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Stigma and Discrimination Experienced by HIV/AIDS Patients in Banke District, Nepal

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ABSTRACT

Background: Stigma, originating from ancient practices of physical branding, signifies rejection, exclusion, or devaluation, arising from expected social judgment. HIV stigma manifests internally as guilt or shame or externally as discrimination, impacting individuals' well-being and social interactions. *Methodology:* This cross-sectional analytical study was conducted at an ART site in Banke District, Nepal, using quantitative methods. Simple random sampling was applied to determine the sample size. Ethical approval was obtained from PUIRC. Reliability and validity were ensured through strategies like pretesting, double entry, and validation. Data were managed and analyzed using Epi Data and SPSS software, employing descriptive and inferential statistics to identify significant predictors. *Results:* The overall HIV stigma mean score was 2.48 ± 0.21, with scores ranging from 1.84 to 3.42. Among the four domains, Public Attitude Concern had the highest mean score of 2.60 ± 0.30, while Enacted Stigma had the lowest. Significant differences were observed between perceived stigma and factors like age, marital status, residence, employment, duration of HIV diagnosis, and disclosure status. Additionally, the overall HIV discrimination mean score was 20.88 ± 2.80. *Conclusion:* The findings highlight that Public Attitude Concern is the most significant domain of stigma, emphasizing the societal judgment faced by individuals living with HIV. Key factors like age, gender, and HIV disclosure status are strongly associated with stigma and discrimination. Addressing these factors is essential for reducing stigma and improving the quality of life for those affected.

Keywords: HIV, Stigma, Discrimination, Banke District

1. INTRODUCTION

The stigma dates back to ancient times. The word stigma was first coined in ancient Greece, when caste-based groups were physically marked and branded. Similar to this, in different cultures and eras, slaves and criminals have both been physically marked. Stigma is a social process that emerges from the anticipation of social judgment about a person or group and is characterized by rejection, exclusion, blame, or devaluation. HIV stigma and discrimination can be externalized as discrimination or internalized as guilt or shame (Adane et al., 2020).

Numerous factors influence stigma among PLWH, and these factors vary across cultures, religions, and regions. Similar to this, stigmatization is seen differently by

persons living with HIV depending on their gender, age, sex, socioeconomic status, family support, and method of HIV transmission. HIV/AIDS patients experience stigma and discrimination, which results in rejection, insults, and discrimination when obtaining healthcare services. People with HIV/AIDS experience stigma and discrimination frequently, which has a negative impact on their quality of life as well as their ability to receive treatment (Amiya et al., 2014).

The human immune system is the target of the Human Immunodeficiency Virus (HIV). The HIV virus kills and damages immune cells, and the number of CD4 cells in the body is a marker of immunological activity. Acquired immunodeficiency syndrome (AIDS), a chronic, life-threatening illness brought on by the human immunodeficiency virus that destroys the body's immune system, is the most serious and last stage of HIV infection (Amon et al., 2014).

Human immunodeficiency virus (HIV) is primarily transmitted through four major routes: unprotected sexual contact (vaginal or anal), blood transfusion, contaminated sharing of needles and other sharp equipment, and HIV transmission through a mother to her infant during pregnancy, birth, and breastfeeding (Adane et al., 2020). Stigma related to HIV and AIDS can lead to discrimination. For people living with HIV and AIDS, discrimination is defined as the act of treating people differently from those without HIV. Prejudice and unfavorable sentiments are referred to as stigma and discrimination among those with HIV. One of the biggest problems affecting persons living with HIV/AIDS worldwide is stigma and prejudice (Ugarte et al., 2013).

People living with HIV/AIDS and those at risk of contracting the virus are affected by stigma and prejudice associated with HIV/AIDS, which creates obstacles to HIV testing and counseling services as well as to effective preventive and care services (Brown et al., 2010). Perceived stigma among individuals with HIV/AIDS primarily impacts their quality of life, as well as that of their family members and medical professionals who treat them (Datta et al., 2016).

The main causes of the rise in HIV in Nepal include low socioeconomic status among women, high labor movement rates, and unfavorable economic conditions. Nepal has started a number of initiatives to prevent and treat HIV. Treatment, care, and support services for individuals living with HIV/AIDS are being expanded by the Nepali government and non-governmental organizations.

Antiretroviral therapy (ART), prevention of mother-to-child transmission, and treatment of opportunistic infections are the main services associated with HIV/AIDS. In Nepal, stigma around HIV and AIDS is a serious issue. People are terrified because of ignorance and false beliefs about HIV. They avoid persons with HIV because of this fear. It has also been shown as a fatal illness for which there is no known cure and is closely associated with immoral actions. These all contribute to prejudice and stigma. Antiretroviral medications are used to treat and prevent HIV. The medications lower the viral load and prevent or disrupt the HIV virus's ability to replicate in the human body (Autenrieth et al., 2018).

1.1. Rationale of the Study

Worldwide, 39 million individuals are HIV positive. In 2023, there will be 1.7 million new HIV infections among them. In the same year, six lakhs thirty thousand persons lost their lives to AIDS-related diseases. And by the end of December 2023, 29.2 million HIV-positive individuals were receiving antiretroviral treatment. South East Asia was home to 4.1 million of the 39 million HIV-positive individuals globally. Out of 39 million persons in West and Central Africa, 26.8 million live with HIV, making Sub-Saharan Africa the region with the highest HIV load (Exavery et al., 2024).

According to the DOHS annual report of fiscal year 2080/81 BS, there are 40540 PLHIV and 20883 HIV people under the treatment of ART service in Nepal, through 80 ART sites all over the country. Lumbini Province covers the second-highest HIV infected population after Bagmati Province. Lumbini Province covers 14 ART sites, and among them, Banke district consists of only one ART site, which is Bheri Hospital, with 510 HIV-infected people taking service through it. HIV/AIDS can delay treatment and cause a lot of problems for patients and their families. It is considered a social and a medical issue. Identification, diagnosis, and treatment of individuals with HIV/AIDS are severely hampered by stigma and prejudice.

Similarly, Banke district has an open border with India that allows the movement of people; this poses a risk of HIV transmission. Similarly, Lumbini Province has the second-highest HIV prevalence among all Provinces, and the Banke District is the most densely populated city in Lumbini Province. People have low knowledge about stigma and discrimination, but high experience among people living with HIV/AIDS. The research area of HIV/AIDS in Nepal is regarded as a culturally sensitive issue and needs to explore more about stigma and discrimination. From the findings of this study, it may help in planning awareness programs related to HIV stigma and discrimination, and help to modify policy as well.

1.2. Research Objectives

- To assess the perceived experience of stigma and discrimination among people living with HIV/AIDS

- To find out the perceived stigma among people living with HIV/AIDS
- To assess discrimination among people living with HIV/AIDS
- To identify a significant difference between different variables associated with stigma and discrimination

1.3. Literature Review

1.3.1. Perceived stigma and discrimination among people with HIV

One of the biggest problems in global public health is HIV stigma, particularly in low- and middle-income nations. In addition to treatment problems, PLWH also had to deal with social problems brought on by the disease. The quality of life for those living with HIV is greatly impacted by the perceived stigma associated with their family members and the medical staff who treat them. According to a study conducted in Dessie, Ethiopia, the percentage of felt stigma was 41.93 (Adane et al., 2020). Studies at the Northern Bengal Medical College in India's ART center with 454 HIV-positive individuals found that stigmatization was recognized by 10% to 97% of participants, but experienced by only 26% of PLWH (Datta et al., 2016).

In a study carried out in the Iranian city of Qom, social rejection and financial insecurity subscale scores that reflect perceived discrimination were used to determine external stigma, and perceived interpersonal insecurity, self-worth, and discretionary disclosures subscale scores were used to determine internal stigma. According to the of the study, 62 percent of PLWH faced outward stigma, and 98 percent suffered internal stigma (Pourmarzi et al., 2017).

The mean stigma score across all groups was 2.52. People living with HIV/AIDS showed a substantially higher mean score for public attitude concern than for any other stigma area, whereas the mean score for enacted stigma was the lowest. HIV-related prejudice and stigma are now recognized as a significant barrier to effective disease prevention and treatment. In the ART facility of the Western Regional Hospital in Kaski, a descriptive cross-sectional research design was applied to 282 HIV/AIDS patients. The findings of this study showed that participants as a whole had a stigma of 46.1% (Subedi et al., 2019).

A research from Bengal City, India, across all stigma domains, public attitude concern had the highest mean score, whereas disclosure concern had the lowest stigma mean score. (Newman, 2003) Negative self-image had the greatest stigma score when compared to other stigma domains, according to a different study conducted among PLHA in Botswana (Altman et al., 2012).

A study conducted in Ethiopia among 422 people living with HIV/AIDS found different misconceptions on stigma and discrimination due to poor knowledge regarding its cause as they think of it as a sign of sin (Adane et al., 2020). The stigma and discrimination experienced by PLWH are inversely correlated with teenage HIV/AIDS education. Adolescents who only had primary education were twice as likely as those with a secondary education or above to say they would not choose to purchase vegetables from a shopkeeper who was HIV/AIDS positive. Similar to this, adolescents who believed that HIV/AIDS may be contracted by eating with infected persons were five times more likely than their peers to say they would never purchase any vegetables from an HIV/AIDS-positive shopkeeper (Letamo et al., 2004).

Higher levels of education were independently and strongly associated with lower internalized stigmas among participants. Similar to this, the study's analysis of the average levels for men and women revealed that males had much greater average levels of internalized stigma than women did. After marriage, stigmatization was observed in both men and women, with men reporting greater levels of stigmatization (Kalichman et al., 2009).

According to a study done in Kenya with 103 HIV/AIDS patients, the intensity of specific stigma is related to the gender of HIV-affected individuals and location differences. The study found that women agreed less often with all of the stigmatizing items. Similarly, differences in gender and location are associated with degrees of specific stigma attributes. Internalized HIV stigma may vary depending on social setting and gender (Yebei et al., 2008).

Compared to men, women are more likely than men to experience perceived stigma. The area of Thailand's north that has been most severely impacted by HIV/AIDS was identified. In terms of actual and projected stigma, the relationship between gender and HIV-related stigma experiences was examined. Compared to males, women were ten times more likely to have helped care for a family member who had HIV/AIDS. In a similar manner, women reported instances of HIV-related enacted stigma more frequently than did men. Spouses, friends, and family members all experienced less HIV-related stigma by 1%, 9%, and 6%, respectively. Women with HIV/AIDS are reported greater stigma than did men. The results of the univariate analysis showed that women with HIV were twice as likely to report both anticipated and experienced stigma (Pannetier et al., 2016).

It is acknowledged that stigma and discrimination cross-cultural borders. In Hinduism, the majority of individuals believe that getting HIV is a punishment for doing something bad in a previous incarnation. A research conducted in Nigeria shows 47.2% of Muslims think that traditional religions are responsible for the spread of HIV/AIDS, and the majority of those surveyed think that

witchcraft is a possible reason (Oyediran et al., 2005). Muslim people in Ethiopia appear to be more prone than others to experience stigma, and they are especially concerned about HIV/AIDS-related discrimination and stigma (Adane et al., 2020). The majority of participants voiced their negative opinions on HIV-positive individuals, believing that they are sinful and that their infection was brought on by Divine punishment. Compared to men, women hold these ideas more frequently (Ugarte et al., 2013).

A study conducted in Nepal on perceived discrimination among People Living with HIV found that more than 50 percent of participants are not willing to expose their HIV status in the community due to the fear of being discriminated (Neupane et al., 2012). People who are infected with HIV/AIDS and have not disclosed with HIV positive status are more likely to have perceived stigma (Adane et al., 2020).

A study shows that people living with HIV/AIDS who were self-employed had significantly lower scores related to stigma than those who are unemployed or employed (Pourmarzi et al., 2017). Another study from Qom, Iran, on perceived stigma in people living with HIV shows that HIV infected participants who were self-employed had significantly lower scores of stigma compared to participants who were unemployed (Pourmarzi et al., 2017).

A study conducted in four US cities among HIV positives shows that one-fifth of participants reported that they had thought of suicide in the past week. Another cross-sectional study from Tehran, Iran shows that suicidal thought was not significantly different among people living with HIV/AIDS. Another study performed in Australia among PLWHA had significantly higher total suicidal ideation score than the asymptomatic HIV positive. Major factors for suicidal ideation include being HIV positive, external locus of control, and their unemployment status (Van Orden et al., 2010).

A cross-sectional study from a clinic of Imam Khomeini Hospital, Iran among HIV positives shows that there were not significant effects on the PLWHA and suicidal ideation. Although anxiety, poor physical activity, depression and sleep quality were significantly associated with negative suicidal thought. Suicidal ideation was correlated with the unemployment, living alone and lack of family support among people living with HIV/AIDS (Dabaghzadeh et al., 2015).

Society has several layers of exclusion related to HIV/AIDS, and denial is a form of such exclusion. Denial in an individual level is one form of experience among most of the HIV infected people during diagnosis of infection. The study shows that there denial of service was associated with the fear of transmission of infection or by the misconception related to its infection (Nepal et al., 2010). A study conducted in Kenya shows that the male is blame more for the transmission and infection of HIV/AIDS. They blame that the infection was due to their own fault. These explain that women had a lower level of internalized stigma compared to men (Yebei et al., 2008).

Although a lot of literature has been written about HIV-related stigmatization and discrimination, it is less common in emerging nations like Nepal and in impoverished nations.

2. METHODOLOGY

The research methodology adopted different procedure steps to explore the information that will reflect the object of the study. The various aspects of research methodology are discussed under the following headings.

2.1. Study design

The study design was cross-sectional.

2.2. Study Method

The study method was quantitative method.

2.3. Study settings and its justification

The study was carried out in the ART center of the Bheri Hospital in Banke, a significant and diversified city in Lumbini Province. There are 80 ART facilities located throughout Nepal, and 19,211 HIV-positive patients are receiving care there. After Bagmati province, Lumbini province has the second-highest number of HIV-positive individuals receiving ART among all HIV-positive individuals in Nepal. Similar to that, the Banke district only has one ART location, yet 483 individuals are receiving ART services there. Different attitudes and perceptions about stigma and prejudice towards persons living with HIV/AIDS exist because of the open international border with India, multicultural practices, and a densely populated area. Hence, this study assesses the perceived experience among people living with HIV/AIDS from stigma and discrimination in Banke district.

2.4. Study population

The study populations were people living with HIV/AIDS and receiving service from ART site of Bheri hospital, Nepalgunj, Banke, Nepal.

2.5. Study unit

The study unit was an individual living with HIV/AIDS in ART site of Bheri hospital, Nepalgunj.

2.6. Sampling procedure and sampling frame

2.6.1. Sampling procedure

This study was adopted the simple random sampling procedure.

Fist steps: ART site of Bheri Hospital was purposively selected as a study site. Individuals who were under the ART treatment and were above 18 years were taken for the study and required sample size was calculated.

Second steps: During the study time there were 510 people under the ART treatment. Simple random sampling was used to collect the data

2.6.2. Sampling frame

According to Annual report 2076/77 there is total 483 clients' in the Banke ART center among them 27 are categories as children. At that time, based on survey at the sites, there were 510 clients in the ART center (Male 264, Female 215 and child below 15 years were 24) where 24 children living with HIV are deducted and study population is 486.

2.6.3. Sample size

The sample size was calculated by using finite sample size calculation formula:

Total population (N) = 486

Sample size calculation by mean and standard deviation

Number of sample size for infinite population

$$n= z^2 \sigma/e^2$$

Z= value of z at 95% confidence level=1.96

Standard deviation (σ) = 0.48 (Subedi et al., 2019)

Precision (E) = $Z\times \sigma/ \sqrt{n}$

$=1.96\times0.48/282$

$= 0.056$

Sample size for infinite population (n) = $(1.96)^2 \times (0.48)^2 / (0.056)^2$

$=283$

For finite population, n = no/1+ (no-1)/N

Where, no = 283

=283/1+ (1-283)/486

= 180

On the basis of pretesting, the non-response rate 20 %, (Non response rate=effective sample/1-non response rate), final sample size was 225. Although the sample was 225 but in the study sample size was taken 237 for more accurate results.

2.7. Selection criteria

2.7.1. Inclusion criteria

People living with HIV/AIDS and who gave consent to participate and were above 18 years old.

2.7.2. Exclusion criteria

- Who were not ready to participate during study
- Who were severely ill or COVID infected during the time of interview.

2.8. Ethical approval

Ethical approval was taken from Pokhara University Institution Review Committee (PUIRC). Similarly, permission also was taken from administration section of ART. The School of Health and Allied Sciences granted clearance for this study, and Pokhara University's Institutional Review Committee (IRC) provided ethical approval. The management of Bheri Hospital provided a letter of authorization. Information was utilized exclusively for research and study purposes, and confidentiality was upheld. Before each interview, the participants gave their written and verbal informed permission and were told of the study's goals. Participants were given guarantees that the highest privacy and anonymity standards would be applied.

2.8.1 Informed consent

During information collection, written informed consents were taken from all the participants before data collection. Each participant was given right to withdraw from the study at any time during the interview as per their wish and interest.

2.9. Research tools and its development

A semi-structured questionnaire was used in a face-to-face interview to gather data. With the assistance of the supervisor, experts, and relevant literature, data gathering tools were created. "Bunn's survey tool," a previously used instrument, was utilized to measure perceived stigma. A questionnaire was created and the literature was studied in order to measure discrimination.

2.10. Pretesting, validity and reliability of tools

2.10.1. Pre-testing

Study design and method for this study was finalized on the basis of various searched literatures. Similarly, supervisor and expert consultation was managed for finalizing the study design and method as per objectives of the study. Data collection tools were prepared with the help of supervisor and expert consultation along with supportive literatures. Pre-testing the tool in 10 percent of the similar population under study was done to establish the reliability of the tool. Twenty HIV-positive individuals were interviewed as part of the pretesting for the study. Four of them made no response to any of the questions. The results indicate a 20% non-response rate.

2.10.2. Reliability and validity of tools

HIV stigma was assessed using standard tool, i.e Bunn's Tool. Data collection tools were translated from English to Nepali for the administrative, readers and participant's purpose and again the Nepali language was translated to English.

With the help of the supervisor and experts, the tool at first was verified to enhance the validity of it. Pre-testing tool in 10 percent of the similar population under study was conducted to establish the reliability of the tool. Experts' opinions were taken from time to time as per the need of the research process to minimize the error in the process of research.

2.11. Data collection procedures

Data were collected with face-to-face interview with an individual living with HIV/AIDS. In case if a participant refused to fill the consent form then next participant was taken for data collection. The Researcher himself collected data. In order to ensure the quality of work, data collection process was closely supervised by the supervisor.

2.12. Limitation/Delimitation and possible bias

The study lacks generalizability as the study is conducted among the HIV positive from one ART site of Banke district. In addition to that, there is a probability of recall bias because the participants need to provide past information. Furthermore, since this is a cross-sectional study, we perceived stigma and assess discrimination among people living with HIV/AIDS.

2.13. Management, processing, and analysis of data

2.13.1. Quality assurance of data

Quality of data was maintained by thoroughly checking of all questions after the completion of the interview. The data was entered into the EPI info software and exported to SPSS software for further analysis process.

2.13.2. Data analysis

Responses from participants were carefully reviewed and entered into the tool. The Statistical Package for Social Science (SPSS) was used to analyze the data once it had been loaded into the Epi Data program. To evaluate the items' internal consistency, or dependability, Cronbach's alpha was calculated. To quantify perceived stigma, the mean score of the respondents was obtained. The interview schedule, which has two sections, was used to gather data. Background information, including sociodemographic data, is included in Part I (A), whereas questions about HIV diagnosis, risk behaviors, and disclosure are covered in Part I (B). With the help of a supervisor and a thorough review of the literature, the researcher created the questionnaire for this part. The standard tool HSS, created by Bunn and the accepted version of the Berger HIV stigma scale, made up Part II. Bunn was asked for permission to use that scale. This instrument consists of 32 items with 4 domains on a 4-point Likert scale (from strongly disagree to strongly agree). Below are the particular queries and the areas they address.

Table 1. Questions related to stigma domain

Question number	Domain
Q2,Q3,Q7,Q8,Q11,Q13,Q20	Negative self-image
Q5,Q9,Q10,Q12,Q14,Q17	Public attitude concern
Q1,Q4,Q6,Q15,Q18,Q19,Q22,Q30	Disclosure concern
Q16,Q21,Q23,Q24,Q25,Q26,Q27,Q28,Q29,Q31,Q32	Enacted stigma

Table 1 shows from 1× 32 items to 4× 32 things, the scores varied between 32 and 128. The ES domain has scores ranging from 11 to 44. In a similar vein, the disclosure domain scores range from 8 to 32, whereas the negative self-image domain scores ranged from 7 to 28. The public attitudes domain might have scores ranging from 6 to 24. All 32 questions measure the overall stigma.

Univariate analysis was performed for frequency distribution and bivariate and multivariate analysis was performed between socio-demographic socio-economic and HIV related characteristic categories with stigma and discrimination and analysis of information was made as per the objectives of the study.

To test for a statistical difference between two groups' means, an independent samples t-test is employed. To ascertain if there is a statistically significant difference between the means of three or more independent groups, one-way ANOVA is utilized. The post hoc test is used to determine which group means vary from one another if an ANOVA yields a result p-value below our significance level. out of every post hoc test. The Tukey's test, which compares the means of all the variables to the means of all the other variables, is the most widely used test. When sample sizes are not equal, it is believed to be the most suitable approach.

3. RESULTS

3.1. Results of the study

Table 2 shows that among all participants in the study, the majority were males followed by females and Transgender. About One fourth of the participants were aged between 24 to 54 years compared with age below 24 and more than 54 years. Minimum age of participants was 20 and the maximum was 68 with mean ±SD was 33.55±9.80. The majority of participants were married and about one third of them were unmarried and a few were separated. Most of the participants were following Hindu religion followed by Islam, Christian and Buddhism. More than one fourth of the participants belonging to upper caste followed by of disadvantage Janajati and Non Dalit Terai caste respectively. More than two-third were from the municipality.

Table 2. Socio demography characteristics of the Participants

Variables	Frequency(n)	Percentage (%)
Gender		
Male	137	57.8
Female	95	40.1
Transgender	5	2.1
Age		
Below 24 years	41	17.3
24 to 54 years	186	78.5
More than 54 years	10	4.2
Minimum age	20	
Maximum age	68	
Mean ± SD	33.55 ± 9.80	
Marital status		
Married	147	61.2
Unmarried	77	32.5
Separated	4	1.7
Window/widower	11	4.6
Religion		
Hindu	207	87.3
Buddhist	2	0.8
Islam	26	11.0
Christian	2	0.9
Ethnicity		
Dalit	19	8.0
Disadvantage Janajati	56	23.6
Non Dalit Terai caste	45	19.0
Religious minority	35	14.8
Advantage Janajati	12	5.1
Upper caste	70	29.5
Place of residence		
Municipality	154	65
Rural municipality	83	35

Table 3. Socio- economic characteristic of participants

Employment status		
Agriculture	41	17.3
Homemaker	49	20.7
Service	54	22.8
Labor	25	10.5
Business	31	13.1
Abroad	8	3.4
Student	29	12.2
Education Status		
Literate	218	92
Illiterate	19	8

Literate		
Simply can read and write	27	12.4
Primary school	32	13.5
Lower secondary	20	8.4
Secondary school level	63	26.6
Intermediate level	45	19
Bachelor or above	31	13.1

Table 3 shows majority of participants were married and about one third of them were unmarried and a few were separated. Most of the participants were following Hindu religion followed by Islam, Christian and Buddhism. More than one fourth of the participants belonging to upper caste followed by of disadvantage Janajati and Non Dalit Terai caste respectively. More than two-third were from the municipality.

Table 4. HIV related characteristic of participants

Variable	Frequency(n)	Percentage (%)
Duration of HIV diagnosis		
Below 1 year	48	20.3
1 to 4 years	149	62.9
More than 4 years	40	16.9
Minimum year	1	
Maximum year	9	
Mean ± SD	3.27 ± 1.93	
Reason for testing HIV		
To get entry for the employment	8	3.4
During pregnancy	12	5.1
During treatment of other illness	148	62.4
Close family member HIV infected	55	23.2
Just to know	14	5.9

Table 4 shows that, among all participants, two-third was diagnosed their HIV status within 1 to 4 years. Similarly, one fifth of the participants were less than 1 year and a few of them were diagnosed HIV status for more than 4 years. The majority of the participants check their status during the treatment of other diseases, nearly one fourth checked when they knew that their close family member is infected, and a few identified while pregnancy checkup and medical checkup prior to entry the job.

Table 5. HIV disclosed status (*Multiple responses)

HIV status disclosed	Frequency(n)	Percentage (%)
HIV status		
Disclosed	218	92.0
Not disclosed	19	8.0
Disclosed voluntarily	206	94.5
Disclosed without consent	3	1.4
Disclosed own self and without consent	9	4.1
Husband/wife	153	70.2
Other family members	195	89.4
Close friend	107	49.1
Neighbors	22	10.1
All	6	2.8

According to Table 5, the majority of the participants shared their HIV status with others on a voluntary basis. A small number, however, was forced to share without their agreement. The majority of the participants told their families they were HIV positive. Similar to this, over two thirds of participants disclosed their HIV status to their spouses, and almost half of participants disclosed it to close friends. Low disclosed percentages 10.1 and 2.8 respectively were seen with their neighbors and everyone linked to them.

Table 6. Mean score of overall stigma and their domain

Stigma	Minimum	Maximum	Mean	SD
Negative self-Image	2.00	3.43	2.55	0.29
Public attitude concern	1.50	3.67	**2.60**	0.30
Discloser concern	1.50	3.50	2.43	0.22
Enacted stigma	1.55	3.36	**2.33**	0.29
Overall stigma	1.84	3.42	2.48	0.21

Table 6 demonstrates mean score of overall stigmas and their domain. Among all participants' overall stigma mean score was 2.48, score range from 1.84 to 3.42 with the SD of 0.21. Among the four domains, Public attitude concern had the highest mean score of 2.60 with SD 0.30. Enacted stigma had the least mean score of 2.33 with SD of 0.29. Similarly, Negative self-image and discloser concern have mean score 2.55 and, 2.43 with SD 0.29 and 0.22 respectively.

Table 7. Comparisons of stigma mean score with gender, age and marital characteristic

Variable	N	Negative self-image stigma			Public Attitude concern			Disclosure concern			Enacted stigma		
		Mean ±SD	Value of T-test or F-test	P- value	Mean ±SD	Value of T-test or F-test	P- value	Mean ±SD	Value of T-test or F-test	P- value	Mean ±SD	Value of T-test or F-test	P- value
Gender													
Male	137	2.58±0.30	F = 3.009	0.051	2.57±0.26	F=2.052	0.131	2.45±0.20	F=0.91	0.404	2.33±0.29	F=0.831	0.43
Female	95	2.53±0.28			2.54±0.35			2.41±0.24			2.33±0.30		
Transgender	5	2.28±0.26			2.30±0.32			2.42±0.06			2.16±0.16		
Age													
Below 24 years	41	2.62±0.313	F=1.131	0.32	2.72±0.280	F=7.99	**0.001***	2.43±0.179	F=0.44	0.643	2.20±0.03	F=4.461	**0.013***
24 to 54 years	186	2.54±0.295			2.52±0.307			2.44±0.233			2.35±0.022		
More than 54 years	10	2.51±0.279			2.50±0.207			2.37±0.166			2.34±0.057		
Post hoc test (Tukey)					Below 24 years vs. 24 to 54 years		**0.001**				Below 24 vs. 24 to 54 years		**0.009**
Marital status													
Married	145	2.52±0.295	F= 2.042	0.109	2.53±0.313	F=3.073	**0.029***	2.42±0.232	F=0.438	0.726	2.35±0.303	F=0.836	0.475
Unmarried	77	2.62±0.301			2.63±0.297			2.45±0.206			2.31±0.301		
Separated	4	2.53±0.357			2.45±0.369			2.37±0.176			2.15±0.114		
Widow/ Widower	11	2.48±0.249			2.39±0.186			2.42±0.218			2.27±0.247		
Post hoc test/ (Tukey)					Married vs. unmarried		**0.03**						

*Statistically significant at p<0.05

Table 7 shows that the statistically mean difference between stigma domain and socio-demographic characteristics. It illustrates that there was a significant mean difference score of Public attitude concern (PAC) and Enacted stigma (ES) domain regarding age of participants (p<0.001) and (P<0.013) respectively. In public attitude concern domain, there was a significant mean difference between age below 24 years and 24 to 54 years of age group. Similarly, among same age group i.e, age below 24 years and 24 to 54 years, mean was a significant difference in ES domain. There was a statistically mean difference between married and unmarried in Public attitude

concern (PAC) with regards to marital status. Table 8 illustrates that there is no significant mean difference in the domain of stigma for gender, residence, religion and ethnicity.

Table 8. Comparisons of stigma mean score with residence, religion and ethnicity characteristic

Variable	N	Negative self-image stigma			Public Attitude concern			Disclosure concern			Enacted stigma		
		Mean ±SD	Value of T-test or F- test	P- value	Mean ±SD	Value of T-test or F- test	P- value	Mean ±SD	Value of T-test or F- test	P- value	Mean ±SD	Value of T-test or F- test	P- value
Residence													
Municipality	154	2.56±0.304	T=0.014	0.905	2.58±0.314	T=0.358	0.550	2.46±0.224	T-0.379	0.538	2.34±0.303	T=0.91	0.339
Rural Municipality	83	2.54±0.287			2.50±0.291			2.39±0.214			2.31±0.288		
Religion													
Hindu	207	2.56±0.305	F=0.674	0.569	2.57±0.307	F=1.305	0.273	2.43±0.226	F=0.530	0.662	2.33±0.300	F=0.817	0.486
Buddhist	2	2.42±0.001			2.33±0.001			2.37±0.001			2.31±0.642		
Islam	26	2.50±0.249			2.46±0.319			2.44±0.200			2.29±0.290		
Christian	2	2.71±0.001			2.50±0.001			2.62±0.001			2.63±0.128		
Ethnicity													
Dalit	19	2.57±0.359	F=0.110	0.990	2.53±0.345	F=0.414	0.839	2.45±0.229	F=0.408	0.843	2.31±0.273	F=0.438	0.822
Disadvantage Janajati	56	2.57±0.276			2.56±0.314			2.43±0.187			2.29±0.286		
Non-Dalit Terai caste	45	2.56±0.306			2.58±0.283			2.44±0.191			2.36±0.279		
Religious minority	35	2.55±0.284			2.50±0.307			2.47±0.190			2.32±0.290		
Advantage Janajati	12	2.55±0.313			2.54±0.202			2.42±0.347			2.40±0.446		
Upper caste	70	2.53±0.305			2.57±0.329			2.41±0.256			2.34±0.305		

*Statistically significant at p<0.05

Table 9. Mean compare between HIV related information and stigma means score

Variable	N	Negative self-image stigma			Public Attitude concern			Disclosure concern			Enacted stigma		
		Mean ± SD	F/T Value	P-Value	Mean ± SD	F/T Value	P-Value	Mean ± SD	F/T Value	P-Value	Mean ± SD	F/t Value	P-Value
Duration of HIV diagnosis													
Below 1 year	48	2.59±0.303	F=4.11	0.18	2.81±0.215	F=26.16	**0.01***	2.40±0.206	F=1.112	0.328	2.10±0.116	F=20.44	**0.01***
1 to 4 years	138	2.58±0.298			2.51±0.290			2.45±0.215			2.39±0.295		
More than 4 years	51	2.45±0.272			2.44±0.304			2.42±0.253			2.37±0.325		
Post hoc (Tukey)					Below1 year vs.1 to 4 year		**0.001**				Below1 year vs.1 to 4 years		**0.001**
					Below 1 year vs. more than 4		**0.001**				Below 1 year vs. more than 4 years		**0.001**
HIV disclosed status													
Husband /wife													
Yes	153	2.53±0.290	T=1.122	0.291	2.54±0.319	T=2.162	0.143	2.43±0.234	T=4.547	**0.034***	2.35±0.301	T=0.055	0.814
No	65	2.66±0.293			2.63±0.269			2.48±0.180			2.32±0.302		
Other member of family													
Yes	195	2.58±0.299	T=1.471	0.227	2.57±0.296	T=3.184	0.076	2.45±0.220	T=0.262	0.609	2.36±0.021	T=5.870	**0.016***
No	23	2.47±0.249			2.55±0.397			2.36±0.204			2.17±0.048		
Close friend													
Yes	107	2.64±0.268	T=6.355	**0.012***	2.60±0.266	T=6.263	**0.013***	2.46±0.218	T=0.464	0.497	2.37±0.318	T=7.545	**0.007***
No	111	2.51±0.308			2.53±0.340			2.43±0.222			2.31±0.281		
Neighbor													
Yes	22	2.47±0.238	T=2.312	0.130	2.65±0.316	T=0.042	0.838	2.34±0.269	T=0.465	0.496	2.26±0.290	T=0.639	0.425
No	196	2.58±0.300			2.55±0.305			2.45±0.211			2.35±0.301		

*Statistically significant at p<0.05

Table 9 illustrates that the mean score difference between HIV related information and HIV stigma domain. There was statistically mean difference between duration of HIV diagnosis with Public attitude concern (PAC) domain and enacted stigma (ES). HIV diagnosis duration below 1 year was significantly mean difference with 1 year to 4 years and more than 4 years of duration. There was significant mean difference between husband/wife and disclosure concern. Disclosed HIV status to other member of family was significantly mean difference with ES. Similarly, there was significant mean difference between close friend and HIV stigma domain. Neighbors of participants have significant mean difference with PAC stigma domain.

Table 10. Response to statement related discrimination

S.N	Statement	Strongly Disagree n (%)	Disagree n (%)	Agree n (%)	Strongly Agree n (%)
1	People Living with HIV/AIDS face neglect from their family	2(0.8)	133(56.1)	100(42.2)	2(0.8)
2	People want to be friend with someone who has HIV/AIDS positive	5	171(72.2)	58(24.5)	3(1.3)
3	People living with HIV/AIDS face rejection from their homes by their family	1(0.4)	84(35.4)	126(53.2)	26(11)
4	Most people not by vegetable from a shopkeeper or food seller that they knew has HIV/AIDS	2(0.8)	81(34.2)	142(59.9)	12(5.1)
5	People who have HIV/AIDS face verbal abuse	0(0)	80(33.8)	144(60.8)	13(5.5)
6	People living with HIV/AIDS face rejection from their peers	1(0.4)	84(35.4)	145(61.2)	7(3.0)
7	People who are suspected of having HIV/AIDS lose respect in the community	4(1.7)	79(33.3)	142(59.9)	12(5.1)
8	People living with HIV/AIDS are treated as similarly by health care professionals as people with other illness	5(2.1)	70(29.5)	154(65)	8(3.4)
	Overall Discrimination (Min, Max, Mean ± SD)	**14**	**29**	**20.88±2.80**	

Table 10 lists the participants' responses to a statement linked to HIV discrimination. The majority of participants more than half disagree with the statement that "People Living with HIV/AIDS Face Neglect from Their Family," whiles others do. On the statement that "People want to be friends with someone who has HIV/AIDS positive," more than two thirds of participants disagree. Similarly, the majority of participants agreed with the statement that "those living with HIV/AIDS faces rejection from their homes by their family." Most participants agreed that people should not purchase vegetables from a shopkeeper or food vendor if they are aware they are HIV positive. The majority of the participants agreed that they are exposed to verbal abuse, while others disagree.

The majority of the participants agreed that people who are HIV-positive experience rejection from their peers and that people who are HIV-suspect lose respect in the community. While some of them disagree, a higher percentage of respondents believed that "Persons living with HIV/AIDS are treated as similarly by health care providers as people with other illnesses. The mean score overall was 20.88, with a minimum of 14 and a maximum of 29. SD equaled 2.80.

Table 11 illustrates that the mean differences between socio-demographic characteristics and HIV related discrimination. Gender of participant was significantly difference ($p<0.01$) with the discrimination. There was a significant mean difference between male and transgender ($P<0.009$). Similarly, significant means difference between female and transgender ($p<0.025$). There was a significant mean difference between the age of participants and HIV discrimination status ($p<0.031$). Among the age group of participants below 24-year age and above 54 years' age have significance difference mean score ($p<0.024$). Likewise, marital status of the participants was a significant mean difference with HIV discrimination ($p< 0.004$). There was a significant mean difference between married and unmarried and similar between unmarried and widow/widower ($p<0.017$)

Although there is no significant mean difference between literate and illiterate with the discrimination, but there is a significant mean difference between literate and discrimination status. Participants with primary level of education and intermediate level have significant mean difference between each other (p<0.012).

Table 11. Comparison of the discrimination mean score with demographic characteristic

Variable	**N**	**Discrimination**		
Gender		**Mean ± SD**	**F /T value**	**P-Value**
Male	137	21.12±2.74	F=4.67	**0.01***
Female	95	20.71±2.80		
Transgender	5	17.40±2.07		
		Post Hoc (Tukey)	Male vs. TG	**0.009**
Age			Female vs. TG	**0.025**
Below 24 years	41	21.48±2.60	F=3.54	**0.031***
24 to 54 years	186	20.85±2.82		
More than 54 year	10	18.90±2.37		
		Post Hoc (Tukey)	Age below 24 year vs. age more than 54 year	**0.024**
Marital status				
Married	145	20.57±2.83	F=4.62	**0.004***
Unmarried	77	21.72±2.46		
Separated	4	20.50±3.31		
Widow/Widower	11	19.09±3.14		
		Post Hoc (Tukey)	Married vs. unmarried	**0.017**
			Unmarried vs. widow/widower	**0.017**
Residence				
Municipality	154	21.14±2.83	T= 4.05	**0.04***
Rural Municipality	83	20.38±2.68		
Education Status				
Literate	218	21.009±2.73	T= 0.066	0.797
Illiterate	19	19.42±3.18		
Literate				
Simply can read and write	27	21.00±2.77	2.645	**0.02***
Primary school	32	19.97±1.94		
Lower secondary	20	21.45±2.35		
Secondary school level	63	20.95±3.01		
Intermediate level	45	22.022±2.59		
Bachelor or above	31	20.48±2.87		
		Post Hoc (Tukey)	Primary level vs. intermediate	**0.012**

*Statistically significant at p<0.05

Table 12. Comparative statistical analysis of the discrimination mean score of employment status, religion and ethnicity characteristic

Variable	N	Discrimination		
Employment status		**Mean ± SD**	**F-value**	**P-Value**
Agriculture	41	19.90±2.49	3.895	**0.001***
Homemaker	49	20.61±2.74		
Service	54	20.62±3.17		
Labor	25	20.80±2.69		
Business	31	20.93±2.75		
Abroad	8	23.12±1.55		
Student	29	22.58±2.07		
		Post Hoc	Agriculture vs. abroad	**0.037**
			Agriculture vs. student	**0.001**
			Homemaker vs. student	**0.034**
			Service vs. student	**0.031**
Religion				
Hindu	207	20.99±2.75	F=1.88	0.133
Buddhist	2	19.50±0.70		
Muslim	26	19.92±3.08		
Christian	2	23.50±3.53		
Ethnicity				
Dalit	19	20.42±2.50	F=0.873	0.500
Disadvantage Janajati	56	21.12±2.69		
Non Dalit Terai caste	45	21.31±2.41		
Religious minority	35	20.34±3.09		
Advantage Janajati	12	21.58±2.92		
Upper caste	70	20.88±2.80		

*Statistically significant at p<0.05

Table 12 shows that the employment status of participants was significantly mean difference with HIV discrimination status (p<0.001). There was a significant mean difference between agriculture and abroad (p<0.037), agriculture and student (p<0.001), homemaker and student (p<0.034) and service and student (p< 0.031). Similarly, there was no any significant difference between religion and ethnicity.

Table 13. Comparative statistical analysis of HIV related information and mean score

Variable	N	Discrimination		
Duration of HIV diagnosis		**Mean ± SD**	**F/T value**	**P-Value**
Below 1 year	48	21.52±2.61	5.152	**0.006***
1 to 4 years	138	21.04±2.80		
More than 4 years	51	19.84±2.73		
		Post Hoc (Tukey)	Below 1 year vs. more than 4 years,	**0.008**
			1 year to 4 years	**0.023**
HIV disclosed status				
Husband/Wife				
Yes	153	20.67±2.79	T=5.049	**0.02***

No	65	22.01±2.57		
Member of family				
Yes	195	21.179±2.78	T=0.085	0.77
No	23	20.217±2.79		
Close friend				
Yes	107	21.58±2.58	T=5.66	**0.01***
No	111	20.58±2.91		
Neighbor				
Yes	22	19.59±2.36	T=1.45	0.23
No	196	21.24±2.79		
Everyone				
Yes	6	19.83±2.78	T=0.006	0.94
No	215	21.079±2.79		

***Statistically significant at p<0.05**

Table 13 shows that duration of HIV diagnosis was significant mean difference with discrimination (p<0.006). There was a significant mean difference in discrimination between HIV diagnosis duration below 1 year and more than 4 years (p<0.008) and between 1 year to 4 years (p<0.023). Disclosed of HIV status was a significant mean difference among husband/wife (p<0.02) and close friend (p<0.01) regarding discrimination.

4. DISCUSSION

People with HIV/AIDS in Banke District were shown to experience stigma and prejudice, according to the research. The study also identifies factors linked to prejudice and stigma. Concerns include sociodemographic, socioeconomic, and HIV-related characteristics. According to the study, the participants' mean age was 33.5, and a larger percentage (78.5%) were between the ages of 24 and 54. Most of the participants were married (61.2%) and a few were separated (1.7%). Higher percentage of participant follow Hinduism (87.3%) and 65% were residence from sub-metropolitan city or municipality and 92% were literate who completed secondary level were 26.6%. Among all participant 92 % disclosed their HIV status. The study shows that a higher proportion of participants (62.9%) have taken ART service since 1 to 4 years and more than half (62.4%) they know their HIV positive status while treatment of other diseases.

4.1. Perceived stigma

The overall stigma means score was 2.48 with a range of 1.84 to 3.42 and SD 0.21. Among all four domains, Public attitude concern had highest mean score of 2.60 and enacted stigma had least mean score 2.33 comparing to all four domains. This is similar to the study conducted in the Pokhara metropolitan city, Nepal. The study concludes that overall HIV stigma was 2.52 with range 1.21 to 3.81 and SD was 0.48. Similarly, enacted stigma had least mean score of 1.66 with SD 1.08 (Subedi et al., 2019). Because both studies were carried out in the same nation with a comparable socio-cultural landscape, the results could be similar. A study from Bengal, India also found that there was highest mean score in public attitude concern, but lower mean score in disclosure concern (Datta, et al., 2016) and Study from Ethiopia found that 41.93 percent of the respondent perceived stigma in their life (Tawiye et al., 2021). But a study from Botswana among people living with HIV/AIDS found that among all domains Negative self-image (NSI) had a highest stigma mean score (Letamo et al., 2004). The study demonstrates that stigma domains vary from nation to nation. It might be the result of different geographic, cultural, and economic factors.

4.2. Stigma domains and socio-demographic characteristics

The study shows that there was a significant difference in mean score between simply can read, write and primary level education (P<0.014). The study finding was almost similar to the study from Botswana, where mean score was difference between primary education of participants and patients who completed their secondary level of education (Letamo et al., 2004). The literary situation of developing and underdeveloped nations differs from developed nations. It can be because of the country's educational standards. The study from Rakai, Uganda concludes the difference mean score among participants with higher levels of education and lower level of

education (Nakigozi, et al., 2011). Gender was significantly associated with the NSI stigma and among gender it was found that there was a significant mean difference between female and male (Nattabi et al., 2011).

There was a significant mean difference between age below 24 and 24 to 54 years of age group ($p<0.001$). Likewise, a study conducted by Subedi et al., (2019) in Pokhara, Nepal concludes that the stigma mean score was found high among young adult in Public attitude concern domain. Nepal is still far from gender equality; the outcome may be similar. As a result, there is still a divide between men, women, and transgender people. Our Study shows that there was a statistically mean difference in employment status of participants regarding stigma ($p<0.0042$), the mean difference between homemaker and student ($p<0.036$) and similarly, the mean difference between service and student ($p<0.041$) were significant mean difference and the results are consistent with the study conducted in Qom, Iran that employed participants were significantly associated with the stigma (Pourmarzi et al., 2017). Another study from Ontario, Canada concluded that unemployment of participants is associated with more enacted stigma (Emlet et al., 2015). It could be a result of different perspectives on employment and unemployment, as well as differences between states or countries with and without strong economies.

In our study there was statistically mean difference regards to marital status ($p<0.029$). A study from Dessie city, Ethiopia showed that, there was significant mean difference between gender and place of residence of participants (Tawiye et al.,2021). The current study revealed significant mean difference in disclosure concern stigma domain with regards to education status of participants ($p<0.007$) and between secondary level and simply can read, write ($p<0.019$).

Furthermore, study shows that, there was a significant mean difference between age below 24 year and 24 to 54 years of age group ($p<0.009$). In our study, there is no significant mean difference between in ES and gender. Study from Uganda shows that female participants have significantly mean difference and higher ES (Nakigozi et al.,2011). The mean stigma domain and gender disparity may differ from family to family. It is dependent on factors like cultural status, economic status and educational status.

4.3. HIV related information and stigma

The findings from independent t-test and ANOVA test highlight that there was statistically mean difference ($p<0.01$) between duration of HIV diagnosis with Public Attitude Concern (PAC) and Enacted Stigma (ES). HIV diagnosis duration below 1 year was significant mean difference between 1 year to 4 years and more than 4 years of duration which was different with the study conducted in Uganda (Nakigozi et al.,2011). Duration of HIV diagnosis below 2 years had a lower stigma mean score comparing to a diagnosis of HIV for more than 2 years (Nattabi et al., 2011). Depending on a person's HIV disclosure status, it could vary. Only a small percentage of persons may be aware of their HIV status. Consequently, there is a low likelihood of stigmatization increasing relative to the time since HIV diagnosis.

Our study shows that there was a significant mean difference between husband/wife and disclosure concern. ($p<0.034$) Similar finding was shown in the study conducted in Vietnam. (Salter et al., 2010) The mean difference between close friend and the HIV stigma domain was significant i.e. NSI ($p<0.023$), PAC ($P<0.013$) and ES. ($P<0.007$) The study finding was similar to the study conducted in Ethiopia (Tawiye et al., 2021). Study found that disclosure of HIV status to family members is significantly associated with ES and status disclosed among close friends are significantly associated with NSI, PAC and ES. The finding of this study is similar to a study carried out in Uganda (Nattabi et al., 2011). The cultural and educational status could be the cause of this. However, research indicates that the majority of low-income nations experience greater stigmatization from their own spouses, families, and neighbors. It can be the result of inadequate understanding of HIV and how it spreads. In this study, HIV disclosure with the neighbors has significant mean differences with the PAC stigma domain. These findings were supported by the study in South Africa among HIV living people and are significantly associated with the disclosure status and stigma related to people living with HIV (Frank et al., 2013).

4.4. Perceived discrimination

The study found that the overall mean score was 20.88 with minimum 14 and maximum 29 mean score, and the SD was 2.80 which are similar to the study conducted in Zimbabwe and Thailand. The overall mean score was 27.19 and 21.44 respectively (Wong et al., 2013).

4.5. Different discrimination means score with socio-demographic characteristics

There was Significant mean difference between male and transgender ($P<0.009$) and between female and transgender ($p<0.025$). A study conducted in Nicaragua concludes that there is a significant mean difference between Gender and discrimination (Ugarte et al., 2013). The study shows that there is a significant mean difference between the age of participants below 24 years and above 54 years have significant difference mean score ($p<0.024$). Another study carried out in India shows that, age of participants, place of residence was

significantly associated with the HIV discrimination (Halli et al., 2017). The outcome is comparable. It can be the result of research done in a comparable nation from developing and growing nations. Our study shows that there were significant mean differences between married, unmarried, widow/widower, educational status, employment status of participants and discrimination similarly, employment status of participants was significantly mean difference with HIV discrimination status ($p<0.001$). An analogous study carried out in Bangladesh revealed significant ($p < 0.05$) differences in the levels of discriminatory attitudes in relation to marital status, age, knowledge of HIV transmission and prevention, and irrational fear of HIV transmission (Harapan et al., 2013). Another study from Bangladesh also shows that there is lower discrimination in high schooling and discrimination increases with age. The perspective of HIV in this study area is comparable to that of Bangladesh and India because the majority of the people shared those nations' cultures, ethics, and religions due to the study area's accessibility to the open border with India. Fear of HIV transmission, gender, religion, marital status, and place of residence were significant with the discrimination (Husain et al., 2010).

5. FINDINGS, CONCLUSION, AND RECOMMENDATIONS

5.1. Findings

Assessing the perceived experiences of stigma and discrimination among individuals living with HIV/AIDS in Banke District was the aim of the study. The research involved 237 individuals receiving services from the Banke District ART center. The major findings of the study are summarized below.

1. More than half of the participants were male (57%) who were involved in the study.
2. The mean age of participants was 33.55 ± 9.80, with minimum age was 20, and maximum age was 68, and 61.2 % participants were married.
3. The majority of participants followed Hinduism and one-fourth of the participants were from upper-caste.
4. Nearly two-third participants were from the Municipality and nearly one-fourth participants were engaged in any form of service.
5. The majority of participants (26.6%) completed secondary level school education.
6. The duration of HIV status from 1 year to 4 years was 62.9%. Similarly, the majority of the participants know their status during the treatment of other diseases.
7. 92% of participants disclosed their HIV status. Among them, 70.2 % disclosed the status with husband/wife, and 89.4% disclosed with other family members.
8. The overall stigma mean score was 2.48, and SD was 0.21, with the highest mean score in public attitude concern domain and lowest in the enacted stigma domain.
9. The overall discrimination mean score was 20.88, and SD was 2.80, with minimum 14 and maximum 29 mean scores.
10. There were significant mean differences between perceived stigma and age, marital status, place of residence, employment status, duration of HIV diagnosis, and HIV disclosed status.
11. Similarly, there was a significant mean difference between perceived discrimination and gender, age, marital status, employment status, duration of HIV diagnosis, and HIV disclosure status.

5.2. Conclusion

According to the study, the mean score for HIV overall stigma was 2.48 ± 0.21. It shows that nearly fifty percent of participants perceived stigma because of HIV positive status. Public attitude concern has the highest mean score among all stigma domains and enacted stigma has the lowest mean score. Seventy percent of participants assess discrimination due to HIV positive status. Perceived stigma was statistically significantly predicted by age, marital status, place of residence, work status, length of HIV diagnosis, and HIV revealed status. Similar to this, there were statistically mean differences in assess to discrimination according to gender, age, marital status, educational status, employment status, duration of HIV diagnosis, and HIV disclosure status.

5.3. Recommendation

Based on the results of study, following recommendation is suggested:

1 Encourage the expansion of the health sector's capacity, primarily through intervention strategies based on institutions and the community, focusing on stigma and discrimination.

2 Quantitative research cannot expose the in-depth thoughts, viewpoints, and experiences of PLWHA on stigma and discrimination. Qualitative and mixed methods may be employed to do so.

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Author Contributions
Kamal Dhakal: Participated in collecting data.
Ramesh Prasad Adhikary: Participated in management of collected data and analysis, including formatting the article.

Informed consent
Written & Oral informed consents were obtained from all individual participants included in the study. Additional informed consent was obtained from all individual participants for whom identifying information is included in this manuscript.

Conflicts of interests
The author declare that they have no conflicts of interest, competing financial interests or personal relationships that could have influenced the work reported in this paper.

Ethical approval & declaration
The study was approved by the Medical Ethics Committee of Pokhara University, Nepal. (Ethical approval code: 810/078/79).

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Data and materials availability
All data associated with this study are present in the paper.

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