

**DEPRESSION AND HIV: EXPLORING EXPERIENCE
OF WOMEN AND HEALTH CARE PROVIDERS IN
ETHIOPIA**

BY

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A thesis submitted in fulfilment of the requirement for the
degree of Doctor of Philosophy in Biobehavioral Health
Sciences

**Kulliyyah of Nursing
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NOVEMBER 2020

ABSTRACT

Mental disorders such as depression and anxiety are common comorbid with HIV. They are also more prevalent in WLHIV particularly in low-income countries, yet, it is vastly undetected and under-served. The purpose of this study is to explore the experience of depression among WLHIV and understand the HCP's practice towards the management of depression in WLHIV. A sequential explanatory mixed-method design was used. In the quantitative part, a facility-based cross-sectional study was conducted. The study participants were identified using systematic random sampling method and HADS was used for anxiety and depression screening. The gathered data was analyzed using SPSS version 23. In the second phase of the study, a generic qualitative design was employed. An in-depth interview was carried out among women who follow-up ART and HCPs in the selected health facilities. The transcript of the in-depth interview was analyzed with application of N-Vivo (version 11.0). A total of 357 women participated in the first phase of the study. The results revealed the prevalence of both depression and anxiety amidst HIV positive women were 32.5% and 28.9%, respectively. In the multivariate analysis, it was discovered that lack of formal education, being divorced, unemployed, and earning a monthly income less than 1400 ETB (37.5 USD) were significantly associated with depression and anxiety. Women with symptomatic HIV clinical stage III and IV, with CD4 cell count below 250, and with co-infections also suffered from depression and anxiety. In addition to this, PSS was negatively associated whereas stigma was positively associated with depression and anxiety. A total of twenty-one women and twelve HCPs completed in the second phase (qualitative part). Women mostly described experience of stressful life events, lower participation of social activities, poor community acceptance, negative self-perception, and hopelessness as their main experience of living with these comorbid illnesses. Considering the HCPs, majority of them described absence of screening practice, low professional ownership and readiness as the main gap on the introduction of depression care and management in the ART set-up. This finding has shown, in the course of the multifaceted nature of HIV and depression comorbidity, both women's and HCP's experience was dynamic in terms of the different psychosocial and clinical dimensions. In conclusion depression and anxiety was highly prevalent in WLHIV and circumstances like the psychosocial and clinical attributes, Perceived Social Support and stigma were associated with developing depression and anxiety. This study presents an insightful understanding of the social, psychological and clinical determinants from the women and the HCPs perspectives. Hence, future interventions should focus on the integration of mental health in HIV clinical set up.

Keywords: Human Immuno-Deficiency Virus, depression, anxiety, comorbidity, Ethiopia.

خلاصة البحث

الأضطرابات النفسية مثل الاكتئاب والقلق هما مرض شائع مصاحب للمرضى بفيروس نقص المناعة (الأيدز) كما أنها أكثر انتشاراً بين النساء خاصة في البلدان المنخفضة الدخل. بالرغم من ذلك، لا يتم اكتشافه وتحديد الأ من قبل نسبة بسيطة من الناس اللواتي يعملنا في مجال الرعاية الصحية. تهدف هذه الدراسة لأكتشاف وتحديد الأكتئاب بين النساء المصابات بفيروس نقص المناعة وكذلك فهم وتطوير آلية للتعامل مع المرضى بفيروس نقص المناعة البشري (الأيدز). تم أستخد الطرق النوعية والكمية في الحصول على البيانات. أجريت دراسة مستعرضة على أساس تحديد نسبة المشاركين في الدراسة بأستخدم أخذ العينات العشوائية المنتظمة وكذلك تم أستخدم مقياس فحص القلق والأكتئاب في المستشفيات. تم تحليل البيانات بأستخدم برنامج التحليل الأحصائي الأصدر ٢٣. في المرحل الثانية تم تحليل المقابلات بأستخدم مقياس برنامج تحليل البيانات النوعية. أظهرت النتائج أن نسبة المصابات بالأكتئاب ٣٢.٢% مصابة بالقلق ٢٨.٩% من أصل ٣٥٧ مشاركة في هذه الدراسة. أظهر التحليل متعدد المتغيرات أن النساء التي يتلقين تعليم منخفض والمطلقات والغير عاملات واللواتي يحصلنا على دخل شهري منخفض بأقل من ١٤٠٠ (٣٧ دولار) أكثر عرضه للأصابة بالأكتئاب والقلق من غيرهن. وكذلك النساء المصابات بمراحل متقدمة من فيروس نقص المناعة البشري يعين من الأكتئاب أكثر من غيرهن. وكذلك لا يوجد علاقة بين الأكتئاب والقلق والنساء الذي يعانون من وصمة العار. في التحليل النوعي الغالبية العظمي من المشاركات وصفنا أحداث الحياة المجهدة والمشاركات المنخفضة في الأنشطة الأتجتماعية وقبول المجتمع الضعيف والتصور السلبي للذات واليأس كانت هي الأعراض الرئيسية المصاحبه لهن. بالنسبة لمقدمي الرعاية الصحية، وصفنا معظمهن أن غياب ممارسة الفحص ونقص الخبرة والأدوات في عيادات مرضى فيروس نقص المناعة كانت هي المشكلة الكبيرة في عدم أدرج علاج القلق والأكتئاب. أظهرت النتائج أن هناك أختلاف متعدد الأبعاد بالنسبة للمرضى بفيروس نقص المناعة وكذلك لمقدمين الرعاية الصحية من حيث الأبعاد النفسية والأتجتماعية. كان القلق والأكتئاب منتشر بين النساء المصابات بمرض فيروس نقص المناعة كذلك كانت لهما أعراض نفسية وأتجتماعية وسريرية واضحة وكذلك كان هناك علاقة واضحة بين قل الدعم من قبل المجتمع وبين تطور مراحل الأكتئاب. كذلك قدمت هذه الدراسة فهماً ثاقباً للمحددات ومن ثم، يجب أن. الأتجتماعية والنفسية والسريرية من منظور النساء ومقدمي الرعاية الصحية تركز التدخلات المستقبلية على دمج الصحة النفسية في الإعداد السريري لفيروس نقص المناعة البشرية.

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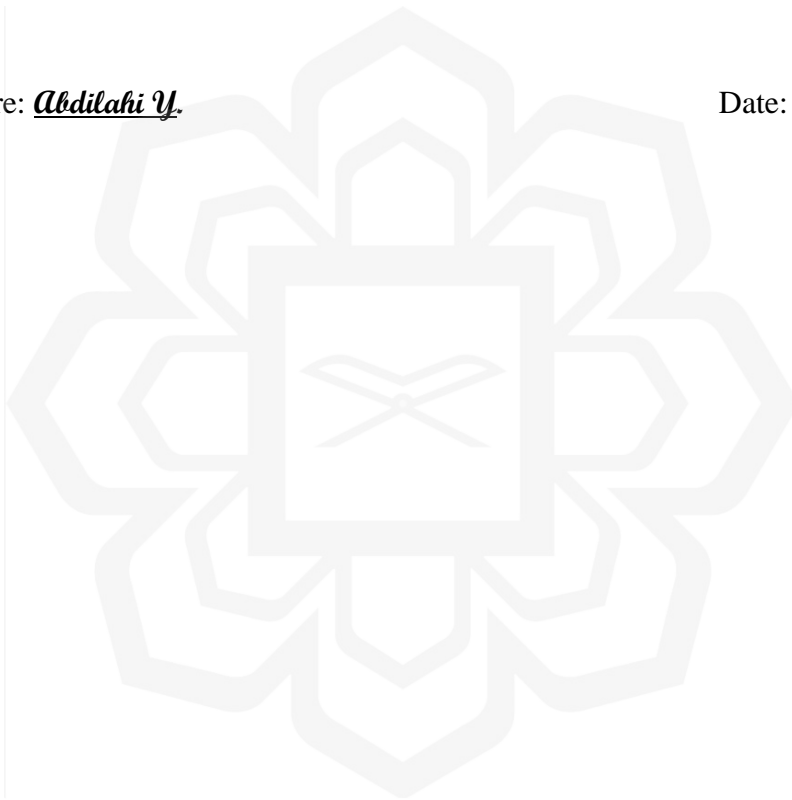
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I hereby declare that this dissertation is the result of my own investigations, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

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ACKNOWLEDGEMENTS

Above all, I would like to express my gratitude to the almighty Allah for every achievement in my life. I would also like to acknowledge my supervisor and mentor Assist. Prof. Dr. Siti Roshaidai Binti Mohd Arifin whom without her, would have been difficult to accomplish this dissertation. I will be ever thankful for your guidance, support and advise. You were sincere and wonderful mentor.

I would like to acknowledge to the members of my supervisory committee, the chairperson Prof. Dr. Ramli Musa and Assoc. Prof. Dr. Lokman Bin. Md. Isa. They were humble, expertise and inspiring advisors. I appreciate your valuable guidance and knowledge transfer.

I am sincerely thankful for our college staff, and HCPs of the hospitals; in Jijiga University Sultan Hassan referral and Karamara Hospital for their assistance and support in my data collection.

Lastly, my special thanks is for my family, friends and colleagues. Thank you for your endless support and inspirations.

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CHAPTER ONE

INTRODUCTION

1.1 CHAPTER INTRODUCTION

Over the past years, it has been recognized, that patients with chronic illnesses subsequently remain at higher risk of suffering from psychological disturbance and mental in-stability (Roberge et al., 2016). Thus, recent developments in the field of psychology and social sciences have led to a renewed interest in exploring the emerging infectious diseases and common mental disorders.

It is well known that depression is regarded as the primary mental disorder, that manifests a frequent feeling of depressed mood, loss of interest, sleep disturbance and incapability to carry out daily activities. This is accompanied by a range of clinical features like poor concentration, reduced energy, and excessive feeling of guiltiness (Klaman & Toy et al., 2016). It is common that various psychological and physiological disorders to occur as a consequence of the Human Immuno-Deficiency Virus (HIV) resulting in a negative health outcome (WHO, 2017).

Despite the expansion of medical researches and the growth of diagnostic equipment's, the inter-link between HIV and depression is mostly un-reported in under-developed countries (WHO, 2017). The relationship between HIV and depression is profoundly reported from different perspectives and based on the social and psychological factors of depression, HIV patients in these countries are least likely to be diagnosed (Cook et al., 2014). Moreover, depressive symptoms are commonly observed and more likely to be prevalent among People Living with HIV (PLHIV)

suggesting the presence of the virus in the neurologic system which might promptly be related to the disease progression (WHO, 2008). Besides, PLHIV is ultimately at higher risk of getting poor self-esteem, negative self-perception, and perceived stigma resulting in the engagement of risky behavior and acquiring emotional disturbances. However, in such circumstances, patients with both illnesses commonly do not get the essential care of depression regardless of the medical recognitions on the link amongst these disorders.

It has been reported that more than half of the PLHIV are women and the majority of them are residents from low-income countries with about two-thirds of them belong to African countries in the south of the Sahara and South-east American countries (Ramjee & Daniels, 2013). Correspondingly, it has been reported that depressive episodes are highly prevalent in HIV positive females, manifesting decreased cognitive function, poor treatment adherence, and experiences of stressful live events (Rochat et al., 2013). Women not only suffer from HIV but also are vulnerable to common mental disorders like depression and anxiety (Fasoulakis, 2017). Despite the prevailing attempts of investigating the clinical and psychosocial related correlates of depression in WLHIV, recently, studies that determines the determinant factors of depression and anxiety are limited from the perspective of women's experience with comorbid illnesses. Hence, this thesis is aimed to assess depression and anxiety in WLHIV and explore their experience of both WLHIV and HCPs.

Chapter one: - highlights the basis for understanding the problem under investigation, problem definition, recent global disease burden, the existing research gap, and the rationality of the study. It also remarks on the socio-economic, epidemiologic, and clinical associates that are relevant with the research problem.

Finally, it associates the link between the diseases under-study hereafter depression and HIV and their theoretical perspectives.

Chapter two: - discusses the evaluation of the recent and relevant studies on HIV and depression across various regions. It describes the details about the epidemiological exposures of depression and anxiety in HIV patients and critically reviewing the empirical studies of these illness. It also encompasses the research gap identification and proposes a baseline for initiating an engagement with other researcher's findings which was crucial for finding-out the prior existing literature and to prevent similar reporting. After conducting a critical review of the subject of HIV and depression, this chapter is attempted to generate a cognizant understanding of the current level of knowledge by relating this review with the topic. Finally, the chapter discusses the empirical reviews and synthesis which was a continuous process aimed to provide a current scientific and social developments with the in the subject area.

Chapter three: -elaborates on the utilized research methods. It explains the procedures employed to answer the research questions. The selected mixed-method research design is presented and the rationale for choosing this methodology is explained. This chapter clarifies the study settings, study population, sampling technique, inclusion process of the study participants. This chapter also discusses the data collection procedures, the used screening tools, and data collection instruments, the data analysis process, and overall ethical related issues. The following chapters four, five, and six reports the findings of the study.

Chapter four: - reports the findings of the quantitative phase and presents the analysis result of this study. This chapter reports the socio-demographic and clinical characteristics, single point, and comorbid prevalence of depression and anxiety. The findings presented in this phase are held to be a baseline for the development of the

qualitative interview-guide to furtherly examine the participant's experience on depression which will be presented in the next chapter.

Chapter five: - explores the women's explanation of their experience with depression and anxiety by using an in-depth interview. This chapter presents the findings by reporting the emerged main five themes and fourteen sub-themes about the living experience of depression. The themes that emerged from the common events experienced by the study participants include; complaining from stressful life events, reduced participation of social activities, concern over community acceptance, hopelessness, and dealing with depression and anxiety. In conclusion, this chapter presents a substantial further explanation of some variables that were not adequately explained in the previous quantitative chapters.

Chapter six: -describes the perception of HCPs in managing depression developed by women. In this chapter, the perception, experience, and practice of the HCPs concerning willingness and preparedness for screening, maintaining patient care and management, and barriers related with the providing of quality health service is presented.

Chapter seven: - highlights the practical application of the theories and formulation of a conceptual model that represents the exposure of depression among WLHIV. It also demonstrates how the inter-wined variables like social, psychological, and clinical variables are related to each other.

Chapter eight: - discuss both quantitative and qualitative findings, compares and contrast with the existing theories and literature. It also highlights the interpretation offindings, critical discussion with the study implications, scholarly contributions, referring the study limitations, and recommending for future researches and forwarding strategic and policy-related recommendations.

1.2 BACKGROUND OF THE STUDY

In general, patients with chronic illnesses do not only suffer from physical impairments but also are at risk of developing mental related illnesses. HIV with its associates can cause impairment of cognitive functioning of the PLHIV especially the neuro-hormones where depression can affect the social integrity and the patient's health about medication adherence and perceived stigma (Yi & Chhoun , 2015).

Thus, it is common that HIV to be responsible for acquiring long-lasting and fatal diseases known by its nature of destructing the body's defense system of the human patient and aggravating the chance of being vulnerable for other comorbid diseases. This serious and chronic disease is characterized by its effects on the social, clinical, and emotional stability of the HIV positive individual. As described by (Matt & Gaskill, 2019), experiencing the disease chronicity and symptom severity including the possible social burden like stigma, community rejection, absence of support, and low self-esteem might be a threat to the patient's physical well-being and psychological stability. Due to the nature of this chronic illness, it is common that patients to acquire two (comorbid) or more (multi-morbid) illnesses at the same time. Mental health and HIV/AIDS are closely interlinked, and they have an effect on each other influencing the course of disease and treatment interference (WHO, 2016).

Globally, PLHIV has a significantly higher exposure to depression with rates two to four times higher when compared to the rest of the population (Bernard & Rekeneire, 2017). Moreover, when PLHIV adjacently develops depression, they are more susceptible to acquire opportunistic infection, viral resistance, and other poor health outcomes, due to various reasons like decreased Cluster Differentiation (CD4) level or lower medication adherence (Ironson et al., 2016). Possibly, this may result a

prominent health hazard, which may increase the need for further investigations and preventive measures for the assurance of a better living and health outcomes for PLHIV. Previous evidence has presented the severity of depressive symptoms among WLHIV, and its link with the advancement of later clinical-stage, causing disease deterioration, disease severity (Cook et al., 2014; Owora, 2018) and consequently leading to a shorter life expectancy. In addition to, an increased probability of AIDS-related deaths and lower adherence of the treatment is often observed among depressed HIV patients (Prasithsirikul et al., 2016).

Social, psychological and clinical elements are often associated with depressive episodes developed by PLHIV and has an impact on the HIV disease advancement to severe stages (Ironson et al., 2016; Cole, 2008) and these factors are rarely examined among WLHIV in the study settings. Besides, there is an increasing concern in poor and under-developed regions of the world where PLHIV do not get an early mental screening and referral to better treatment to the same level in the developed countries, and the impact on the daily life is still growing (Memiah et al., 2014).

1.3 STATEMENT OF THE PROBLEM

A significant proportion of PLHIV is women as they account for half of the Thirty-five million PLHIV. Approximately 98% of women with HIV live within developing countries and majority of them are living in under-served regions (Ramjee & Daniels, 2013).

HIV and depression both tend to be widely prevalent among the vulnerable, marginalized, and stigmatized people compared to general populations (Fasoulakis, 2017). Moreover, the exposure of depression in HIV infected individuals is significantly higher when compared to other parts of the community (Lundberg et al., 2013). Generally, depression is considered as one of the common mental disorder in Ethiopia and it is more prevalent in women due to gender and reproductive related reasons.

Women are often at greater risk for getting depression and anxiety than men due to psychosocial, biological, and hormonal related factors (Tebikew et al., 2017). Thus from the findings of (Eshetu et al., 2015), a higher rate of depressive symptoms was documented in Ethiopia when compared to previous studies, stating that 39.8% of the studied participants to be depressed.

Despite the vulnerability, depression among WLHIV remains under-diagnosed affecting not only the life of the patient but also the medication adherence. WLHIV, have been the focus of current researches concerning biomedical issues linked with pathogenesis of the disease and its transmission. However, there have been limited studies from Sub-Saharan Africa where most of the vulnerable women live. Regardless of the improved health care visit during antiretroviral therapy follow-up and advances in the mental health modalities which provide opportunities for the screening, prevention, and treatment, depression mostly remains undetected and untreated (Abera et al., 2014). In this regard, depression would possibly intensify the existing poor quality

of care and non-adherence to antiretroviral therapy which might deteriorate health conditions among PLHIV (Willie et al., 2016).

In most hospitals of Ethiopia, chronic illnesses like mental health is not integrated with some of the care and treatment services and HIV patients and patients are unable to access the required medical care. Despite the prominence of screening and management of depression of HIV patients in have been long acknowledged, women and health worker's experience is not reported from the region. Therefore, this study explores the experience of depression among WLHIV and HCP's practice in managing depression among WLHIV. The results will be a baseline for the introduction of mental health services in HIV care set-up.

1.4 SIGNIFICANCE OF THE STUDY

Based on the frequency and the presentation of the symptoms, depression is the primary recorded illness among PLHIV. This illness of patients who were already immunocompromised is on the rise. This study investigates and examines the occurrence of depression among PLHIV and identification of potential associates that would make the findings substantially vital and relevant for the practice of HCPs in medical set up. The following describes the rationale of this study.

- Globally, a extensive emphasis on generating evidence related with the comorbidity of depression and HIV was raised (Carrico et al., 2011; Owora, 2018; Prasithsirikul et al., 2016; Wang et al., 2018). However, there is shortage of studies and an increasing concern in resource-limited developing countries of the world where PLHIV do not get an early mental health screening, awareness, and linking to mental health services to the same level in developed countries and the impact on daily life is still growing (Memiah et al., 2014).

- It is clear from the existing evidence that the topic of depression and HIV has been widely reported and extensively explored in the field of public health due to its high proportion of depression in PLHIV and disproportionately the number of women affected by women by both HIV and depression are higher than the general population. Yet much of the work in this area is limited and most of the studies have emphasized the normal population while overlooking the most vulnerable people like WLHIV living in regions with poor resources.
- To address the previously unaccounted phenomena on the relevance of service integration of the two comorbid illnesses depression and HIV, where symptoms related to such diseases are typically linked with each other and depression exists to be un-detected and potentially risk (Robertson et al., 2014). Most of the studies that had been carried out around the globe have examined the statistical association of the socio-economic and psychosocial factors related to depression (Schuster et al., 2012). Yet, less emphasis was given on the determination of researches which would explore the personal-driven exposures and social burden. Thus, in adequate focus was paid to explore the potential problem in areas where HIV is highly prevalent. To the author's understanding and information, this research is the first of its design which investigates the experience of depression in both WLHIV and HCPs in Ethiopia. Finally, the endeavor of this research is sought to explore the experience of depression among WLHIV and the HCPs engaged in HIV care. The results of this thesis will be a baseline for the implementation of depression screening in ART services. Therefore, the publications of this study and the dissemination of this finding including conferences and seminars can provide a basis for more exploration regarding the link between depression and HIV.