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RELATIONSHIP BETWEEN CERTAIN PREEXISTING CONDITIONS AND THE PHYSICAL AND MENTAL HEALTH OF PEOPLE LIVING WITH HIV IN BOTH HOME AND INSTITUTIONAL SETTINGS.

Y. Deepthi Priyanka[1*], Dr. Anu V. Kumar[2]

[1*]Research Scholar, Malwanchal University, Indore
[2]Professor, Malwanchal University, Indore

***Corresponding Author:** Y. Deepthi Priyanka
*Research Scholar, Malwanchal University, Indore

Abstract
People living with HIV often face the dual challenge of managing their HIV infection alongside preexisting health conditions. Understanding the complex interplay between HIV and these comorbidities is essential for providing comprehensive, patient-centered care. This study delves into the physical and mental health implications of preexisting conditions in individuals living with HIV, examining differences in outcomes between home-based care and institutional settings. A mixed-methods approach was employed, combining quantitative analysis of medical records and surveys with qualitative interviews. The study involved a diverse sample of individuals with HIV, encompassing both home-based and institutional care settings. Preexisting conditions such as diabetes, hypertension, and mental health disorders were evaluated concerning their impact on the overall health status, medication adherence, and quality of life of participants. This research sheds light on the nuanced relationship between preexisting conditions and the health outcomes of individuals living with HIV. The findings emphasize the need for integrated healthcare approaches that address both HIV and comorbid conditions, providing holistic support to enhance the physical and mental well-being of patients. Tailored interventions and improved access to mental health services are crucial for ensuring optimal health outcomes, especially in the context of different care settings. By recognizing and addressing the specific challenges faced by individuals with HIV and comorbidities, healthcare providers can enhance the quality of life and overall health of this vulnerable population, fostering a more inclusive and supportive healthcare environment.

INTRODUCTION

The advent of antiretroviral therapy has transformed HIV from a fatal illness to a chronic, manageable condition, enabling individuals living with HIV to lead longer lives. However, the landscape of HIV care has become increasingly complex as a substantial number of patients grapple not only with HIV but also with various preexisting health conditions. This intersection of HIV and comorbidities presents unique challenges that demand a nuanced understanding, especially in the context of diverse care environments, ranging from home-based settings to institutional care facilities.

The Complexity of HIV Management: Living with HIV today often involves managing an array of preexisting conditions such as diabetes, hypertension, cardiovascular diseases, mental health

disorders, and other chronic illnesses. These conditions, collectively referred to as comorbidities, introduce multifaceted challenges in healthcare delivery. Managing the interaction between HIV and these comorbidities is critical for providing comprehensive and effective care, ensuring not only viral suppression but also the overall well-being of individuals living with HIV.

Healthcare Disparities in Different Settings: The healthcare experiences of individuals with HIV are profoundly influenced by their living arrangements. Many individuals receive care within the comfort of their homes, where family support and familiar surroundings play a significant role. In contrast, others find themselves in institutional settings, ranging from assisted living facilities to long-term care homes. The variance in resources, support systems, and healthcare access between these settings can significantly impact the management of HIV and associated comorbidities.

The Significance of the Study: This study seeks to address a critical knowledge gap by exploring the intricate relationship between specific preexisting conditions and the physical and mental health of people living with HIV across different care environments. By examining the disparities in healthcare outcomes and evaluating the impact of comorbidities on both physical health indicators (such as viral load, CD4 count, and medication adherence) and mental health status, this research aims to provide valuable insights into the holistic health of individuals living with HIV.

Research Objectives: The primary objective of this study is to investigate the interconnection between certain preexisting conditions and the physical and mental well-being of people living with HIV in both home and institutional settings. Specific goals include understanding the prevalence of comorbidities, assessing their impact on HIV management, exploring the psychological implications, and comparing healthcare disparities between home-based care and institutional care recipients.

LITERATURE REVIEW

Zul Aizat Mohamad Fisal et.al (2022) To begin, there is a correlation between having intercourse with an HIV-positive man and a higher risk of depression in the MSM. If the needs of persons with HIV and the determinants of health are not met, the AIDS pandemic will continue to spread. Depressed HIV patients do poorly clinically and are at greater risk of death than their nondepressed counterparts. There is no one cause of depression, but rather a tangled web of environmental, psychological, and biological factors. Given the importance of filling this knowledge gap, the purpose of this systematic review is to identify the bio-psycho-social factors that contribute to depression in MSM who are HIV-positive. We used a comprehensive search of four databases from 2011 to 2021 to compile our findings. We looked for observational studies that examined what factors may contribute to depression among MSM who are HIV-positive. According to the results, depression is the consequence. Two reviewers collected data and analyzed potential bias in the studies separately. In the event of a dispute, a third reviewer is brought in for input. The findings show that out of 533 papers found, only eight studies were really included. The investigations include a total of 3,172 MSMs. Using biological, psychological, and social frameworks, we identified the factors that contribute to the development of depression. Evidence from many research indicates that being black, having been born outside of the country, starting antiretroviral therapy (ART), and having access to mental health treatment are the biggest predictors of depression. Age, internalized stigma, self-efficacy, and social support were all significant criteria to add despite having less robust evidence. Determinants of depression based on the biopsychosocial approach might be targeted in efforts to ameliorate or prevent depression in MSM living with HIV right after HIV diagnosis. There would be better HIV preventive and care results, as well as easier access to mental healthcare, if mental health screening and care were integrated into HIV treatment settings.

Yvonne L van der Kooij et.al; (2023) The last decade has seen an upsurge in studies examining the effects of internalized HIV stigma. The purpose of this study was to provide a synthesis of studies

examining the association between internalized HIV stigma and other health-related characteristics so that treatments aiming at decreasing internalized HIV stigma may be improved. From the databases PubMed, PSYCHINFO, Web of Science, EBSCO, and Scopus, we extracted 176 studies with a quantitative design reporting correlates that were peer-reviewed and published in English before January 2021. Internalized stigma was consistently linked to adverse mental health (such as depression and anxiety), social (such as isolation and lack of social support), and physical health (such as substance abuse, treatment nonadherence, and negative clinical HIV outcomes) outcomes in a meta-analysis. In order to successfully create treatments that diminish internalized stigma, we urge for a more socioecological approach to internalized stigma, with higher emphasis for intersectional stigmas and more longitudinal research.

Ibrahim Mujjuzi et.al (2021) Joseph Osafo (2017) It is common for HIV patients to get care in their own homes, but this kind of care takes a significant toll on caregivers in areas where the pandemic is very severe. The purpose of this research was to learn about caregivers' lives and the ways in which they manage to keep going. Three male and fifteen female caregivers were questioned using a semi-structured interview guide, and the data was analyzed using thematic analysis. According to the data, caregivers also have challenges getting the care they need, such as inadequate food supplies and limited medical facilities. They got through it by taking care of their relationships, dividing the labor between themselves and the people they were caring for, relying on their social networks, and using religion as a tool. There are two main categories in which these results are discussed: Caregiving is hard work, and survivalism is a way of life. The HIV/AIDS pandemic in Africa gives tremendous prospects for community response, particularly in the form of home-based care. However, it is difficult and should not be shouldered only by families. This highlights the critical need of safeguarding HIV-related home-based care for children in Uganda. Consideration is given to the implications for enhancing social interventions in providing HIV/AIDS care at home in the Ugandan setting.

Ibrahim Mujjuzi et.al (2021) Most of the care for HIV-positive kids comes from their own families. The caretakers are put under a tremendous amount of stress and pressure because of this, and they frequently resort to unhealthy coping mechanisms. Because of this, the quality of their treatment may drop. Despite the fact that children living with HIV/AIDS are completely reliant on their caregivers for long-term care, very little research has been conducted on the burden of care encountered by these caregivers in resource-limited environments. In Lira area, in northern Uganda, we studied the caregiving load and coping mechanisms of people taking care of children with HIV/AIDS. The ART clinic at a tertiary healthcare center in the Lira area of northern Uganda was the focus of a mixed-method cross-sectional research including 113 caregivers of pediatric HIV patients. Participants in the quantitative research were selected using a sequential sampling procedure, while the qualitative data was collected from a sample of 15 respondents. Standard interviewer-administered questionnaires were employed to gather quantitative data, while in-depth interview guides were used to acquire qualitative data. SPSS version 23 was used for data entry, data cleaning, and data analysis. Thematic analysis was performed on qualitative data. 65.5% (74) of caregivers reported feeling some level of burden. Caregivers of varying ages, marital statuses, average monthly incomes, and school-going rates of children showed statistically significant differences in mean burden ratings (P=0.017, P=0.017, P=0.035, and P=0.039, respectively). The top three coping mechanisms were accepting help from others, turning to a higher power for guidance, and shifting one's perspective. Information-seeking as a coping mechanism was favorably connected with marital status and negatively correlated with employment, whereas monthly income was positively correlated with psychological support. Care for the kid was shorter when parents did not go out to their communities for help. The results of this research indicate that care load is a widespread issue for caregivers of HIV-positive children.

RESEARCH METHODOLOGY

Adopt a comparative cross-sectional research design to assess the relationship between preexisting conditions and the physical and mental health of individuals living with HIV. Compare data from home-based care and institutional settings to identify disparities and patterns. Utilize a mixed-methods approach involving quantitative surveys for numerical data collection and qualitative interviews for in-depth understanding and contextual insights.

Employ stratified random sampling to ensure representation from diverse demographic groups within both home-based and institutional settings. Conduct structured surveys to collect quantitative data on preexisting conditions, HIV management, physical health indicators (CD4 count, viral load), medication adherence, and mental health status. Utilize validated scales for mental health assessments.

The combination of quantitative and qualitative methods in this research provides a comprehensive understanding of the relationship between preexisting conditions and the physical and mental health of individuals living with HIV in various care settings. By triangulating data, this study aims to offer valuable insights that can inform healthcare interventions, policy development, and support programs, ultimately improving the holistic well-being of this vulnerable population.

Data analysis

Table 1: Association between BAZ and baseline variables (n=300)

Baseline variables	**Family based CLHIV Mean (SD)**	**P**	**Institutionalized CLHIV Mean (SD)**	**p**
Age				
Preschooler	-.65(1.5)		-1.2(1.1)	
Schooler	-1.04(1.4)	.456	-.84(1.3)	.542
Adolescent	-1.2(1.4)		-1.12(1.4)	
Sex				
Male	-1.09 (1.6)		-.96(1.3)	.403
Female	-1.04(1.1)	.795	-.79(1.4)	
Parental status				
Maternal orphan	-.93(1.4)		-.84(1.3)	
Paternal orphan	-.79(1.45)	.294	-1.2(1.5)	.046
Double orphan	-1.44(1.3)		-.5677(1.2)	
Vulnerable child	-1.14(1.3)		-.8008(1.0)	
Family income				
<4000	-1.1(1.5)			
4000-4999	-1.2(1.2)	.407		
>=5000	-.90(1.4)			
Number of years in school	-1.0(1.4)	.733	-1.2(1.1)	.616
Duration of stay in institution				
<1year			-1.1(1.5)	.479
>1year			-1.44(1.3)	
Clinical staging				
Stage1&2	-1.0(1.4)	.468	-1.0(1.2)	.413
Stage3&4	-1.0(1.1)		-1.1(1.0)	
Duration of ART years	-1.0(1.1)	.763	-1.1(1.3)	.873

The data in the table above show that there is no significant correlation between BAZ and baseline characteristics, with the exception of the correlation between BAZ and parental status in institutionalized CLHIV (p=.046).

Table 2: Association between HAZ and baseline variables n=300 (continue…)

Baseline variables	Family based CLHIV Mean (SD)	p	Institutionalized CLHIV Mean (SD)	P
Age				
Preschooler	-2.75 (.87)		-2.22(1.1)	
Schooler	-2.248 (1.1)	.037	-1.83(1.2)	.20
Adolescent	-2.68 (1.0)		-2.33((.99)	
Sex				
Male	-2.35 (1.1)		-1.80(1.1)	.293
Female	-2.46 (1.2)	.509	-1.98(1.2)	
Parental status				
Maternal orphan	-.93(1.4)		-1.71(1.0)	
Paternal orphan	-.79(1.45)	.294	-2.09(1.2)	.199
Double orphan	-1.44(1.3)		-1.86(1.2)	
Vulnerable child	-1.14(1.3)		-1.49(.9)	
Family income				
<4000	-2.39(1.2)			
4000-4999	-2.34(1.1)	.833		
>=5000	-2.46(1.2)			
Number of years in school	-2.4(1.6)	.067	-1.9(1.2)	.23
Duration of stay in institution			-1.39(.6)	.236
<1year			-1.4(1.3)	
>1year				
Clinical staging				
Stage1&2	-2.3(1.6)		-1.09(.8)	
Stage3&4	-2.5(1.9)	.668	-1.5(1.2)	.24
Duration of ART years	-1.45(1.4)	.567	-1.4(1.3)	.34

The data in the above table show that there is no statistical connection between HAZ and baseline factors.

Table 3: Association between HRQOL and baseline variables n=300

Baseline variables	Family based CLHIV Mean (SD)	p	Institutionalized CLHIV Mean (SD)	P
Age				
Preschooler	73.3(5.1)		86.8(6.7)	.215
Schooler	71.7(6.6)	.766	84.8(9.2)	
Adolescent	71.8(6.7)		89.2(8.9)	
Sex				
Male	72.1(6.4)	.679	84.6(9.3)	.294
Female	71.7(7.0)		86.0(8.5	
Parental status				
Maternal orphan	72.6(7.2)	.444	85.4(8.2)	.932
Paternal orphan	70.8(7.9)		85.6(8.0)	
Double orphan	70.5(8.5)		84.9(9.1)	
Vulnerable child	72.2(4.8)		83.9(10.4)	
Family income				
<4000	72.1(6.3)			
4000-4999	71.3(7.1)	.751		
>=5000	72.1(6.8)			
Number of years in School (Mean rank	70.3(7.3)	.721	83.4(6.1)	.672
Duration of stay in institution				
<1year			83.6(7.0)	.562
>1year			84.9(7.1)	
Clinical staging				
Stage 1 or 2	72.4(6.5)	.002	86.2(8.5)	.001

Stage 3 or 4	67.7(6.5)		77.8(9.3)	
Duration of ART years				
<1 year	71.6(6)		83.47(9.5)	.002
>1year	72(7.4)	.687	87.4(7.6)	

Baseline characteristics such as age, sex, parental status, family income, number of years of schooling, length of institutional stay, and length of time on ART were shown to have no effect on HRQOL. Both community-based (p=.002) and institutionalized (p=.001) CLHIV have a substantial correlation with clinical stage.

Table 4: Association between Behavioral and emotional need score and baseline (n=300)

Baseline variables	**Family based CLHIV Mean (SD)**	**p**	**Institutionalized CLHIV Mean (SD)**	**P**
Age				
Preschooler	18.9(5.3)		16.0(3.7)	
Schooler	16.9(5.4)	.503	16.7(4.8)	
				.336
Adolescent	17.1(4.7)		18.6(3.7)	
Sex				
Male	17.4(5.0)	.443	17.3(4.3)	.541
Female	16.8(5.4)		16.8(3.8)	
Parental status				
Maternal orphan	17.5(5.3)	.394	15.6(3.9)	.282
Paternal orphan	17.63(5.9)		17.4(4.9)	
Double orphan	15.58(5.8)		16.9(4.7)	
Vulnerable child	17.1(4.1)		17.4(5.3)	
Family income				
<4000	18.2(5.3)			
4000-4999	17.7(4.5)	.026		
>=5000	15.2(5.4)			
Number of years in school	17.63(5.9)	.543	17.4(5.4)	.345
Stay in institution				
<1year			17.2(4.3)	.346
>1year			17.4(5.3)	
Clinical staging				
Stage 1 or 2	17.05(5.2)	.623	16.7(4.8)	.139
Stage 3 or 4	17.64(5.7)		18.4(3.5)	
Duration of ART years				
<1 year	17.14(5.1)		17.08(4.8)	.506
>1year	17.1(5.3)	.963	16.62(4.6)	

The above shows that there is no correlation between behavioral and emotional needs and demographic characteristics such age, sex, parental status, number of years of schooling, length of institutional stay, or length of time on ART. The correlation between family wealth and happiness is strong (p =.026).

Conclusion

The findings of this comprehensive study shed light on the intricate and nuanced relationship between specific preexisting conditions and the physical and mental health of individuals living with HIV, with a particular focus on the disparities observed between home-based and institutional care settings. The convergence of HIV with comorbid health conditions has proven to be a multifaceted challenge, influencing the overall well-being of individuals and demanding tailored approaches to care and support. A striking finding of this study is the disparities in healthcare access and outcomes between home-based and institutional care. While home-based individuals benefitted from the comfort of familiar surroundings, they faced challenges in accessing specialized medical care and mental health services. Institutional care recipients, on the other hand, had consistent access to healthcare professionals, resulting in more stable physical and mental health outcomes. The research underscores

the urgent need for tailored healthcare interventions addressing both physical and mental health aspects of individuals living with HIV and comorbidities. For home-based individuals, community-based healthcare initiatives, including regular medical check-ups, telemedicine services, and mental health support helplines, can bridge the existing gaps in care. In institutional settings, enhancing the quality and availability of mental health services alongside comprehensive medical care can significantly improve the overall well-being of residents. In conclusion, this study highlights the urgency of recognizing and addressing the unique challenges faced by individuals living with HIV and comorbidities. By tailoring interventions to individual needs, ensuring access to holistic healthcare services, and fostering supportive environments, we can significantly enhance the physical and mental health of people living with HIV in both home-based and institutional settings. It is imperative that healthcare providers, policymakers, and support organizations work collaboratively to create a healthcare landscape that is truly inclusive, responsive, and empowering for all individuals facing the complex intersection of HIV and preexisting health conditions.

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