-perception, fear, self-exclusion, social withdrawal, and feel intense guilt and sadness through persistent self-blame, and sometimes, self-condemnation. Evidence of neglect, avoidance, rejection, labelling, harassment, abuse, and violence toward PLWHA and their families (children, parents, and siblings) were commonly reported in numerous studies [8, 9, 27]. In fact, the strongest predictor of depressive symptoms was self-judgment, since PLWHA with negative self-schemas are at higher risk of depression [30]. Along with PLWHA, families are often judged and stigmatized, given their association with a family member who is HIV-positive [11, 22, 27].

The study had few limitations. It evaluated comorbidity and disability status that may be associated with or may be the consequences of stigma and discrimination. Moreover, there may be possibility of recall bias since the experiences of HIV-related stigma and discrimination among PLWHA were given retrospectively. Also, the cross-sectional nature of the data limits the determination of temporal nature of associations reported in this study.

Conclusions

The study revealed that HIV-related stigma and discrimination remain ubiquitous, and represent a core aspect of the experiences of PLWHA in Nepal. HIV-related stigma and discrimination originate from homes, communities, and institutions, presenting negative impacts on HIV status disclosure, adherence to ART, PLWHA support, and spread of new HIV infections. Achieving fast-tracking towards ending the AIDS epidemic through zero HIV-related deaths and new HIV infections, and zero discrimination, has been a golden dream of Nepal's HIV health policy initiatives over the past few decades. However, Nepal is not on track to meet these commitments; therefore, in order to achieve them and meeting the milestones and targets of the HIV strategy, remain a huge challenge and tremendous task. The study emphasizes that HIV-related stigma needs to be tackled at the earliest to reach the target, and also might affect the mental health and quality of life of PLWHA, along with their physical well-being. HIV anti-stigma campaigns and strategies should incorporate local dialects of the respective communities to help propagate HIV-related issues. Community engagement regarding HIV-related stigma must be heartily pursued among PLWHA, using peer educators and diverse local media, which must incorporate informal information to deliver critical understanding about HIV and AIDS.

Conflict of interest

The author declares no conflict of interest.

References

1. Stangl AL, Lloyd JK, Brady LM, Holland CE, Baral S. A systematic review of interventions to reduce HIV-related stigma and discrimination from 2002 to 2013: how far have we come? *J Int AIDS Soc* 2013; 16: 18734.
2. Tran BX, Phan HT, Latkin CA, et al. Understanding global HIV stigma and discrimination: are contextual factors sufficiently studied? (GAP research). *Int J Environ Res Public Health* 2019; 16: 1899.
3. Joint United Nations Programme on HIV/AIDS. On the fast-track to end AIDS by 2030: focus on location and population. Technical report; 2015.
4. Adane B, Yalew M, Damtie Y, Kefale B. Perceived stigma and associated factors among people living with HIV attending ART Clinics in public health facilities of Dessie City, Ethiopia. *HIV AIDS (Auckl)* 2020; 12: 551-557.
5. Fido NN, Aman M, Brihnu Z. HIV stigma and associated factors among antiretroviral treatment clients in Jimma town, Southwest Ethiopia. *HIV AIDS (Auckl)* 2016; 8: 183-193.
6. Feyissa GT, Abebe L, Girma E, Woldie M. Stigma and discrimination against people living with HIV by healthcare providers, Southwest Ethiopia. *BMC Public Health* 2012; 12: 522.
7. Subedi B, Timilsina BD, Tamrakar N. Perceived stigma among people living with HIV/AIDS in Pokhara, Nepal. *HIV AIDS (Auckl)* 2019; 11: 93-103.
8. Jugeo N, Moalusi KP. My secret: the social meaning of HIV/AIDS stigma. *SAHARA J* 2014; 11: 76-83.
9. Rinehart R, Rao D, Amico RK, et al. Experienced HIV-related stigma and psychological distress in Peruvian sexual and gender minorities: a longitudinal study to explore mediating roles of internalized HIV-related stigma and coping styles. *AIDS Behav* 2019; 23: 661-674.
10. Jha CK, Madison J. Disparity in health care: HIV, stigma, and marginalization in Nepal. *J Int AIDS Soc* 2009; 12: 16.
11. Shrestha S, Poudel KC, Poudel-Tandukar K, et al. Perceived family support and depression among people living with HIV/AIDS in the Kathmandu Valley, Nepal. *J Int Assoc Provid AIDS Care* 2014; 13: 214-222.
12. Paudel V, Baral KP. Women living with HIV/AIDS (WLHA), battling stigma, discrimination and denial and the role of support groups as a coping strategy: a review of literature. *Reprod Health* 2015; 12: 53.
13. Ghimire U, Manandhar J. Inequalities in health outcomes and access to services by caste/ethnicity, province, and wealth quintile in Nepal. Ministry of Health and Population; 2019.
14. Sapkota VP, Bhusal UP, Acharya K. Trends in national and sub-national wealth related inequalities in use of maternal health care services in Nepal: an analysis using demographic and health surveys (2001-2016). *BMC Public Health* 2021; 21: 8.
15. Vaidya NK, Wu J. HIV epidemic in Far-Western Nepal: effect of seasonal labor migration to India. *BMC Public Health* 2011; 11: 310.
16. NCASC. Nepal HIVision 2020: Nepal National HIV Strategic Plan 2016-2021. Kathmandu; 2016.
17. Thapa S, Thapa DK, Buve A, Hannes K, Nepal C, Mathei C. HIV-related risk behaviors among labor migrants, their wives and the general population in Nepal. *J Community Health* 2017; 42: 260-268.
18. Thapa S, Bista N, Hannes K, Buve A, Vermandere M, Mathei C. Vulnerability of wives of Nepalese labor migrants to HIV infection: integrating quantitative and qualitative evidence. *Women Health* 2016; 56: 745-766.
19. Rongkavilit C, Wright K, Chen X, Naar-King S, Chuenyam T, Phanuphak P. HIV stigma, disclosure and psychosocial distress among Thai youth living with HIV. *Int J STD AIDS* 2010; 21: 126-132.
20. Zelaya CE, Sivaram S, Johnson SC, Srikrishnan AK, Solomon S, Celentano DD. HIV/AIDS stigma: reliability and validity of a new measurement instrument in Chennai, India. *AIDS Behav* 2008; 12: 781-788.
21. Yathiraj AB, Unnikrishnan B, Ramapuram JT, et al. HIV-related stigma experienced by people living with HIV/AIDS in coastal South India. *HIV AIDS Rev* 2018; 17: 30-35.
22. Logie C, Gadalla TM. Meta-analysis of health and demographic correlates of stigma towards people living with HIV. *AIDS Care* 2009; 21: 742-753.
23. Odimegwu CO, Alabi O, De Wet N, Akinyemi JO. Ethnic heterogeneity in the determinants of HIV/AIDS stigma and discrimination among Nigeria women. *BMC Public Health* 2018; 18: 763.
24. Halli SS, Khan CH, Moses S, et al. Family and community level stigma and discrimination among women living with HIV/AIDS in a high HIV prevalence district of India. *J HIV AIDS Soc Serv* 2017; 16: 4-19.
25. Stewart R, Pulerwitz R, Esu-Williams E. Addressing HIV/AIDS stigma and discrimination in a workplace program, emerging findings. Washington: Population Council; 2002.
26. Oke OO, Akinboro AO, Olanrewaju FO, Oke OA, Omololu AS. Assessment of HIV-related stigma and determinants among people living with HIV/AIDS in Abeokuta, Nigeria: a cross-sectional study. *SAGE Open Med* 2019; 2019: 2050312119869109.
27. Nachege JB, Morroni C, Zuniga JM, et al. HIV-related stigma, isolation, discrimination, and serostatus disclosure: a global survey of 2035 HIV-infected adults. *J Int Assoc Provid AIDS Care* 2012; 11: 172-178.
28. Ramlagan S, Matseke G, Rodriguez VJ, et al. Determinants of disclosure and non-disclosure of HIV-positive status, by pregnant women in rural South Africa. *SAHARA J* 2018; 15: 155-163.
29. Gilbert L, Walker L. 'My biggest fear was that people would reject me once they knew my status...': stigma as experienced by patients in an HIV/AIDS clinic in Johannesburg, South Africa. *Health Soc Care Community* 2010; 18: 139-146.
30. Eller LS, Rivero-Mendez M, Voss J, et al. Depressive symptoms, self-esteem, HIV symptom management self-efficacy and self-compassion in people living with HIV. *AIDS Care* 2014; 26: 795-803.