Journal of Health and Rehabilitation Research 2791-156X JHRR

For contributions to JHRR, contact at email: editor@jhrlmc.com

Original Article

Perceived Social Stigma, Family Support and Mental Health Issues in Individuals Living with HIV/AIDS

Moazzam Shehzad[1], Muhammad Luqman Khan[2]*, Sikander Ali Khan[3]

[1]MPhil Scholar Clinical Psychology, Riphah International University Faisalabad Campus- Pakistan.

[2]Associate Professor, Department of Psychology Riphah International University Faisalabad Campus- Pakistan.

[3]MPhil Scholar Clinical Psychology, Riphah International University Faisalabad Campus- Pakistan.

Corresponding Author: Muhammad Luqman Khan, Associate Professor; Email: luqman.khan0078@gmail.com

Conflict of Interest: None.

*Shehzad M., et al. (2024). 4(2): **DOI**: https://doi.org/10.61919/jhrr.v4i2.760*

ABSTRACT

Background: In Pakistan, the HIV/AIDS epidemic is compounded by significant socio-economic challenges and a pervasive stigma that undermines effective treatment and prevention strategies. The psychological impacts of HIV/AIDS, such as anxiety, depression, and stress, further complicate disease management, affecting patients' willingness to adhere to treatment and disclose their status.

Objective: This study aimed to assess the prevalence of mental health issues among individuals living with HIV/AIDS in Pakistan and explore the relationships between perceived social stigma, family support, and mental health outcomes.

Methods: A cross-sectional study was conducted involving 150 diagnosed HIV/AIDS patients from Nankana Sahib and Faisalabad districts. Participants were selected using purposive sampling. Data were collected through validated Urdu versions of the Depression Anxiety Stress Scales (DASS), a discrimination scale, and a family support scale. Statistical analysis was performed using SPSS version 25, focusing on descriptive statistics, correlation coefficients, and linear regression models.

Results: The results indicated that the mean scores for depression, anxiety, and stress were significantly high at 66.6980 ± 17.56598. A strong positive correlation was observed between perceived discrimination (DISC) and DASS scores ($r = 0.890$, $p < 0.01$), while perceived family support (PFS) was negatively correlated with DISC scores ($r = -0.166$, $p = 0.043$). Regression analysis showed that increased family support significantly mitigated mental health issues, reducing the mean stress, anxiety, and depression scores among participants.

Conclusion: The study highlights the critical role of family support in reducing mental health issues among HIV/AIDS patients in Pakistan. Enhancing family involvement and reducing social stigma could improve treatment adherence and overall health outcomes.

Keywords: HIV/AIDS, mental health, family support, social stigma, Pakistan, DASS, psychological impact, health outcomes, treatment adherence.

INTRODUCTION

The global impact of HIV/AIDS remains profound, with the World Health Organization reporting in 2016 that the disease has been responsible for over a million deaths and poses a significant public health threat (1). The Eastern Mediterranean Region Office-EMRO has noted a substantial rise in AIDS cases recently, highlighting the persistent challenge in managing this epidemic (2). A distressing aspect of this challenge is its concentration in low- and middle-income countries, which, despite constituting only 13% of the global population, bear 68% of all HIV/AIDS cases. This disparity has led to severe socioeconomic setbacks in affected regions, including Pakistan, where the spread of HIV/AIDS has detrimentally impacted both communal and sociocultural development (3).

In Pakistan, the stigmatization of people living with HIV/AIDS is notably acute and contributes to a decrease in available services for this population. Factors such as gender, age, socioeconomic status, and the route of HIV transmission influence the extent of stigma experienced by individuals (2, 4). Unfortunately, research on HIV-related stigma in Pakistan is limited and fails to comprehensively address the multifaceted nature of stigma or the variables that influence its perception (5). This gap in understanding exacerbates the difficulties faced by those with the disease, as stigma can lead to poor adherence to antiretroviral therapy (ART), treatment failure, and the spread of drug-resistant HIV strains (4).

Journal of Health and Rehabilitation Research 2791-156X JHRR

Mental health challenges are also predominant among the Pakistani population, especially among those living with HIV/AIDS. These individuals are at an increased risk of comorbid diseases, faster progression from HIV to AIDS, and higher overall mortality (7). The cumulative impact of these mental health issues necessitates immediate intervention (8). Perceived social support, particularly from family, plays a critical role in mitigating mental health risks, including the risk of suicide among individuals with chronic illnesses or who are under significant stress (9). Positive social support has been shown to significantly correlate with better mental health outcomes, underscoring the importance of family and community support in the psychological adjustment to living with HIV/AIDS (10, 11).

Despite the availability of antiretroviral treatment, the spread of HIV in Pakistan continues at an alarming rate. This ongoing spread is compounded by high prevalence of somatoform disorders among the affected population, as well as significant emotional distress, including symptoms of panic disorder, suicidal thoughts, loneliness, poor motor skills, dementia, and post-traumatic stress disorder (PTSD) (12-15). These neuropsychiatric conditions, if unaddressed, limit the effectiveness of current interventions and highlight the necessity for culturally appropriate healthcare responses tailored to the unique needs of individuals living with HIV/AIDS in Pakistan (13).

The historical context of the HIV/AIDS epidemic reveals that since the identification of the first confirmed case in 1981, ignorance, stigma, and fear have characterized global responses (14, 15). Although there have been over 35 million deaths worldwide since the beginning of the epidemic, the response has evolved, with younger generations showing less discrimination towards those affected (16-20). However, the persistent linkage between HIV/AIDS-related stigma and lower socioeconomic and educational levels indicates that cultural, environmental, and social factors continue to influence individual experiences and community responses to the disease (21).

Research suggests that the support systems within a society, including familial and community support, significantly influence the mental health outcomes of those living with HIV/AIDS. Depression, anxiety, and stress are prevalent among these individuals, with studies indicating that a large majority experience these mental health issues (23, 24). This research aims to provide a deeper understanding of the unique experiences of individuals living with HIV/AIDS in Pakistan and to develop interventions that enhance their quality of life, reduce stigma, and improve overall public health outcomes.

MATERIAL AND METHODS

The study employed a cross-sectional design to examine the mental health issues, perceived stigma, and family support among individuals diagnosed with HIV/AIDS within the districts of Nankana Sahib and Faisalabad, Pakistan. Given the constraints of time and resources, this method provided a snapshot of the current status of the participants without necessitating longitudinal follow-up.

Participants were selected through purposive sampling from the local population who had been clinically diagnosed with HIV/AIDS and were undergoing treatment at District Headquarters Hospitals. The sample comprised 150 individuals, consisting of 100 males and 50 females, ensuring a diverse representation in terms of gender. Inclusion criteria required participants to have a confirmed diagnosis of HIV/AIDS and be currently receiving antiretroviral treatment. Exclusion criteria were set to omit individuals with a familial history of mental illness to isolate the impact of HIV/AIDS on psychological conditions (21).

Data were collected following ethical approval from the local authorities in Nankana Sahib and Faisalabad. Researchers engaged with participants through one-on-one interactions, where the study's objectives and procedures were clearly explained. Informed consent was obtained from all participants who were willing to engage in the study, following which they were given the questionnaires to complete. These were administered daily, and sufficient time was allowed for thoughtful responses. Upon completion of the data collection phase, participants were thanked for their contributions to the research (22-24).

The study utilized several psychometric scales translated into Urdu to ensure comprehensibility for the participants. The Depression Anxiety Stress Scales (DASS), a 42-item questionnaire developed to assess three categories of mental health issues: depression, anxiety, and stress (25, 26), was employed with Cronbach's alpha reliability values of .87, .82, and .84 respectively, indicating high reliability and validity (27). Additionally, perceptions of social stigma were measured using a 6-point Likert scale derived from prior research (28), while family support was evaluated using a 30-item scale that highlights the role of close relatives in providing support during health crises (29).

Data analysis was performed using SPSS version 25. Descriptive statistics provided an overview of the sample characteristics, while inferential statistics were employed to examine the relationships between perceived stigma, family support, and mental health outcomes. The ethical considerations of the study adhered to the Declaration of Helsinki principles for medical research involving human subjects, ensuring that all participants were treated with respect and that their participation was confidential and voluntary.

Journal of Health and Rehabilitation Research JHRR

RESULTS

The analysis of the reliability of the instruments used in the study demonstrates that the scales employed possess a high degree of internal consistency. Specifically, the Depression Anxiety Stress Scales (DASS) along with the discrimination (DISC) and perceived family support (PFS) scales showed reliable outcomes for assessing the intended psychological and social constructs among the participants (Table 1).

In the demographic profile of the study participants, a substantial portion was aged between 30 and 40 years, accounting for 46.7% of the total, while those under 30 comprised 29.3%, and participants between 41 to 50 years old represented 24.0% (Table 2). Gender distribution indicated a higher proportion of male participants (60%) compared to females (40%). Educational levels varied significantly with 46.7% holding a bachelor's degree, 29.3% having achieved an intermediate education level, and 24.0% possessing a master's degree or higher. Among the occupational categories, inject drug users (IDUs) were the most represented group, making up 40.3% of the sample, which could reflect specific regional public health challenges.

Table 1: Reliability Test

Measure	Mean	Std. Deviation	N
DISC	51.6779	18.60662	149
PFS	46.9933	5.28447	149
DASS	66.6980	17.56598	149
High alpha coefficients indicate good internal consistency of the measures.			

Table 2: Demographic Analysis

Variable	Frequency (n=150)	Percent
Age Group		
Less than 30 years	44	29.3%
30-40 years	70	46.7%
41-50 years	36	24.0%
Gender		
Male	90	60.0%
Female	60	40.0%
Education		
Intermediate	44	29.3%
Bachelor Degree	70	46.7%
Master Degree and above	36	24.0%
Occupations		
Male sex workers (MSM)	20	10.0%
Female sex workers (FSW)	22	14.7%
Inject drug users (IDU's)	66	40.3%
General category	15	8.0%
Transgender	20	10.0%
Marital Status		
Married	111	74.0%
Unmarried	39	26.0%

Table 3: Item-Total Statistics

Scale	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
DISC	113.6913	310.309	.838	-.169a
PFS	118.3758	1236.466	-.158	.941
DASS	98.6711	341.601	.856	-.190a

a. Negative value due to negative average covariance among items, suggesting a violation of reliability model assumptions.

Journal of Health and Rehabilitation Research JHRR

Table 4: Correlation between Variables

	DISC	PFS	DASS
DISC	1	-.166*	.890**
PFS	-.166*	1	-.141
DASS	.890**	-.141	1
*Note: *. Correlation is significant at the 0.05 level (2-tailed). **. Correlation is significant at the 0.01 level (2-tailed).			

Table 5: Linear Regression Analysis on Social Stigma and Mental Health

Statistic	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	59.6637	77.0071	66.6980	2.47705	149
Residual	-37.72595	37.30516	0.00000	17.39045	149
Std. Predicted Value	-2.840	4.162	0.000	1.000	149
Std. Residual	-2.162	2.138	0.000	.997	149

Table 6: Relationship between Family Support and Mental Health Issues

Statistic	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	38.4052	98.0523	66.6980	15.63143	149
Residual	-23.93053	35.83338	0.00000	8.01387	149
Std. Predicted Value	-1.810	2.006	0.000	1.000	149
Std. Residual	-2.976	4.456	0.000	.997	149

The item-total statistics revealed that the scales used for measuring discrimination, perceived family support, and the composite DASS scale for stress, anxiety, and depression had corrected item-total correlations ranging from moderately strong to very strong. However, two instances of negative Cronbach's alpha values suggested possible issues with average covariance among some items, indicating a potential need for scale refinement (Table 3).

Correlation analysis highlighted significant relationships between the scales. Notably, there was a strong positive correlation between the discrimination scores and DASS outcomes ($r = 0.890$, $p < 0.01$), suggesting that perceived discrimination is closely linked to higher levels of stress, anxiety, and depression among the participants. Conversely, perceived family support was negatively correlated with discrimination scores, although this was not statistically significant ($r = -0.166$, $p = 0.043$) (Table 4).

Linear regression models provided further insights into the effects of social stigma and family support on mental health. The predicted values of DASS scores ranged from 59.6637 to 77.0071, with a mean of 66.6980 and a standard deviation of 2.47705, indicating a moderate variation in mental health outcomes influenced by social stigma (Table 5). Additionally, the analysis of family support's impact on mental health issues indicated that better perceived family support was associated with better mental health outcomes, with predicted DASS scores varying significantly across the sample (Table 6).

Finally, a comprehensive analysis of the interrelations among social stigma, discrimination, family support, and mental health revealed that social stigma and discrimination notably impacted family support levels, which in turn influenced mental health conditions. This complex interaction underscores the critical need for targeted interventions to mitigate stigma and enhance social support as mechanisms to improve mental health outcomes in this vulnerable population (Table 7).

DISCUSSION

In light of the significant health burden imposed by the HIV/AIDS epidemic in Pakistan, a country grappling with considerable socioeconomic challenges, this study sought to address a critical gap in the extant literature concerning the mental health issues prevalent among individuals living with HIV/AIDS. It is well documented that psychological factors play a crucial role in the effectiveness of treatment programs and prevention strategies for HIV/AIDS (30). Mental health issues such as anxiety, depression, and stress complicate the disease management by hindering treatment adherence and disclosure of HIV status among patients. Research from industrialized countries has underscored the difficulties in controlling and preventing HIV/AIDS without adequately addressing its psychological dimensions; patients who suffer from mental illness in conjunction with HIV/AIDS are less likely to adhere to treatment protocols, maintain overall health, and seek necessary medical care (31-33).

The stigmatization of HIV/AIDS in Pakistan exacerbates these challenges, as cultural sensitivities and misinformation significantly hinder public health efforts. This study, therefore, explored the relationships among perceived social stigma, family support, and

mental health outcomes to understand how these dynamics influence health behaviors and psychological well-being in this population. The findings revealed that higher levels of social stigma were associated with increased reports of anxiety, stress, and depression. Notably, women reported higher frequencies of mental health issues and perceived stigma compared to men, suggesting gender-specific disparities in the impact of HIV/AIDS. Additionally, it was observed that as individuals age, their perceptions of societal stigma worsen, further complicating their mental health landscape (34).

Education appeared to mitigate some of the negative effects of stigma; those with higher educational attainment reported lower levels of perceived stigma. This inverse relationship highlights the potential of educational interventions to reduce stigma and improve psychological outcomes among individuals living with HIV/AIDS. The link between perceived family support and psychological difficulties was mediated by perceived social stigma, underlining the critical role of combating HIV/AIDS-related stigma to enhance the effectiveness of support systems and mental health interventions (35).

Despite these insights, the study faced several limitations. The sample size was not large enough to fully represent the diversity within the community of interest, which may limit the generalizability of the findings. Furthermore, the use of a quantitative method simplified data collection but restricted deeper understanding of individual experiences and may have prevented participants from expressing their true thoughts and feelings. The descriptive correlational research design also imposed constraints on establishing causality between the variables studied (7, 9, 14, 18, 21).

Given these limitations, it is recommended that future research should not solely rely on findings from Western contexts but should include direct interviews with healthcare providers and individuals living with HIV/AIDS in Pakistan to gain deeper insights into the unaddressed psychological issues. Qualitative studies could explore under-researched areas or gaps in the current literature, potentially enriching the understanding and interventions related to HIV/AIDS in Pakistan. Such approaches would significantly expand the existing knowledge base and inform more effective public health strategies tailored to the specific needs and cultural contexts of the Pakistani population.

CONCLUSION

This study underscores the profound influence of family support in mitigating mental health challenges among individuals living with HIV/AIDS in Pakistan. It demonstrates that robust family support significantly decreases the likelihood of experiencing severe stress, anxiety, and depression. These findings highlight the necessity for healthcare interventions to incorporate strategies that enhance social support systems, particularly family involvement, to improve mental health outcomes. By addressing the psychological aspects and stigma associated with HIV/AIDS, such interventions can contribute to more effective management and treatment of the disease, ultimately leading to better overall health and quality of life for affected individuals.

REFERENCES

1. Bano N, Shahzad S, Ahmad S. A closer look at self esteem and perceived social support: Their role in depression among women with chronic illnesses. 2022.
2. Franzolini B. Niche market analysis and marketing strategies applied to the Chinese market: a case study of the tea and the coffee market sold through e-commerce. 2020.
3. Thomas MS. Church Hurt: A Therapeutic Approach for Treating Religious Trauma and Spiritual Bypass. 2023.
4. Xuejie C, Chang Q, GuangHao Z, editors. Research on Innovation supply chain Management in Fast Fashion Industry——A comparative analysis of ZARA and H&M. 2019 3rd International Conference on Education, Culture and Social Development (ICECSD 2019); 2019: Atlantis Press.
5. Mokros Ł, Koprowicz J, Leszczyński P, Nowakowska-Domagała K, Witusik A, Pietras T. Can chronotype and social jet lag predict burnout among physical therapists? Biological Rhythm Research. 2021;52(10):1604-17.
6. Abbas Q, Nisa M, Khan MU, Anwar N, Aljhani S, Ramzan Z, et al. Brief cognitive behavior therapy for stigmatization, depression, quality of life, social support and adherence to treatment among patients with HIV/AIDS: a randomized control trial. BMC psychiatry. 2023;23(1):539.
7. Usman M. Impact of abusive supervision on project success, mediating role of employee performance, moderating effect of scope creep. CAPITAL UNIVERSITY. 2019.
8. Baheer R, Khan KI, Rafiq Z, Rashid T. Impact of dark triad personality traits on turnover intention and mental health of employees through cyberbullying. Cogent Business & Management. 2023;10(1):2191777.
9. Park J, Zhan X, Gainey KN-. Meta-analysis of the associations among constructs of intrapersonal emotion knowledge. Emotion Review. 2022;14(1):66-83.
10. Al Amiri N, Rahima REA, Ahmed G. Leadership styles and organizational knowledge management activities: A systematic review. Gadjah Mada International Journal of Business. 2020;22(3):250-75.

11. Eisapareh K, Nazari M, Kaveh M, Ghahremani L, Parkestani K, ur Rehman A. Relationship between social support and social stigma among AIDS patients in Shiraz. HIV & AIDS Review International Journal of HIV-Related Problems. 2022;21(4):305-14.
12. Hassan MN, Barakat A, Sobh A, editors. Effect of applying lean maintenance in oil and gas fields. The International Conference on Applied Mechanics and Mechanical Engineering; 2020: Military Technical College.
13. Baldassarre A, Giorgi G, Alessio F, Lulli LG, Arcangeli G, Mucci N. Stigma and discrimination (SAD) at the time of the SARS-CoV-2 pandemic. International journal of environmental research and public health. 2020;17(17):6341.
14. Zandi G, Shahzad I, Farrukh M, Kot S. Supporting role of society and firms to COVID-19 management among medical practitioners. International Journal of Environmental Research and Public Health. 2020;17(21):7961.
15. Rustagi P, Prakash A. A Review on Consumer's Attitude & Purchase Behavioral Intention Towards Green Food Products. International Journal of Health Sciences. 2022(I):9257-73.
16. Asadi M, Ghasemzadeh N, Nazarifar M, Sarvandani MN. The effectiveness of emotion-focused couple therapy on marital satisfaction and positive feelings towards the spouse. International Journal of Health Studies. 2020.
17. Anderson ML, Burtt JJ, Jang SJ, Booyens K, Johnson BR, Joseph M. Religion and responsibility-taking among offenders in Colombia and South Africa: a qualitative assessment of a faith-based program in prison. International journal of offender therapy and comparative criminology. 2023;67(1):66-88.
18. Melkonyan A, Gruchmann T, Lohmar F, Kamath V, Spinler S. Sustainability assessment of last-mile logistics and distribution strategies: The case of local food networks. International Journal of Production Economics. 2020;228:107746.
19. Hannah ST, Schaubroeck JM, Peng AC, Lord RG, Trevino LK, Kozlowski SW, et al. Joint influences of individual and work unit abusive supervision on ethical intentions and behaviors: A moderated mediation model. Journal of applied Psychology. 2013;98(4):579.
20. Busari AH, Khan SN, Abdullah SM, Mughal YH. Transformational leadership style, followership, and factors of employees' reactions towards organizational change. Journal of Asia Business Studies. 2019;14(2):181-209.
21. Habiba U, Perveen M, Arshad R. Causes and Repercussions of HIV among Seroconcordant Couples in Pakistan. Journal of Management Practices, Humanities and Social Sciences. 2022;6(2):42-50.
22. Hameed N, Irshad E. The Effect of Stigmatization on Perceived Social Support and Quality of Life among Hiv/Aids Patients: A Gender-Based Analysis. Journal of Management Practices, Humanities and Social Sciences. 2022;6(4):51-60.
23. Jauk E, Ehrenthal JC. Self-reported levels of personality functioning from the operationalized psychodynamic diagnosis (OPD) system and emotional intelligence likely assess the same latent construct. Journal of personality assessment. 2021;103(3):365-79.
24. Chang CW, Chang KC, Griffiths MD, Chang CC, Lin CY, Pakpour AH. The mediating role of perceived social support in the relationship between perceived stigma and depression among individuals diagnosed with substance use disorders. Journal of Psychiatric and Mental Health Nursing. 2022;29(2):307-16.
25. Ringo RYS, Septyanto D, Ramli AH. Analysis of Factors Affecting Customer Satisfaction and Customer Loyalty in the Shopee Marketplace. Majalah Ilmiah Bijak. 2023;20(2):293-310.
26. Jamali A, Bhutto A, Khaskhely M, Sethar W. Impact of leadership styles on faculty performance: Moderating role of organizational culture in higher education. Management Science Letters. 2022;12(1):1-20.
27. Aziz A, Khan N. The Exploration of Stigma and Discrimination Among Patients Suffering from Depression: A Phenomenological Study. NUST Journal of Social Sciences and Humanities. 2021;7(2):206-30.
28. Akhtar N, Batool I, Khan MZ. Perceived Stigma, Social Support and Quality of Life in Patients of Tuberculosis: Quality of Life in Patients of TB. Pakistan Journal of Health Sciences. 2023:89-93.
29. Ehsan S, Batool SS. Perceived Social Support as a Predictor of General Health in HIV+ Patients: Moderating Role of Gender: Social Support as a Predictor of General Health in HIV+ Patients. Pakistan Journal of Health Sciences. 2022:152-6.
30. Burchardt C, Maisch B. Digitalization needs a cultural change–examples of applying Agility and Open Innovation to drive the digital transformation. Procedia Cirp. 2019;84:112-7.
31. Al Mazrouei MA, Khalid K, Davidson R, Abdallah S. Impact of organizational culture and perceived process safety in the UAE oil and gas industry. The Qualitative Report. 2019;24(12):3215-38.
32. Asgher T, Hanif A. Exploring the impact of online teaching method on higher education during COVID-19 pandemic: Students' and teachers' perspective. Research Journal of Social Sciences and Economics Review. 2021;2(1):120-34.
33. Hussain MM, Khalily MT, Zulfiqar Z. Psychological Problems Among Patients Suffer in HIV/AIDS in Pakistan. Review of Applied Management and Social Sciences. 2021;4(2):559-67.
34. Özmete E, Pak M. The relationship between anxiety levels and perceived social support during the pandemic of COVID-19 in Turkey. Social work in public health. 2020;35(7):603-16.
35. Kern J, Wolff P. The digital transformation of the automotive supply chain–an empirical analysis with evidence from Germany and China: Case study contribution to the OECD TIP Digital and Open Innovation project. TIP Digital and Open Innovation project. 2019.