



## REVIEW ARTICLE

## The Role of Stigma and Revenge in HIV Prevalence

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### Abstract

Many people are infected with human immunodeficiency virus (HIV) every year. Due to the unique properties of this virus, no effective vaccine has been approved to prevent this virus. HIV is transmitted to a healthy person in various ways, such as sex, using an infected syringe, etc. So far, various ways have been proposed to prevent the spread of this virus, however, the number of people infected with this virus continues to increase every year. Various factors play a role in this process of disease transmission. HIV stigma and revenge are among the psychological problems that contribute to the spread of the disease. Stigma caused by HIV causes patients to not accept the treatment and hide the disease from their sexual partners, thus affecting the spread of the disease. Some people who are unintentionally infected with HIV take revenge on others by infecting healthy people. There are various methods, including education, to relieve these patients, which can be helpful in controlling the spread of the disease due to HIV stigma and revenge.

### Keywords

Human immunodeficiency Virus, Social stigma, Revenge, HIV transmission

### Introduction

Every year, hundreds of people are infected with human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS). Currently, millions of people infected with HIV are living with this virus all over the world [1]. The HIV virus can be transmitted from an infected person to a healthy person in different ways. In past studies, it has been shown that the prevalence of HIV in different regions has not been the same, which can be explained by the different ways of transmission in different regions [2]. For example, after a 3-fold increase in the prevalence of HIV-1 in Eastern Europe and Central Asia, studies

showed that this increase in prevalence was associated with epidemics of drug use and men who have sex with men (MSM) [3]. Many studies have emphasized the indirect effect of social and economic factors on HIV prevalence through differences in transmission routes in different societies. For example, in the study of Al-Sadr, et al., they reported that the effect of the sexual network on the prevalence of HIV-1 is greater than that of individual risky behaviors. This difference is due to the difference in social factors [4]. Also, in the study of Moazen, et al., the differences in high-risk behaviors in different societies are mentioned. Differences in acceptance of high-risk behaviors such as injecting drug use, tattoos, and diversity in sexual activities ultimately lead to differences in HIV prevalence in these communities [5].

Among the other factors affecting the spread of HIV in different societies, which have been less investigated, can mention the feeling of stigma related to HIV and vengeful behavior. Stigma is known as a harmful social phenomenon that is associated with social and economic labels and the connection of differences to negative stereotypes. Stigma ultimately separates people from each other and leads to discrimination for people who have this characteristic [1]. Finally, stigma becomes a perception, an unpleasant experience, and an internal problem that has harmful effects on the individual and society [2]. Observations have shown that the stigma caused by the human immunodeficiency virus and the resulting discrimination has a great negative burden on the mental and even physical health of people with HIV [6,7]. Irrational attitudes, behaviors, and judgments resulting from HIV-related stigma and discrimination and unfair treatment due to HIV infection are



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widespread. The mentioned cases reduce the number of people infected with prevention, testing and treatment services and are considered major obstacles on the way to overcome the AIDS epidemic [8].

On the other hand, some people are unintentionally infected with HIV and after enduring psychological pressures such as the stigma associated with HIV, they seek revenge on others to relieve themselves. Vengeance refers to risky mental and practical behaviors due to excessive anger that may lead to harmless actions or even destruction or death due to a perceived personal attack [6,7]. In some studies, it has been reported that in order to induce a sense of revenge, by not disclosing HIV by the infected person, the virus was transmitted to the sexual partner [8]. We have witnessed several cases of intentional transmission through sexual intercourse through the satisfaction of anger and revenge (unpublished).

Knowing the social and individual factors related to and affecting the spread of HIV plays a very important role in controlling this virus, at least until the achievement of effective vaccines. Stigma and revenge are among the factors affecting the spread of this virus among different communities, which should be investigated more in advance. This study focuses on the impact of stigma and revenge on the spread of HIV and preventive and palliative methods to reduce such cases.

### The Impact of Stigma on the Spread of HIV

Previous studies have reported the negative impact of psychosocial stress on the physical and mental health of HIV positive people. It has been observed that HIV-positive people who experience HIV stigma have the highest rates of depression, loneliness, and substance abuse [9]. There are different levels of HIV stigma around the world. People infected with HIV experience both internal and external stigma. Due to their internal stigma, they isolate themselves from society and healthy people and stay away from treatment. Also, due to external stigma, HIV-infected people may be rejected by their relatives. For example, they are treated unfairly in the workplace [10]. Also, stigma related to HIV can be divided into perceived stigma and experienced stigma. Perceived stigma is when an infected person believes that if they disclose their HIV infection, they may be discriminated against and judged negatively. However, many HIV-infected patients have experienced stigma. Experienced stigma refers to the fact that HIV-infected people experience discrimination due to HIV infection [11,12]. The stigma associated with HIV, whatever its form, poses many challenges to reducing the prevalence of HIV, participating in HIV treatment. Even if people do not disclose their information to other people, the fear of stigma and discrimination prevents them from disclosing their HIV status, which facilitates the spread of the disease [13]. Related studies show that MSM experience higher levels of HIV-related stigma,

particularly in low- and middle-income countries (LMIC) [14]. There are also other reports of increased HIV risk among MSM and general cultural discrimination against their sexual orientation due to high levels of HIV-related stigma [15]. It has also been reported that gay, black, bisexual, or heterosexual Caribbean men with HIV experience more internalized stigma than others. It has been pointed out that this is due to racism, anti-immigrant prejudices, and homophobia, as well as discrimination in the workplace and in their communities due to HIV infection [16].

In addition to the mentioned cases, there are reports of the negative effects of HIV stigma and discrimination on HIV prevention, care and treatment services, including HIV testing, condom use, adherence to antiretroviral therapy (ART) and acceptance of mother-to-mother transmission prevention services. The child is also available [17,18]. As well as HIV stigma, some other discriminatory behaviors such as lesbian, gay, bisexual and transgender (LGBT) stigma cause these people to experience social rejection and devalue. These cases have a lot of negative effects on people's sexual behavior and lead to high-risk behaviors and the possibility of HIV infection [19]. Social networks are key informal mechanisms for sharing information, promoting mental health, and encouraging adherence to medical treatment, all of which are critical for people living with HIV [20]. Studies have shown that LGBT stigma can be associated with increased mental health problems and increased vulnerability to HIV [21,22]. In some countries, it has even been reported that perceived HIV stigma is high even among MSM who do not have HIV [23]. Serious health consequences such as failure to disclose infection to sexual partners, avoidance of HIV testing, failure to properly receive medication, and the emergence of drug resistance are occurring due to the widespread stigma associated with HIV. All the mentioned cases seriously affect the quality of life of people infected with HIV and their relatives [24-27].

On the other hand, perceived stigma is more based on stigmatizing attitudes and behaviors and can be seen in the general society and even in a health center [28-30]. Social ostracism of people who have an undesirable trait, such as being infected with HIV, occurs because of HIV stigma. This exclusion from society keeps people away from receiving services for HIV care and treatment and is one of the main obstacles to finding infected people [31]. Various reports have been published on the association of high stigma in increasing psychological distress [32].

Stigma negatively affects the ability of MSM to disclose their HIV infection status and receive professional and social support for these individuals, which contributes to the spread of the disease among these individuals [33]. In the study conducted by Pantelic, et al., it has been shown that among adolescents with HIV, discrimination

increases internal stigma and endangers care and treatment [34].

Appropriate measures need to be taken to reduce the harm caused by HIV stigma. These trainings are necessary for HIV-infected people and even non-infected people and will help reduce the AIDS epidemic. Stress management training sessions as care interventions are one of the most effective ways to control and reduce stigma and fear of society. By performing these interventions in HIV-infected people, there is a tangible improvement in the mental health of people and the improvement of their quality of life [35].

As a matter of fact, some evidence has shown that increased concern about HIV-related stigma has influenced nutrition program enrollment and potentially contributed to health disparities. By integrating HIV-related stigma prevention strategies, it is possible to create a suitable nutritional and care situation for patients. Also, some studies have reported the impact of the potential role of religious leaders in combating HIV-related stigma [36,37]. However, educating people to reduce HIV stigma is fraught with difficulties. To overcome these difficulties, it is suggested to use the potential role of schools in reducing stigma, especially among teenagers [13]. However, it is the first and most important step in reducing the stigma of education and it is necessary to combine education with different strategies and use it. Despite the positive aspects of education in reducing stigma, it has been shown that the effect of education has limitations, because there is a lot of resistance to changing stereotypes in different societies. Therefore, the role of political, religious leaders, sports and artistic celebrities in fighting stigma seems more necessary [38].

An important strategy in HIV prevention and care in the state of Pennsylvania is to reduce the stigma and eliminate discrimination associated with HIV status. Various factors influence these attitudes about HIV-infected people. The Covid-19 pandemic has effectively affected the lives of people infected with HIV [39]. On the other hand, even researchers believe that their experiences of HIV can be used to understand and remove the stigma of COVID-19 [40]. The stigma and sense of revenge was not unique to HIV. Various media in the world have reported numerous reports of the stigma associated with Covid-19, especially people of Asian descent [41].

### The Effect of Revenge on HIV Prevalence

A set of thoughts and actions that occur due to feelings of anger and lead to harmless results up to destruction or death due to a personal attack is called revenge [6,7]. Revenge, like stigma, is associated with non-disclosure of HIV and plays a major role in increasing HIV cases [8].

Lack of control over sexual behavior, sexual coercion

(SC), and intentional condomless intercourse are among the risks of retaliation in HIV transmission [39].

Young people suffer the most in this way. Some reports have pointed to the contamination of several million young people aged 15 to 24 around the world. Young people are more susceptible than others to the risk of HIV infection due to anger and revenge [40].

Previous studies have shown that returning harm to others who have harmed you is one of the main characteristics of revenge, and this feeling has a significant negative role among men who have sex with men living with HIV (MSM) [41].

Revenge is not unique to feelings related to HIV infection, and in many cases indirectly affects the increase in HIV prevalence. In general, revenge is created after harming a person, and the injured person tries to return the harm to the harming person and even other fellows of the harming person. For example, in Ghasemi's study, it has been shown that among MSM infected with HIV, revenge and response to someone who has harmed them is considered the right thing to do. It is also reported that these people have a low ability to disclose HIV infection to their sexual partners. These issues show that the risk of HIV transmission among MSM due to non-disclosure of HIV infection is greater than forced sexual behaviors and the ability of a person to persuade a sexual partner not to use condoms [7].

Therefore, this issue should be taken into consideration in trainings, and the ways of disclosing contamination should be taught, especially to sexual partners. In one study, it was reported that only 47% of HIV-infected people surveyed who were sexually active had informed their partner that they were HIV-positive during their last sexual relationship. Fear of physical harm from a sexual partner is one of the most common reasons for non-disclosure of HIV infection [42].

### Conclusion

Risk behaviors have always been the most challenging issues in the spread of HIV. In the past, knowing the factors affecting the spread of HIV, at least in some specific cases, has had a positive effect in preventing the increase of people infected with this virus. For example, by distributing syringes among drug users and drug addicts, a significant reduction in the prevalence of HIV has been observed among these people. Stigma and revenge are among the hidden issues that affect the spread of HIV. It is possible to reduce the prevalence of HIV by conducting extensive studies and knowing ways to control the stigma and revenge related to HIV, such as education, non-discrimination, providing free treatment and sympathy for infected people.

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