

Disease-Related Stigma, Emotional Regulation and Depression in patients with HIV

FOZIA BIBI¹, SAIMA MAJEED², SADIA NIKHET³, BISMA JAMIL MAKHDOOM¹, ALI BURHAN MUSTAFA³

¹Department of Applied Psychology, The Islamia University of Bahawalpur-Pakistan

²Department of Psychology, Forman Christian College (A Chartered University), Lahore-Pakistan

³Department Of Psychiatry and Behavioral Sciences, Sheikh Zayed Hospital and Medical College, Rahim Yar Khan-Pakistan

Correspondence to Dr. Saima Majeed, Email: saimamajeed@fccollege.edu.pk Tel: +92-317-4633096.

ABSTRACT

Background: HIV/AIDS has become one of the major global health burdens. Self-stigma and emotion dysregulation in people living with HIV (PLWH) have become urgent issues and have attracted the attention of both physicians and epidemiologists.

Aim: To examine the relationship between disease-related stigma, emotional regulation, and depression in patients with HIV.

Method: A cross-sectional study was conducted. A purposive sample of 100 patients—70 male and 30 female diagnosed with HIV/AIDS was collected from two public hospitals in southern Punjab. Patients who had been diagnosed as being HIV positive for at least three months were included in the study. The age range of participants was 18 to 50 years. Patients with other medical issues were excluded from the study. Measures for data collection were the Discrimination and Stigma Scale (DISC), Difficulties in Emotional Regulation Scale (DERS), and Hamilton Depression Scale. The data was evaluated using SPSS version 24. Pearson's correlation was applied.

Results: There is an inverse relationship ($r = -.34^{**}$) obtained between disease-related stigma and emotional regulation, whereas a significant positive relationship ($r = .41^{**}$) is found between disease-related stigma and depression. A negative relationship ($r = -.59^{**}$) is also examined between emotional regulation and depression. Emotional regulation is a mediator between disease-related stigma and depression in patients with HIV. There is a significant gender difference in depression. The mean score of depression is high among females as compared to males.

Practical Implication: It improved the psychological health of HIV-positive patients by categorizing the issues they face.

Conclusion: It was concluded that disease-related stigma is positively related to depression while emotional regulation is inversely related to depression. Emotional regulation also plays a mediating role between self-stigma and depression in patients with HIV positive. Women scored higher on depression as compared to men.

Keywords: HIV Patients, Psychological Impact, Psychological Distress and Social Stigma.

INTRODUCTION

AIDS has become a major global health burden. At the end of 2017, 36.9 million people were living with HIV (PLWH) worldwide. In total, there were 1.8 million new cases of infection and 940,000 deaths, and 39% of them were reportedly diagnosed with a depressive disorder¹. Depression is a common mental disorder. It is described by low mood, poor concentration, reduced self-esteem, biological symptoms (such as sleep disorders and loss of appetite), pessimistic thoughts and increased withdrawal from social achievements². These psychological problems can result in chronic impairments, including suicidal thoughts, in addition to anxiety disorders³ Major depressive disorder (MDD) is recognised as the leading cause of non-fatal ill health worldwide and has negatively impacted over 50 million lives with disabilities, or 7.5% of all lives⁴.

Despite progress in HIV care and treatment, people living with HIV (PLHIV) are still stigmatized and rejected by their families and communities⁵. Millions of HIV-positive individuals are unable to access and benefit from effective preventative care and programmes due to AIDS-related stigma and sexism. Because of this, between 50 and 60% of HIV-positive individuals are unaware of the full spectrum of treatment options.⁶ Numerous studies conducted in various countries around the world on populations of HIV-AIDS patients have confirmed these results and included additional mental health consequences such as anxiety, stress, or post-traumatic stress disorder.⁷ HIV can also cause psychological and emotional problems, which can lead to a variety of psychiatric disorders. Anxiety disorders, depression, and cognitive neurological disorders (e.g., these patients have been documented to have psychotic disorders, manic disorders, personality disorders, social anxiety disorder, and post-traumatic stress disorder)⁸.

To show worldwide research trends and pinpoint research gaps regarding depression in HIV-positive individuals, bibliometric

analysis was used in a study that shows a clear correlation between depression and HIV/AIDS, as demonstrated by this unbiased assessment of the output of international researchers or institutions in this area.⁹ People who internalise negative self-perceptions experience self-stigma, as opposed to perceived stigma, which they encounter because of discriminatory attitudes and actions on the part of others. A study found that HIV patients and schizophrenia patients both experience self-stigma. However, it is far more severe in those who have schizophrenia. Therefore, more support and advocacy groups must be formed for this population across the nation in order to lessen the stigma associated with them and enhance their general quality of life.¹⁰ HIV-related stigma was linked to an increased likelihood of anxiety symptoms in this study, as it was in previous studies in Sweden, China, and the United States, where stigma was linked to lower quality of life, emotional dysregulation, and higher anxiety and depression scores.

Despite the high incidence of major depression, about half of HIV-positive people with depression are formally diagnosed, and up to 80% are not treated¹². In addition to being treated for depression by antidepressants, researchers discovered that approaches such as the implementation of coping mechanisms for dealing with life stressors have a profound effect on mental health.

Emotional regulation, or the ability to manipulate and regulate one's emotions, is a possible mediator of the connection between HIV stigma and emotional status. Social stigma may reduce a person's ability to express their emotions and regulate their behaviour, ultimately leading to more risky habits and emotional distress. As a result, the current research aims to examine the role of emotional control as a mediator of HIV stigma's negative effects on emotional¹⁶. AIDS has an effect on a person's emotional and physical health. Overall, 42% of respondents identified a prior emotional well-being problem for which they had not been referred for treatment, suggesting an unmet demand for mental health help. This may have covered conditions that were not significant enough to require a referral or that were not reported to healthcare providers.

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HIV infection induces a progressive weakening of the immune system, leaving people more vulnerable to opportunistic diseases, tumours, and other immunologic disorders. Recent research has shown a connection between depression and deteriorating serum diagnostics, including viral loads and CD4 counts, in HIV-infected people who are depressed. 9, 20].

The "low prevalence-high risk" status of Pakistan means that HIV/AIDS research is still in its early stages, despite increased efforts being made globally to identify and lessen the psychosocial issues of HIV/AIDS-related stigma. ²¹. The degree of stigma in Pakistan is revealed by the findings of a study carried out at workplaces near its main cities. The results showed that 29% of respondents were compelled to quit, and 65% of respondents had their jobs terminated after disclosing their HIV status. ^A few studies can help us better understand the stigma associated with HIV/AIDS in Pakistan. HIV/AIDS-related self-stigma in Pakistan has many understudied consequences, including loss of integrity, marriage, optimism, job loss, and low adherence to treatment.

This study aimed to evaluate the association among HIV patients between depression, emotional regulation, and self-stigma. HIV is viewed as a chronic and occasionally fatal illness in Pakistani society, and people living with it are often stigmatized. Furthermore, by identifying interpersonal problems that HIV patients face, this research will enhance the long-term care of this illness. To help mental health professionals control depressed outcomes, this research also aims to investigate the impact of depression in HIV-positive patients.

The objective of this study was to improve the psychological health of HIV-positive patients by categorising the issues they face. If the test results are positive, depressive symptoms could result, which could encourage risky sexual behaviour and accelerate the HIV epidemic. Evidence from Pakistan suggests that depression in HIV-positive people is under-diagnosed and undertreated.

METHODOLOGY

After permission from the Institutional Ethical Review Board, a cross-sectional research design has been applied in this study. From the HIV Centre at Sheikh Zayed Hospital in Rahim Yar Khan, a purposeful sample of one hundred patients was gathered. Patients who had been diagnosed as being HIV positive for at least three months were included in the study. The age range of participants was 18 to 50 years. Patients with other medical issues were excluded from the study. Measures for data collection were the Discrimination and Stigma Scale (DISC), Difficulties in Emotional Regulation Scale (DERS), and Hamilton Depression Scale. After the approval of the proposal from BOS and IRB, a study was conducted, and informed consent was also signed by the participants.

Discrimination and Stigma Scale (DISC): This scale measures participants' perceptions of bias and inequality at work, marriages, parenting, employment, social institutions, recreation, and religious practices over the previous three months. Barbara Berger and collaborators created the HIV Stigma Scale to assess the stigma perceived and faced by HIV-positive people. This 40-item scale tested four aspects of HIV-related stigma: personalised stigma, disclosure concerns, negative self-image, and concern with public attitudes towards people with HIV. It was based on a conceptual model of perceived stigma and produced a four-factor solution after an exploratory factor study. With a Cronbach's alpha of 0.90 for each of the subscales and 0.96 for the 40-item scale, the Berger HIV Stigma Scale has been thoroughly validated in various contexts²³.

Emotional Regulation Difficulties Scale (DERS): The DERS is made up of 36 objects that are classified into six subscales. Many things begin with When I'm distressed, to determine problems controlling feelings during periods of distress, respondents are asked to rate how often the elements refer to them on a scale of 1 to 5 (1 indicating almost never, 2 indicating sometimes, 3 indicating

around half the time, 4 indicating much of the time, and 5 indicating almost all). The Emotional Regulation Difficulties Scale has strong, reasonable test-retest reliability (= .88, p.01) and internal consistency (= .93). It sufficiently builds predictive validity²⁴.

Hamilton Depression Rating Scale (Ham-D): HDRS (also known as the Ham-D) is the most frequent scale administered for depression (Hamilton, 1960). ²⁵ The original edition includes 21 elements (HAM-DU) relating to depressive symptoms encountered in the previous week. The HAM-D has good internal accuracy (Cronbach alpha 0.71), test-retest reliability, and inter-rater reliability.

Procedure: After approval from the IRB and permission from the director of the HIV centre, questionnaires were given to the participants individually. Rapport was also built up with the help of a research information sheet and assurance of confidentiality, as well as the provision of free-of-cost counselling in cases of psychological distress. It took 20 to 25 minutes for one participant to complete the data collection process. After data collection, a session of debriefing was also conducted to determine if there were any questions or queries related to the procedure or results. A formal note of thanks was also given to the participants for their time and voluntary participation in scientific study and for filling a knowledge gap.

Table-1: Frequency Distribution of Demographic Variables (n=100)

Respondent's Characteristics		f (%)
Gender	Male	70(70)
	Female	30(30)
Education	Uneducated	44(44)
	Matric	38(38)
	Intermediate	9(9)
	Graduation	8(8)
	Postgraduate	1(1)
Age	16 to 25	49(49.0)
	26 to 35	42(42.0)
	36 to 45	6(6.0)
	46 to 55	3(3.0)
Professional	Employed	51(51)
	Unemployed	49(49)

Statistical analysis: The data was evaluated using SPSS version 24. It also helped in determining the direction of the relationship between dependent and independent variables. Quantitative variables were represented as mean ± SD, while qualitative variables were represented as percentage and frequency. An independent sample t-test was applied to see comparisons between genders regarding qualitative parameters.

RESULTS

Table 2 showed that all scales of the present research showed an acceptable range of Cronbach's alpha (between .67 and .78) for reliability analysis. Moreover, the mean and SD of all the scales were mentioned in the table. The actual range of the scales that are used in the current research and age were mentioned in the table, and the actual range that is obtained after the data analysis is also mentioned in the table.

Table 3 indicates that disease-related stigma is negatively correlated with emotional regulation and positively correlated with depression. On the other hand, emotional regulation is negatively correlated with depression.

Table-4 showed that emotional regulation was a mediator between Disease Related Stigma and Depression in Patients with HIV Positive.

Table 5 shows the gender differences in disease-related stigma, emotional regulation, and depression. P values show a significant difference for depression, in which women scored higher as compared to men.

Table-2: Reliability Analysis and Descriptive Statistics of all Scales (n=100)

Variables	M	SD	α	Range		Skew
				Potential	Actual	
Disease Related Stigma	115.32	11.35	.67	40-160	72-131	.24
Emotional Regulation	274.30	33.66	.78	60-300	142-300	.24
Depression	30.50	8.17	.62	0-67	18-55	.24

Table-3: Relationship Between Disease Related Stigma, Emotional Regulation and Depression (n=100)

Variables	1	2	3
Disease Related Stigma		-.34**	.41**
Emotional Regulation		-	-.59**
Depression			-

*Statistically significant.

Table-4: Regression Analysis for Mediation of Emotional Regulation between Disease-Related Self Stigma and Depression

Variable	B	95%CI	SE B	β	R ²	Δ R2
Step 1						
Constant	136.1***	[124.98, 147.13]	5.58	-.37	.18	1.8***
Self stigma	-.69***	[-1.05, -.330]	183			
Step 1						
Constant	25.4***	[-10.35, 61.20]	18.28		.38	.02***
Self stigma	-.58***	[-.893, -.276]	.156	-.31		
Emotional Regulation	.37***	[.261, .498]	.060	.51		

Note CI = confidence interval

*** p < .001

Table-5: Comparison between Male and Female Sample through Independent Sample t-Test among all variables (n=100)

Variable	Male (n = 70)		Female (n = 30)		t	P	95%CI	
	M	SD	M	SD			LL	UL
Disease-related stigma	116.56	9.89	112.43	13.96	1.67	.09	.74	8.99
Emotional Regulation	277.20	28.40	267.53	43.36	1.32	.19	4.85	24.18
Depression	28.07	7.41	36.17	7.08	-5.07	.00	11.2	4.92

DISCUSSION

The findings were only partly consistent with the forecasts. The global significance of the correlations between emotion dysregulation, mental health issues, and self-stigma is important. Disease-associated stigma has a negative correlation with emotional regulation but a strong correlation with depression. Emotional control, on the other hand has a detrimental relationship with depression and major experiences showed that higher levels of stigma were correlated with lower rates of HIV disclosure only in people with higher levels of emotion dysregulation. In this study, the findings indicate that greater emotion dysregulation can worsen the correlations between HIV-related enactment and/or public attitude stigma among people living with HIV. Greater emotion control, on the other hand, can act as a buffer against these associations, protecting HIV/AIDS patients from the negative impact of HIV-related enactment and disease-related stigma. Future research may look at whether psychotherapies aimed at emotion management can help protect HIV/AIDS patients from such stressors, as well as whether such treatments can enhance public health behaviours like HIV status disclosure.

The connection between major depressive disorder and younger age runs counter to previous research, which found that major depressive disorder was more prevalent among older adults who used PHC services (27). Such variations can be explained by the various ways in which HIV/AIDS manifests. Specific neurobiological factors play a role in the development of major depressive disorder; further research is required to investigate this hypothesis. Age, disease-related stigma, emotional regulation, and depression are all demographic variations in the current research. Males have significantly older average ages than females. As a result, the incidence of disease-related stigma is higher among men.

In terms of coping, mental well-being, and rumination, there was a major gender disparity between HIV+ males and females. In contrast to their male colleagues, the results showed that females were more associated with problem-focused coping and good mental well-being. Females outperformed males in rumination, while males outperformed females in flow²⁸.

Limitations: Financial limitations are followed by low manpower for follow-ups. The research study used two different survey

questionnaires, so there are chances that any other extraneous variable can affect the result.

CONCLUSION

The present study findings indicated that disease-related stigma is positively related to depression, while emotional regulation is inversely related to depression. Emotional regulation also plays a mediating role between self-stigma and depression in patients with HIV. Women scored higher on depression as compared to men. Whereas no gender difference was found for disease-related stigma or emotional regulation.

Implications and future directions: The study suggests the importance of integrated care models that not only focus on the medical aspects of HIV but also address the psychological and emotional well-being of individuals. Mental health professionals and HIV care providers should collaborate to provide comprehensive care. Healthcare professionals should consider incorporating interventions that address disease-related stigma, enhance emotional regulation skills, and target self-stigma in individuals with HIV. This could include psycho-education, counselling, and support groups aimed at reducing stigma and improving emotional regulation.

Author's contribution: FB, SM&SN: Conceptualized the study, analyzed the data, and formulated the initial draft.

BJM&ABM: Conceptualized the study and contributed to the proof reading.

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