

Impact of Programs Eliminating Negative Perceptions About HIV to Benefit Patients' Health and Wellbeing

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Abstract

Introduction: Human immunodeficiency virus (HIV) stigma, which is the social shaming and demeaning of people with HIV, is still a big problem that makes it hard to stop the HIV spread around the world. The stigma associated with HIV is a social or structural problem that arises when a power structure identifies, labels, denigrates, and treats those with the illness negatively.

Objectives: In this research, the HIV Stigma Framework (HIVSF) was tested on 95 HIV-positive individuals from an inner-city neighborhood in the Bronx, New York.

Methods: We used a study given by a researcher and information from medical records to find out how each kind of HIV stigma affected people (internalized, performed, and expected) concerned People health (PH) and Wellbeing Markers (WBM)).

Results: The results show that internalized stigma is strongly linked with emotional and behavioral signs of health and wellbeing. These include feeling powerless about HIV, accepting it, and thinking it has some benefits. The existence of several Chronic Diseases (CD) and a Clusters of differentiation 4 (CD4) count below 200 are two examples of physical health (PH) and WBM that are linked to both actual and prospective feelings of shame.

Conclusions: By comprehending how it differs, researchers may be able to learn more about how HIV stigma affects health and wellbeing (WB). They could also create more focused aid programs for HIV-positive people.

Keywords: Human immunodeficiency virus (HIV), physical health (PH.), wellbeing (WB), Clusters of differentiation 4 (CD4), HIV Stigma, HIV stigma framework (HIV SF), Health Discrimination (HD)

1. Introduction

The HIV epidemic is still an issue in the United States. Between 2011 and 2016, 40,000 new HIV cases were reported annually. PrEP for HIV has shown much promise in reducing the incidence of new HIV infections (Pleuhs et al., 2020). The antiviral medications tenofovir and emtricitabine were combined in a once-daily tablet that the FDA authorized in 2012 to decrease the risk of Contracting HIV (C-HIV). "Pre-Exposure Prophylaxis (PrEP)," a biological method for preventing HIV, has changed how HIV prevention is done in the U.S. and around the world (Golub, et al., 2019). The stigma and injustice attached to HIV globally harm the physical and emotional health (EH) of people living with HIV (PLHIV). HIV stigma and discrimination against people living with the virus (PLHIV) may take many various forms, including offensive terminology, prejudiced actions, and subpar care from healthcare providers (HCP), families, and communities (Mahamboro et al., 2020). It is challenging to combat HIV/AIDS and its spread in Pakistan's traditional Muslim culture. There are many misconceptions and falsehoods regarding conventional cultural beliefs and practices due to the shame and risky behaviors associated with HIV/AIDS (Iqbal et al., 2019).

Additionally, long-term HIV-negative individuals don't transmit the virus to their sexual partners or, in the case of pregnant women, to their unborn children. At the same time, they are pregnant or giving birth (Remien et al., 2019). The socio-ecological method is in keeping with the reality that adolescents living with HIV (ALWH) have psychological issues brought on by personal, familial, social, neighborhood, and societal influences. They can cope with problems associated with their disease, such as the stigma of HIV, by understanding how ALWH engage with these components of their social environments (Ashaba et al. 2019). The analyses found that students' knowledge of HIV was either average or bad and had wrong ideas about high-risk behaviors and a negative view of PLHIV. Misconceptions were found in most KAP studies done with young people in Nigeria, Botswana, Gabon, and other African countries, as well as in other parts of the world (Tarkang, et al.2019). HIV testing needs to be done more often as evidence of the advantages of early antiretroviral treatment (ART) grows. Because of this, UNAIDS developed the 90:90:90 strategy, which asks for 90% of HIV-positive individuals to have a diagnosis, 90% of those who receive ART, and 90% of those on treatment to have their virus under control(De Cock et al., 2019).

2. Literature Review

Kimemia et al. 2019 performed 4 Focus Group Discussions (FGDs) with HIV-seroconcordant couples who want to get pregnant quickly, 21 In-Depth Interviews (IDIs), and 20 Key Informant Interviews (KIIs) with medical experts who gave ideas for better conception. Crockett et al. 2019 examined whether HIV stigma and HIV-related abuse felt by women living with HIV (WLHIV) changed based on their unique situations and local surroundings. Maseko et al. 2020 executed In-Depth Interviews (IDIs) with 40 HIV-negative adolescent girls and young women (AGYW) between the ages of 15 and 24 six months after they began the master's program. Klassen et al. 2019 conducted social ecology (SC) research on condom usage and how others perceived it by speaking with 19 homosexual males in Vancouver, Canada, who tested negative for HIV and employed HAART-based prevention techniques. Earle et al. 2019 revealed the risks and responsibilities FSWs experience, which are considered crucial justifications for taking and utilizing PrEP, how PrEP was used to lower risk or enhance reality, and which features of PrEP were most appreciated. When scaling up, all of these aspects must be taken into consideration. Vazquez et al. 2019 informed 187 HIV-negative pregnant women between 18 and 24. They resided in Tugela Ferry, a rural area and one of the most impoverished regions of South Africa's Kwazulu-Natal province. Fau et al. 2022 looked into whether HIV stigma and discrimination felt by women living with HIV (WLHIV) changed based on their unique situations and local environments.

Mahamboro et al. 2020 learned that HIV-positive males who marry women in Yogyakarta, Indonesia, experience stigma and maltreatment. Luseno et al. 2021 explored the potential effects of 4096 adolescents' sexual behavior, attitudes about HIV risk, and perceptions of HIV stigma on Depressive Symptoms (D.S.) and Quality Of Life (Q.L.) in a rural, high-HIV area of western Kenya. Witzel et al. 2020 compared the implications of HIV self-testing (HIVST) with the effects of traditional HIV testing services to discover which kind of service delivery works best for relevant groups. Chenneville et al. 2020 described the present and potential future impact of COVID-19 on PWH, compared and contrasted COVID-19 and the HIV pandemic, and asked experts and medical workers to look into the effects of COVID-19 on HIV prevention and treatment. Park, et al., 2020 learned how CKD and diabetes affect PLWH death rates. This was done by looking at statistics from the Centres for AIDS Research Network of Integrated Clinical Systems. Santos et al. 2021 conducted a cross-sectional survey with a global sample of homosexual men and other MSM (n = 2732) between April 16, 2020, and May 4, 2020, using a social networking app. According to qualitative feedback, patients' fear of COVID-19 infection kept them from attending clinics. However, stay-at-home directives supported cutting-edge community-based HIV treatment methods and normalized ART (Linnemayr, et al., 2021). Bogart et al. 2021 compared the effects of COVID-19 on antiretroviral drug (ART) adherence in a cohort of HIV-positive Black Americans and looked at the relationship between COVID-19-related medical fear, COVID-19 vaccination, and treatment hesitation, as well as the adverse effects of COVID-19 on those ART. Hyndman et al. 2021 conducted a confidential cross-sectional survey on the internet of Men Who Have Sex with Men (MSM) who visited 56 Dean Street, a center for sexual health and HIV, and were HIV-negative but at a high risk of contracting HIV. Baker et al. (2020) discussed the use of Cognitive-Behavioral Approaches (CBA) to assist HIV-positive persons with sexual issues People With HIV (PWH nic).

3. Methodology

The effects of HIV stigmatization on P.H. and W.B. are shown in Figure 1, in our opinion. The bands at the top of the image, according to the HIV Stigma Framework, depict the overall connection between how HIV stigma is created and what occurs as a consequence. The theories under investigation in this research are associated with Paths A through E, which show how HIV stigma affects P.H. and W.B. We also use arrows that point in both directions to demonstrate possible links between HIV stigma processes and health and happiness measures. Prior studies support the relationship between felt, expected, and true shame. Internalized HIV stigma may be closely connected with the emotional, mental, and physical health and welfare of PLWH (Figure 1), which may indicate how well and satisfied they are. If people have internalized HIV stigma, they could feel undeserving, dirty, or ugly. They might also think that because you have HIV, you deserve bad things to happen to you. It shouldn't be surprising that internalized shame is linked to several bad mental health traits, such as a rise in depressive symptoms, a rise in psychological pain, a fall in self-esteem, and a drop in general WB. Many people who suffer chronic illnesses opt to see things positively, preferring, for instance, to view their condition as a chance to change their beliefs and life goals.

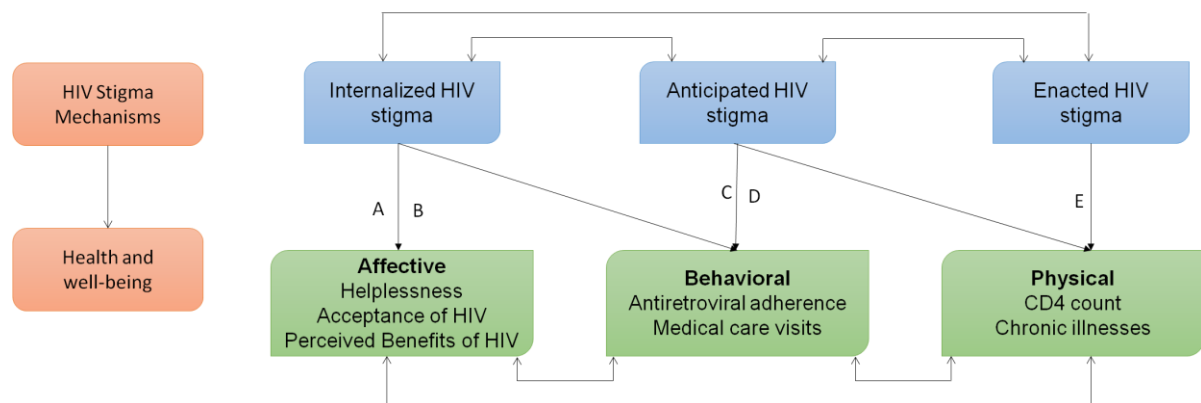


Figure 1: Hypothesized connections between the health and happiness of persons with HIV and how they handle stigma

3.1 Procedure and Participants

The information was gathered through psychological and social elements research at a community center in the Bronx, New York, which offers integrated HIV treatment. The study examined how long a person receives HIV treatment. A staff member notified clinic patients about the trial, and those who indicated interest met with a researcher to discuss their eligibility for the study. The research required all participants to have HIV, to be at least 18 years old, and to speak either English or Spanish. The participants had to have known they had HIV for more than two years before taking part since one of the objectives of the parent research was to determine how long patients remained in care. A qualified researcher conducted The in-person interviews in a private room for around 60 minutes. Participants received a \$15 payment for their time. The Institutional Review Board gave its approval to each approach. A total of 101 participants participated in the research. Six respondents informed the interviewer that they had misunderstood something or had given an incorrect response, such as providing their sexual orientation as their answer to a question concerning HIV Stigma Mechanisms rather than their HIV status. The researcher noted all participants who reported difficulties as part of the study method. Then, before the study, these individuals were eliminated from the data set, leaving a group of 95 individuals.

3.2 HIV Stigma Mechanisms

Despite the fact that numerous already-validated measures include questions that test how HIV stigma operates, no scales assess the stigma processes described in the HIV Stigma Framework. As a consequence, by using

predefined values, the questions used to measure how much HIV stigma was internalized, expected, and practiced were changed to comply with the criteria. If having HIV made one feel embarrassed, it was one of the six criteria used to assess whether or not a person had internalized HIV stigma. Nine questions were provided to people with HIV to find out how they expected to be treated, including "Healthcare workers will treat me with less respect". One of the nine questions used to evaluate the effects of HIV stigma was whether or not my family rejected me. On a scale of 1 to 5, respondents with higher Likert scores showed more humiliation. The final score was calculated by adding the sums of each point.

3.3 Affective Health and Wellbeing

Three aspects of mental health were examined using the Illness Cognitions Questionnaire: acceptance of having HIV, feeling powerless about having HIV, and believing that having HIV had some advantages. The metric was first designed for those with various chronic conditions. In the current research, HIV was used instead of the term disease.

3.4 Physical Health and Wellbeing

Having more than one chronic illness and a CD4 level below 200 were used to measure physical health and W.B. To determine if participants had more than one chronic condition, participants were asked whether they had ever had a diagnosis for asthma (AT), diabetes (DA), heart disease, high blood pressure (HBP), lung disease (LI), or hepatitis C (H.C.). The Infectious Diseases Society of America's HIV Medicine Association (MAIDS-A) identified these ailments. The facility's staff learned that asthma was a common long-term illness bad for PH and that many clients had it. People who took part were split into two groups: those with long-term sickness and those without. One of the computer health records people had was the number of CD4 T cells. People in the study with a CD4 count of 200 or less were put in Group 1, and people with a CD4 count of 200 or more were put in Group 0. This was done because a CD4 count of less than 200 is a sign of a very weak Immune System (I.S.) and can be used to identify AIDS.

3.5 Psychiatric Health and Happiness

To gauge mental health (M.H.) and W.B., we counted the days patients did not receive medical attention and failed to take their ARV medication as directed. Examining the patients' digital medical records allowed researchers to determine the number of days during which they were left without medical treatment. The HIV MAIDS-A recommends monitoring PLWH every three to four months if their CD4 levels are normal and their viral loads are low.

Furthermore, the facility where the participants were treated advises PLWH to get treatment at least once every three months. In other words, if someone hadn't visited a doctor for HIV in the previous 90 days, or three months, it was assumed that there was a gap in their treatment. Throughout the last 18 months, only a few people visited the clinic as necessary. The number of days this occurred was added together to determine this.

There were two approaches to identifying participants in the Swiss HIV Cohort Study who weren't taking their ARV medication as directed. How well individuals take their HIV medication is the first question. In the last four weeks, how often have they missed a dose? Is asked. The second question relates to pauses for drug use. In the previous four weeks, it asked individuals whether they had missed two consecutive HIV medication doses. Participants in this study were split into adherent (0) and non-adherent (1) groups based on whether they reported never missing a dosage and not missing two doses in a row in the preceding four weeks. People may also choose not to take HIV medicine at the time.

3.6 Participant Demographics and HIV Features

Participants took down their age, gender, ethnicity, race, sexual preference, top level of education, and average income. They also reported the length of their HIV infection and if they had taken any medications in the past 18 months.

3.7 Data Analyses

Participants in this study were classified as adherent (groups of 0) or non-adherent (groups of 1) based on whether they said they had never missed a dose or had missed two doses in a row in the preceding four weeks. People could also choose not to take HIV medicine at the time.

4. Result and discussion

Most of the analytical sample's characteristics match those of the clinic group from which it was drawn, as shown in Table 1. There were people of various ages and genders present. The majority of poll respondents who classified as either gay or heterosexual and were Black or Latina. Most of the staff members were from low-income families. 41% of respondents didn't finish high school, and 56% said their yearly salary was less than \$10,000. Participants reported having HIV on average for 16 years, and 22% said they had just started taking medication for it. Most of the group could speak English well, even though 40% were not Americans. As a result, only 11% of respondents chose to answer in Spanish. According to the average of what people mentioned, having HIV has several benefits. The majority of people claimed to have several chronic conditions.

Table 1: Features of an analysis sample

Characteristic	% (n)	M (S.D.)
Age		51.33 (11.43)
Ethnicity:		
Latino (a)		
Race		
Black	49.5 (51)	
Other: white, Multiracial, other	50.6 (48)	
Spanish survey	11.6 (11)	
Born outside of the US	42.0 (39)	
Gender		
Male	51.4	
Female	52.6	
Education		
High school degree or more	42.2 (41)	
Some school	60.2 (58)	
Heterosexual or straight	22.2 (21)	

5.1 Measures for HIV Stigma

Cronbach's alpha showed with the intention of each subscale had high internal reliability, which was noted in the measures' descriptions. Internalized HIV stigma was linked to predicted and real HIV stigma (Table 2) but not to true HIV stigma. Both expected and real HIV stigma were attached in a good way. It was thought that the three scales were different since most of the differences in each scale didn't cross over.

Table 2: Relationships between the characteristics of the sample and how HIV stigma is formed

	Anticipated HIV stigma (A-HIVS)	Enacted HIV stigma (E-HIVS)	Internalized HIV stigma (I-HIVS)
Enacted HIV stigma (E-HIVS)	$r = 0.37, p < 0.02$	-	$r = 0.15, p = 0.33$

Age	R= -0.04, p=0.88	r = -0.08, p = 0.48	r=-0.15, p=0.27
years of HIV infection	r = -0.11, p = 0.30	r = 0.14, p = 0.21	r = -0.38, p = 0.02
High school education (HSE) or more	r = 0.04, p = 0.81	r = 0.18, p = 0.11	r = 0.15, p = 0.26
Female gender (F.G.)	r = -0.03, p = 0.81	r = -0.09, p = 0.39	r = 0.19, p = 0.09
Anticipated HIV stigma (A-HIVS)	-	-	r= 0.25, p=0.05

Taking the survey in Spanish and having HIV for a considerable amount of time were shown to be poor indications of internalized HIV stigma, according to bivariate models. Women who had already undergone drug treatment and those with less internalized HIV stigma also differed. As a result, individuals who replied to the poll in English had HIV diagnoses that were more recent, were female, had never had medication treatment, and reported feeling more alone. Tremendous HIV guilt was consistently linked to being gay, lesbian, or bisexual. None of the demographic variables examined revealed any conclusive associations with the anticipated HIV stigma.

5.2 Stigma between HIV patients

In this study, people with HIV were put into six groups based on their shame (Fig. 3).

- Social judgment: 29% of HIV patients felt embarrassed about their condition and avoided social situations.
- Anticipated stigma: Fear of adverse events is what it is. HIV patients were concerned about how their friends, family, workplace, or group would react if they revealed they had the virus in 33.3% of cases.
- Internalized stigma: These persons had negative emotions and ideas. They felt terrible about themselves and were ashamed of what they did. They also blamed themselves or someone else.
- External stigma: Most HIV patients (94.44%) still attended social events or activities despite HIV. People rarely turned away HIV-positive people from social events because they knew they had HIV.
- Discrimination: 15.4% of people with HIV were treated poorly for a reason other than having HIV. Prejudice was based on one's sexual orientation, use of injectable drugs, employment as a sex worker or foreign worker, status as a refugee or member of an ethnic minority, or status as a prisoner.
- Resilience: Being resilient means handling problems like injustice and embarrassment. 75% of people with HIV did not provide help to those who had tested positive for the infection in terms of their emotions, daily needs, or access to medical care. This is because their mental health wasn't good enough for them to help people going through the same thing.

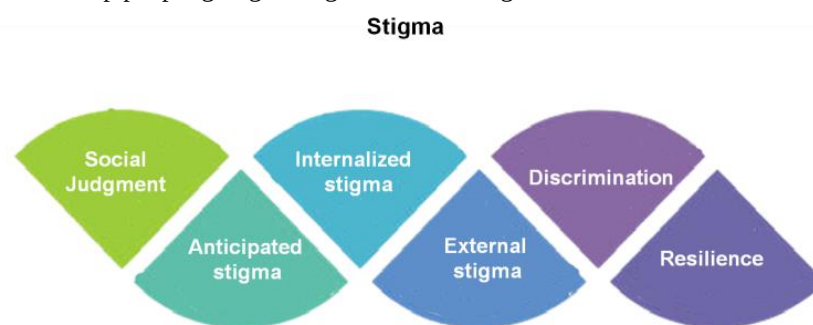


Figure 2: Types of discrimination against HIV patients

5.3 Identifying and Differentiating HIV Stigma Mechanisms

Early bivariate studies of health and wellbeing factors showed that being Latino was linked to feeling more helpless, while being Black and having more education were linked to feeling less vulnerable. When people were older, they were more likely to be accepted. More perceived benefits were seen by women while finishing the poll in Spanish, and being born outside the U.S. were linked to fewer perceived benefits. A history of drug treatment and being older were linked to having one or more chronic illnesses simultaneously. On the other

hand, being gay, lesbian, or bisexual was related to not having any chronic diseases simultaneously. The failure to take the ARV medication as directed has no relation to anything. Age, income, and the number of years a person has lived with HIV were all taken into consideration in multivariate regression analysis when determining the outcome.

Internalized HIV Stigma (IHIVS) was connected, as anticipated, to symptoms of deteriorating mental health and W.B., such as feeling less in control, feeling less accepted, and believing that having HIV doesn't have many advantages (Table 3). Additionally, IHIVS was associated with deteriorating M.H. and W.B. indicators, such as a reduced inclination to seek medical attention sooner and skip ARV doses (impact minor, $p = 0.06$). Unexpectedly, there found a correlation between feeling embarrassed of having HIV and a decreased likelihood of getting a chronic disease. As predicted, a greater chance of receiving a Chronic Disease Diagnosis (CDD) at the same time as receiving an HIV diagnosis was linked to physical health and W.B. Surprisingly; there was a slight association ($p = 0.07$) between being concerned about HIV stigma and a reduced likelihood of having a CD4 level below 200. An increased risk of having a CD4 count below 200 seems to be linked to the HIV stigma in addition to being a symptom of poor physical health and welfare.

Table 3: Health and Wellbeing Indicators and HIV Stigma Mechanisms

	Affective			Physical		Behavioral	
	Perceived Benefits (P.B.)	Acceptance (A)	Days in Medical Care Gaps (MCG)	ARV Non-Adherence (NA)	Internalized HIV Stigma (I-HIV Stigma)	Chronic Illness Comorbidity (CIC)	CD4
HIV stigma	B(SE)=0.04 (0.64) p=0.97	B(SE)=0.02 (0.65) p=0.95	B(SE)=2.70 (12.75) P=0.85	(0.45-1.85) P=0.79	B(SE)=0.02 (0.65) p=0.99	(1.32–13.64) p = 0.02	(0.14–1.07) P=0.09
Anticipated	$\beta = -0.01$	$\beta = 0.01$	$\beta = -0.04$	OR=0.92	$\beta = 0.01$	OR=0.91	OR = 0.39
HIV stigma	B(SE)=0.75 (0.95)	B(SE)=1.48 (0.92)	B(SE)=25.75 (21.11)	(0.51-4.89)	B(SE)=1.48 (0.92)	(0.32–7.74)	(1.21–16.19)
Enacted	$\beta = 0.09$ P=0.44	$\beta = 0.02$ p=0.99	$\beta = -0.15$ P=0.21	OR=1.39 P=0.55	$\beta = 0.18$ p=0.11	OR = 1.58 P=0.59	OR = 4.43 P=0.05
Internalized HIV stigma	$\beta = 0.35$ B(SE)=-1.65 (0.54) p<0.001	$\beta = 0.38$ B(SE)=-1.88 (0.55) p<0.001	$\beta = 0.25$ B(SE)=-20.25 (9.98) P=0.52	OR=1.75 (0.98-4.01) P=0.09	$\beta = 0.45$ B(SE)=2.28 (0.51) p<0.001	OR=0.45 (0.21-0.95) P=0.05	OR = 1.35 (0.64–2.86) P=0.45
HIV stigma	B(SE)=0.04 (0.64) p=0.97	B(SE)=0.02 (0.65) p=0.95	B(SE)=2.70 (12.75) P=0.85	(0.45-1.85) P=0.79	B(SE)=0.02 (0.65) p=0.99	(1.32–13.64) p = 0.02	(0.14–1.07) P=0.09

With nine lines, the poll looked at how well students knew the basics about HIV/AIDS. Students didn't understand much about basic science, with a mean score of 4/9: Some of the statements (facts) were well known by the students. For example, 85% (110/128) knew that HIV targets and strikes the immune system, and 50% (64/128) knew what AIDS stands for. But the respondents didn't know much about how the disease was spread. Only 32% (41/128) knew that the infection could be spread through blood, breast milk, and sexual fluids, but not through spit. The exact number of students understand that the best time to test for HIV is three to six months after getting it (Figure 3).

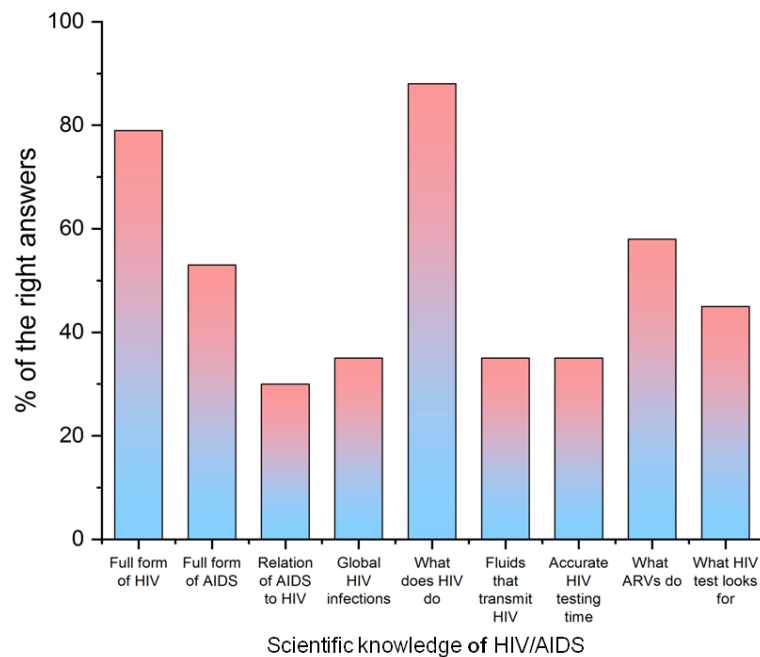


Figure 3: Scientific knowledge of HIV/AIDS among female students

Over two-thirds of HIV patients, or 25/31 (80.6%), have a poor view of the disease. HIV illness is usually seen as a sickness of non-believers (figure 1).

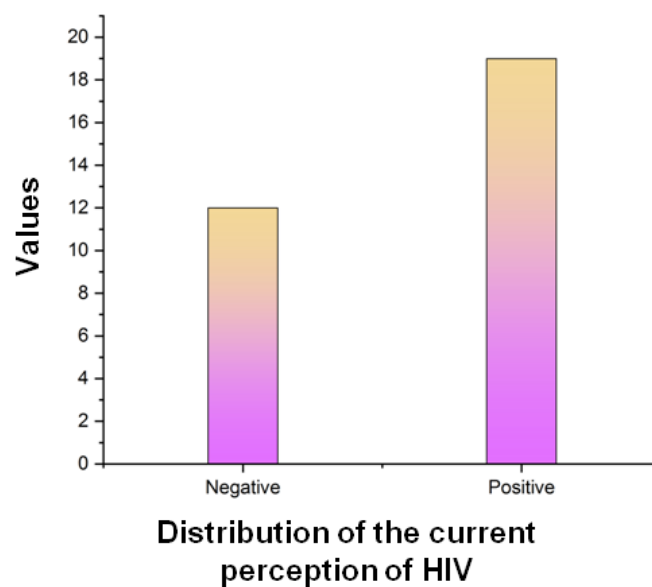


Figure 4: Distribution of how PLHIV currently thinks about having HIV.

People worry about getting HIV because they don't know enough about it and have old ideas about it. Many people also think that HIV is a sickness that only certain people get. As seen in Figure 4, this causes others to have unfavorable perceptions of HIV-positive individuals.

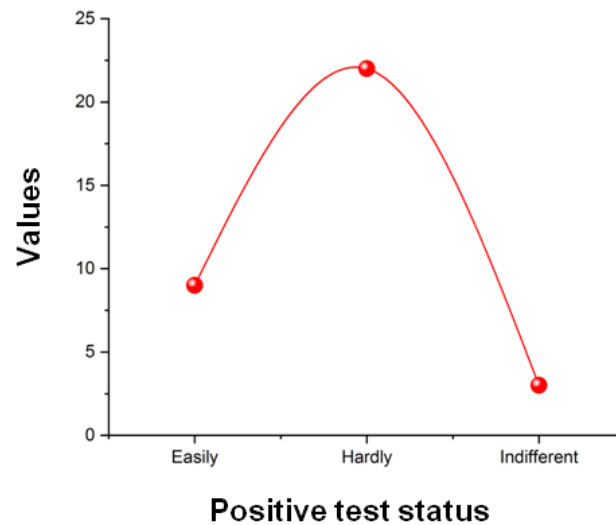


Figure 5: Distribution of PLHIV based on positive test status

The percentage of those between the ages of 15 and 49 who are unwell hasn't changed since 2001; in 2021, it was 0.7%. HIV-positive individuals were 38.4 million in 2021, up from 30.8 million in 2010. This was brought about by increased HIV infections and prolonged HIV-positive survival rates (figure 5).

People living with HIV (PLHIV) are spread out in many different ways, depending on why it's hard to tell others about their HIV status. One of the main reasons people may find it hard to tell others they have HIV is fear of shame and discrimination. Even though HIV-related shame is becoming less common, it remains in many places. People may not tell others they have HIV because they fear being judged, rejected, or treated differently (figure 6).

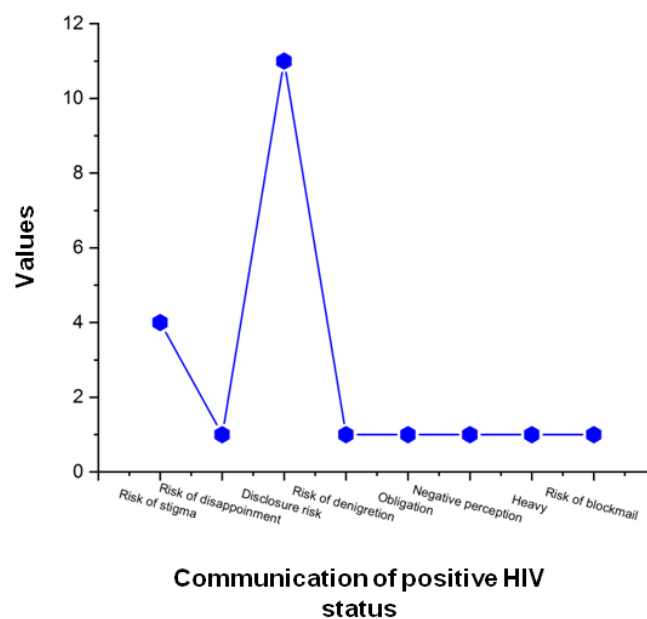


Figure 6: Distribution of PLHA based on communication of positive HIV status

5.3 Discussion

This research examined the many connections between PLWH health and wellbeing metrics and the HIV stigma processes outlined in the HIV Stigma Framework. We gathered information from PLWH in the Bronx, New York, who are currently getting HIV treatment, self-reports, and medical records to investigate these correlations. Internalized HIV stigma is strongly associated with behavioral health and wellbeing indicators, such as skipping ARVs and delaying doctor visits, as well as emotional health and wellbeing indicators, such as feeling more helpless about having HIV, accepting it less, and realizing fewer benefits. Expected HIV stigma, good physical health, and a greater chance of simultaneously having other chronic diseases were all connected. Being at an increased risk of having a CD4 count under 200 was a real HIV stigma. This serves as a gauge of physical health and happiness. Support for the other suggested lines and lines in Hypothesized connections between the health and happiness of persons. In contrast to internalized HIV stigma, which is linked to a measure of better PH and WB (lower risk of having more than one chronic disease), expected HIV stigma in the current group was not connected with indicators of mental health and W.B.

6. Conclusion and Implications

The study's cross-sectional technique could be the most significant of all. Because of this, it is more difficult for us to pinpoint the mechanisms linking HIV stigma processes to adverse health effects. Research that employed continuous techniques has provided some support for the links proposed in this work. In our view, it will likely have the most impact on how individuals care for their health in the future. It may not have had as big of an effect on people's medical procedures in the past. This could throw some insight into why the study's findings did not support our hypothesis on the link between M.H. and W.B. and expected HIV stigma. Future research should use longitudinal methods to ascertain if HIV stigma mechanisms change over time in terms of how they predict outcomes for health and wellbeing and whether expected stigma is associated with certain health behaviors. The development of anticipated stigma may thus be influenced by both internalized and externalized stigma, which may have a secondary impact on outcomes. The length of an individual's HIV infection is associated with less internalized HIV stigma, which this kind of long-term research may explain. People with HIV (PLWH) may experience less internalized HIV stigma if they search for purpose, support, and acceptance in the years after their diagnosis. It may be crucial to comprehend how the various HIV stigma processes interact. The association between actual HIV stigma and measures of M.H. and W.B. may also be better understood as a result of research that simultaneously assesses all three stigma processes using multivariate analysis. According to the contact hypothesis, educating others about HIV, lowering their concern about PLWH in social situations, and enhancing their understanding of PLWH, making it more straightforward for PLWH to interact with others, may aid in reducing prejudice, stereotypes, and discrimination. If we have a better, more in-depth understanding, we can break the link between the symptoms of poor emotional, mental, and physical health and W.B. among PLWH and HIV stigma.

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