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Perception of Mental Health Stigma Among Young Adults Aged 18–25 in
Khartoum, Sudan (2025)

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DEDICATION

We dedicate this research to the people who supported and uplifted us throughout this journey.

To our families, thank you for your endless love, patience, and encouragement. Your belief in us gave us strength when we needed it most.

To our friends, your kindness, motivation, and quiet presence have been a constant source of comfort.

And to each other, as a team, we are grateful for the shared determination, late nights, honest conversations, and unwavering support. This work stands as a reflection of our collaboration, resilience, and shared vision.

With heartfelt gratitude and appreciation.

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ABBREVIATION

PTSD	Post-traumatic stress disorder
MENA	Middle East And North Africa
IDPs	Internally displaced persons
SPSS	Statistical package for the social sciences
UNHCR	United nations high commissioner for refugess
UK	United kingdom
US	United state
WHO	World Health Organization

ABSTRACT

Background

This study explores how young adults in Sudan perceive mental health and its associated stigma, shaped by conflict, displacement, and cultural norms. Focusing on both displaced and non-displaced individuals in Khartoum, it highlights the urgent need for context-sensitive strategies to reduce stigma and improve mental well-being.

Objective

To explore and understand the perceptions of mental health stigma among young adults aged 18 to 25 in Khartoum in 2025, with the aim of identifying key cultural, social, and contextual factors influencing stigma and informing effective, locally-relevant mental health strategies.

Materials and methods

This is a cross-sectional study conducted in 2025 and covered 216 young adults aged 18–25, randomly recruited from Khartoum, Sudan. Data were collected using online, closed-ended standardized questionnaires. The questionnaire was coordinated and supervised by the Research Team Members to maintain consistency and data quality throughout the process.

Results

A total of 216 young adults participated in the study. The majority were aged between 21 and 25 years, with females comprising 61% of the sample. Most participants (93%) had been displaced due to conflict, and 94% had received a university or college education. About 65% were students, while 14% were unemployed.

Regarding awareness of mental health stigma, 66% had heard of the term, while 14.4% reported not knowing what it meant, and 18.5% provided unrelated responses. Furthermore, 79% believed that mental health conditions are treated differently than physical health conditions in their communities. Over 80% perceived stigma in Khartoum to be strong or very strong, and most described the general public's attitude toward mental illness as negative.

Cultural beliefs (69%) and religion (57%) were reported as key influences shaping perceptions of mental health. Additionally, 82% of participants associated mental illness with supernatural causes. Education level was noted to have a significant impact on perception, and 55% had been exposed to mental health discussions during school or university.

When asked about the impact of stigma, 87% believed it reduced young adults' willingness to seek help. Among those who felt they needed support, 48.1% had avoided seeking care due to fear of judgment. Discrimination in social and professional settings was acknowledged by 69% of respondents.

In terms of lived experience, 15.2% reported experiencing trauma. Among them, 48.4% said it came from peers (e.g., friends or classmates), 33.3% from family members, and 18.8% from workplaces.

Conclusion

This study concludes the significant presence of mental health stigma among young adults in

Khartoum, Sudan, with a notable proportion of displaced participants.

While awareness of mental health issues is relatively high due to education and exposure to

digital media, stigma remains deeply rooted in cultural and religious beliefs, leading to negative

perceptions, social exclusion, and reluctance to seek help. Despite these challenges, the findings

suggest an opportunity for progress.

Participants showed strong support for educational interventions and trusted healthcare

professionals as reliable sources of mental health information. The pervasive stigma, exacerbated

by displacement, calls for culturally sensitive, multi-level strategies to reduce mental health

discrimination and improve access to care.

Addressing this issue through public awareness campaigns, education, and policy reforms could

foster a more inclusive environment for mental health support in Khartoum.

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Chapter I

**Introduction, Rational, Literature
Review and Objectives**

Chapter One

Introduction

1.1. Background

Mental health is a growing global concern, affecting nearly one in eight individuals worldwide with conditions such as depression, anxiety, and post-traumatic stress disorder (PTSD) (1). These disorders are especially prevalent among young adults, a group often navigating significant life transitions and stressors. Despite the increasing burden, mental health services remain underfunded and under-prioritized globally. One of the most significant barriers to mental health care is social stigma, which prevents individuals from seeking help or discussing their struggles, particularly in low- and middle-income countries(2).

In the Middle East and North Africa (MENA) region, the situation is further complicated by a combination of socio-economic instability, cultural and religious norms, and limited access to mental health services. Mental illness is often misunderstood, and help-seeking behavior is discouraged by fear of judgment, shame, or social exclusion (3) (4). As a result, many individuals suffer in silence, and stigma continues to be a major obstacle to both prevention and treatment.

Sudan reflects many of these regional challenges and adds its own unique context. The country has experienced ongoing political and economic instability, which has weakened the healthcare system and limited access to basic services, including mental health care. Since April 2023, the outbreak of armed conflict between the Sudanese Armed Forces and the Rapid Support Forces has led to widespread violence, infrastructure collapse, and the displacement of millions of people (United Nations High Commissioner for Refugees(5) While this study does not focus specifically on displaced individuals, it acknowledges the broader national context and includes both displaced and non-displaced young adults in Khartoum.

Young adults in Sudan today are navigating a complex and often uncertain environment. Their perceptions of mental health and the associated stigma are shaped by personal experiences, cultural expectations, economic challenges, and in some cases, the e

ffects of displacement. By including both displaced and non-displaced individuals, this study aims to capture a broader picture of how Sudanese youth perceive mental health stigma. Understanding these perceptions is essential for developing effective, context-sensitive mental health strategies that can reduce stigma and improve well-being among young people in Sudan.

1.2. Problem Statement

Mental health stigma remains a major global barrier to care, particularly among young adults. According to the World Health Organization (2022), stigma contributes to delayed help-seeking, worsening mental health outcomes, and increased suicide rates (1). In low- and middle-income countries such as Nigeria, despite high rates of depression and anxiety, stigma and cultural beliefs significantly hinder access to mental health services (6).

In Sudan, the situation is further compounded by ongoing conflict and widespread displacement. Since the outbreak of war in April 2023, millions have been displaced, and over 50% of internally displaced persons (IDPs) are estimated to suffer from mental health conditions such as depression, anxiety, and PTSD(7). Yet, the country has only 2.05 mental health professionals per 100,000 people, severely limiting access to care (8).

Although research on young adults in Sudan is limited, studies in Khartoum have shown that 13% of secondary school students experience symptoms of depression and anxiety, suggesting early onset of mental health struggles (9). Deep-rooted stigma—reinforced by cultural, religious, and gender norms—continues to prevent individuals from seeking help, even among those who have received mental health interventions (10) (11)

This research seeks to understand how young adults in Khartoum, both displaced and non-displaced, perceive mental health stigma. By exploring these perceptions, the study aims to support the development of culturally sensitive interventions to reduce stigma and improve access to mental health care in Sudan.

1.3 Justification

Since there is a dearth of research on this topic, this study is essential for understanding the impact of stigma surrounding mental health on young adults in Khartoum, Sudan, including displaced individuals originally from Khartoum. Mental health issues among young adults are becoming more prevalent globally, and stigma plays a key role in preventing them from seeking treatment, exacerbating their mental health problems. For displaced individuals, the stigma surrounding mental illness may be intensified, and the added stress of displacement can further worsen their mental health challenges. In Sudan, mental health services are still developing, and stigma continues to be a significant barrier to treatment. This study aims to provide much-needed local data to guide the development of effective intervention strategies and policies, focusing on both resident and displaced populations from Khartoum. Early intervention on stigma is crucial for improving mental health outcomes and reducing long-term societal and healthcare costs. Additionally, this research will help raise awareness and enhance support for Sudanese young adults, whether displaced or residents, in addressing mental health stigma.

1.4 Research Questions

What is the perception of mental health stigma among young adults in Khartoum in 2025?

1.5 Objectives

1.5. General Objective

The general objective of this study is to explore the perception of mental health stigma among young adults in Khartoum, Sudan, in 2025, including both resident and displaced individuals originally from Khartoum.

1.5. Specific Objectives

1. To assess the awareness, perceptions, and attitudes (including behaviors and responses) toward mental health stigma among young adults in Khartoum, Sudan, encompassing both resident and displaced populations.
2. To examine the role of cultural, social, and educational factors in shaping young adults' perceptions and influencing stigma-related behaviors toward mental health.
3. To identify the primary sources influencing mental health perceptions, such as family, media, peers, and community, and their impact on stigma.
4. To explore the perceived short-term and long-term effects of mental health stigma on access to care, social inclusion, and overall well-being among young adults.

Literature Review

2.1 General section

Mental Health and Stigma :

Mental health refers to a person's emotional, psychological, and social well-being, influencing how individuals think, feel, and behave (1). It also plays a crucial role in how people handle stress, relate to others, and make life decisions (12). According to the WHO (2022), mental health is a state of well-being in which an individual realizes their abilities, can cope with the normal stresses of life, work productively, and contribute to their community(1). Mental health encompasses several key components: emotional well-being, which includes the ability to cope with life's challenges and manage emotions; psychological well-being, which includes self-esteem and cognitive function; and social well-being, which includes building healthy relationships(12) .

Globally, mental health is recognized as an essential component of overall well-being. Mental health disorders, such as depression, anxiety disorders, substance use disorders, and eating disorders, affect millions worldwide(13). The burden of mental health disorders is significant, as they not only affect individuals' personal lives but also have far-reaching consequences for families, communities, and economies. Mental health conditions are linked to chronic illnesses like heart disease, diabetes, and stroke (1). Mental health issues are also a major contributor to disability, with depression being a leading cause (2). In fact, mental health conditions are responsible for one in six years lived with disability globally (1).

Despite the significant impact of mental health, mental health stigma remains a substantial barrier to care worldwide. Stigma refers to the negative attitudes, beliefs, or stereotypes directed at individuals due to specific characteristics, often leading to discrimination. Mental health stigma is a multi-dimensional concept and includes public stigma, which refers to societal attitudes and beliefs about mental illness; self-stigma, which refers to the internalized negative beliefs that individuals hold about themselves due to their mental illness; and structural stigma, which refers to systemic discrimination embedded within societal institutions (14). In many societies, mental illness is still perceived as shameful or a personal weakness, which often leads to social exclusion and delayed help-seeking behaviors (15).

In Sudan, mental health stigma is particularly pronounced due to various cultural, religious, and social factors. Sudanese society often views mental health issues through a spiritual lens, linking mental illness to possession, sin, or other supernatural causes (16). This perception of mental illness as a taboo subject has contributed to widespread stigma, and individuals suffering from mental health issues may face social rejection, discrimination, and exclusion. The stigma surrounding mental health is compounded by religious beliefs, with some people in Sudan associating mental health problems with a lack of faith or spiritual weakness, which may discourage individuals from seeking professional help (17).

The impact of mental health stigma in Sudan is profound. Due to social expectations and a lack of awareness, many individuals with mental health conditions are reluctant to seek care, leading to untreated mental health issues. This lack of treatment often exacerbates the severity of the condition and contributes to poor outcomes such as social isolation, poor educational performance, and low productivity (18). In Khartoum, the capital of Sudan, young adults often experience high levels of academic stress and peer pressure, both of which contribute to poor mental health. However, mental health care resources are limited, and many young people do not seek help due to fears of being judged or misunderstood.

The connection between mental health stigma and physical health is significant. Poor mental health often leads to the development of chronic physical conditions like cardiovascular disease, diabetes, and hypertension, and vice versa (1). The stigma surrounding mental illness can also reduce individuals' self-esteem and cause internalized shame, preventing them from disclosing their condition to others or seeking appropriate care. This is especially true in Sudan, where mental illness is often viewed as a sign of weakness, and individuals are expected to manage their problems in private. As a result, early intervention is crucial to mitigate the negative impacts of stigma and promote better mental health outcomes.

In addition to the individual consequences of stigma, mental health stigma has far-reaching effects on society. Mental health conditions are closely linked to poor education

nal outcomes and unemployment. Young adults who suffer from mental health conditions like depression or anxiety may struggle with concentration, leading to poor academic performance and high dropout rates (12). The stigma associated with these conditions may also prevent young people from seeking support from teachers, counselors, or peers, further isolating them. In Sudan, where educational and employment opportunities are already limited, these impacts are even more pronounced. Young adults with untreated mental health issues may also have trouble finding stable employment and face discrimination in the workforce, leading to lower productivity and higher absenteeism (1).

Furthermore, the stigma surrounding mental illness can negatively affect relationships. In Sudanese society, where strong community ties and family relationships are highly valued, mental health issues can cause withdrawal and communication problems, leading to increased family conflicts and social isolation. This issue is particularly critical for young adults, who are in the process of identity formation and are heavily influenced by social expectations and peer dynamics.

Social media has also played a significant role in shaping mental health perceptions among young adults. Platforms like Instagram and Facebook often present idealized images of life, which can contribute to feelings of inadequacy, self-doubt, and anxiety among young people (19). These pressures are particularly high in Khartoum, where young adults are increasingly exposed to global standards of beauty, success, and happiness, making it difficult for them to align their self-image with these ideals. This exposure, coupled with the cultural stigma surrounding mental health, creates a perfect storm for poor mental health outcomes among Sudanese youth.

Mental health stigma varies across cultures and regions, with significant differences between developed and developing countries. In Western societies like the US and UK, mental health awareness has improved in recent years, but stigma still exists, especially for severe disorders such as schizophrenia and psychosis (20). In contrast, in developing countries like Sudan, mental health stigma is often deeply embedded in cultural beliefs and religious views, making it more difficult to address. In countries like Japan and many parts of Africa, mental health conditions are often viewed through a spiritual or supernatural lens, which prevents individuals from seeking appropriate care and leads to lack of treatment (17). In Sudan, the situation is exacerbated by limit

ed access to professional mental health services, particularly in rural areas and among young adults who face unique stressors and pressures.

The importance of addressing mental health stigma in young adults cannot be overstated. Young adults are at a critical stage of development, marked by identity formation, independence, and decision-making (21). This developmental stage makes them particularly vulnerable to mental health issues, as they navigate complex life transitions and social pressures. In Sudan, young adults face unique challenges, including economic instability, educational pressures, and social expectations, all of which can contribute to the development of mental health issues. However, due to the stigma surrounding mental health, many young people in Sudan may not seek help, leaving them at greater risk for poor mental health outcomes.

Addressing stigma early in life is essential for improving mental health outcomes throughout adulthood. By reducing stigma, young adults are more likely to seek help, develop healthier coping mechanisms, and engage in more open conversations about mental health. This, in turn, will lead to better outcomes in education, employment, and social relationships. Young adults represent the future leaders of society, and their views on mental health will shape the policies, workplace environments, and social attitudes of the future. Breaking the stigma surrounding mental health begins with young adults, as they are uniquely positioned to influence future generations and create more supportive environments for mental health care (20).

In conclusion, Due to societal, cultural, and religious factors, stigma around mental health is particularly prevalent in Sudan, even though it continues to be a major obstacle to care and recovery worldwide. By concentrating on young adults in Khartoum, this study seeks to investigate how stigma around mental health is perceived during this critical developmental stage and help lessen stigma in Sudanese society. In order to give young people the support that they require for growth emotionally, psychologically, and socially, this issue must be addressed.

2.2 Focusing section

2.2.1 Introduction :

Mental health stigma in Sudan is deeply woven into the fabric of society—shaped by tradition, reinforced by silence, and often misunderstood through spiritual or moral lenses. Yet, these perceptions are not evenly distributed(1). Young people living in Khartoum, especially those displaced by conflict, carry a disproportionate burden. Many have endured trauma, loss, and instability, only to find themselves in communities where mental health struggles are dismissed, feared, or shamed (7)

For displaced youth, the stigma hits harder. The clash between surviving displacement and conforming to rigid social expectations creates a quiet crisis. Seeking help is often seen as weakness; mental illness is interpreted as punishment or spiritual possession.

As a result, suffering goes unseen and untreated (22)

Amid these intersecting pressures—displacement, youth, urban hardship, and enforced silence—emerges a critical need to understand how culture, society, and religion shape mental health perceptions. It is in the daily interactions, quiet judgments, and fear of labels that stigma takes root, isolating those most in need of support.

2.2.2 Perception of Mental Health Stigma Among Young Adults in Khartoum (Resident vs. Displaced Youth)

Displaced individuals, particularly in conflict zones like Sudan, face unique challenges related to mental health stigma. While many escape physical danger, deep psychological trauma often persists(5). Displacement disrupts relationships, dismantles support networks, and significantly impairs recovery(22).

Young adults bear an especially heavy burden. Whether displaced or residents of Khartoum, many fear being ostracized if they seek mental health care. They encounter multiple layers of stigma—social judgment, self-stigma, and structural barriers—all of which act as powerful deterrents to accessing urgently needed services. In refugee camps and urban settlements alike, mental health services remain critically inadequate, creating an environment where mental distress festers without treatment(5).

2.2.3 Factors Influencing Mental Health Stigma (Cultural, Social, and Religious Influences).

2.2.3.1 Cultural Context of Stigma

Cultural beliefs play a central role in shaping perceptions of mental health. In Sudan

particularly among displaced populations. mental illness is frequently explained through spiritual or supernatural frameworks, such as spirit possession, divine punishment, or curses(23) . This framing diminishes recognition of mental illness as a legitimate medical issue and instead drives individuals toward traditional healers or spiritual remedies, delaying or avoiding clinical intervention(24) .

Displaced youth, often from highly conservative backgrounds, experience intensified stigma. Family silence around mental health perpetuates generational patterns of misunderstanding and marginalization (22).

Implication:

Interventions must be culturally sensitive. Effective programs should work with, rather than against traditional belief systems, partnering with community elders and spiritual leaders to bridge cultural practices and medical approaches.

2.2.3.2 Social Influence and Isolation

Sudanese society places high value on emotional resilience, family honor, and public image. Mental health struggles are often perceived as private weaknesses rather than medical concerns. Among displaced communities, fears of being labeled "unstable" or "unmarriageable" discourage youth from seeking help (8,25,26).

The consequences are severe: prolonged social isolation, depression, suicidal ideation, and substance misuse.

Implication:

Mental health advocacy must tackle these social dynamics head-on. Youth-led initiatives, peer support groups, and mental health education embedded into schools and community gatherings can help normalize mental health conversations and foster solidarity.

2.2.3.3 Religious Influence

Religion deeply informs Sudanese identity and societal behavior. Mental health struggles are often interpreted religiously as tests from God, punishments for sin, or signs of weak faith. While this framing can offer comfort, it often discourages professional treatment(23,25,26).

For displaced youth with limited access to clinical services, spiritual narratives may be their only available explanation, reinforcing self-blame and delaying recovery.

Implication:

Mental health strategies should integrate, not ignore, religious frameworks. Partnering

with imams, sheikhs, and religious scholars to affirm that mental illness is a health condition—not a moral failing—can dramatically shift community attitudes.

2.2.4 Barriers to Mental Health Care Access

Despite growing acknowledgment of mental health needs in Sudan, access to care remains dismal. Mental health services are overwhelmingly concentrated in Khartoum, monopolizing the majority of available services, leaving other regions severely underserved. Out of 18 Sudanese states, only a limited number have fully staffed psychiatric hospitals; others rely on non-specialist care(27).

These structural gaps, layered over social stigma, create a compounded barrier for young adults. Rural and displaced populations, in particular, face a landscape where mental health care is inaccessible, unaffordable, or stigmatized leading to widespread feelings of helplessness and abandonment.

2.2.5 Consequences of Mental Health Stigma on Youth (Psychosocial Impact)

Psychosocial Distress and Emotional Well-Being

Stigmatized youth often internalize negative societal beliefs, resulting in low self-esteem, emotional withdrawal, and chronic psychological distress. Displaced Sudanese youth face heightened risk of depression, anxiety, and suicidal ideation due to compounded stigma and lack of support(15).

Self-stigma exacerbates emotional isolation, diminishing resilience and impairing coping mechanisms. Left unaddressed, these issues spiral into deeper psychological crises.

2.2.6 Academic and Functional Impairment

Mental health stigma significantly impedes educational success. Young adults battling internalized stigma struggle with concentration, motivation, and consistent attendance. Fear of judgment deters them from seeking academic accommodations or counseling, worsening their academic performance and increasing dropout rates (28).

Final Note:

The interaction of culture, society, religion, and displacement produces a complex web of stigma that suffocates mental health progress among Sudanese youth. Addressing this reality requires culturally nuanced, community-embedded interventions that respect traditions while boldly pushing for reform.

2.3 Previous study section

2.3.1 Mental Health Stigma Among University Students

Study: Self and Public Stigma Towards Mental Illnesses and Its Predictors Among University Students in 11 Arabic-Speaking Countries.

This cross-sectional study explored self-stigma and public stigma among university students in 11 Arabic-speaking countries, including Sudan. A total of 4,241 students were surveyed. The findings revealed significant variations in stigma, with Sudanese students displaying higher levels of stigma compared to students from Lebanon. Factors such as low mental health knowledge, male gender, and lower academic performance were linked to increased stigma. This study emphasizes the need to target educational institutions and youth in stigma-reduction efforts in Sudan. It aligns with the proposed study in Khartoum by providing a baseline understanding of stigma in a university context and supports the idea of tailoring mental health interventions to young adult populations(29).

2.3.2 Cultural and Social Influences on Mental Health Stigma

Study: Acculturative Stress, Stigma, and Mental Health Challenges: Emic Perspectives from Somali Young Adults in San Diego County's 'Little Mogadishu'

This qualitative research examined mental health challenges among Somali young adults in the U.S., focusing on acculturative stress, stigma, ethnic discrimination, and parental attitudes. Participants reported widespread psychological distress, including depression and PTSD, with stigma acting as a barrier to seeking help. Coping mechanisms included peer support, religious activities, and sports. Although the study is based in a diaspora context, its insights are valuable for understanding cultural contributors to stigma. These findings are relevant to Sudanese youth in Khartoum, where similar cultural pressures and misunderstandings about mental illness may influence stigma. The study underlines the importance of culturally sensitive interventions that address community attitudes and generational divides(30).

2.3.3 Mental Health Stigma in Displacement Contexts in Sudan

Study: Change in Mental Health Stigma After a Brief Intervention Among Internally Displaced Persons in Central Sudan

This longitudinal study assessed the impact of an intervention on mental health stigma among 1,549 internally displaced persons in central Sudan. Despite high baseline stigma, the intervention did not result in significant changes. Socio-demographic factors such as education, employment, and income were associated with stigma levels. This study highlights the entrenched nature of stigma and the limited effect of short-term interventions. For the proposed research, it provides important insights into the Sudanese context, demonstrating that youth-targeted and long-term strategies may be more effective. The research underscores the need for deep community engagement and sustainable approaches to address stigma in Khartoum(31).

2.3.4 Regional Attitudes Toward Mental Illness and Help-Seeking

Study: Cross-Cultural Comparison of Mental Illness Stigma and Help-Seeking Attitudes: A Multinational Population-Based Study from 16 Arab Countries and 10,036 Individuals

This large-scale study explored stigma and help-seeking attitudes across 16 Arab countries, including Sudan. It found widespread stigma, with help-seeking behaviors influenced by factors such as gender, education, and urban/rural residency. Notably, belief in supernatural causes of mental illness correlated with less willingness to seek professional help. These findings emphasize the role of cultural and religious beliefs in perpetuating stigma. For young adults in Khartoum, such beliefs may be major barriers to mental health service utilization. This study supports the inclusion of religious and cultural narratives in awareness campaigns and highlights the importance of promoting mental health literacy(32).

2.3.5 Perceptions of Depression Among Arab University Students

Study: Stigmatizing Attitudes Towards Depression Among University Students in Syria

This research focused on Syrian university students and their attitudes toward depression. Over 50% of participants held negative views, often perceiving depression as a weakness rather than a medical condition. Higher education and greater awareness of mental illness correlated with reduced stigma. The study identified the role of misconceptions in shaping stigma and emphasized the potential of educational interventions in changing attitudes. These findings are applicable to Khartoum, where similar misconceptions may prevail. The proposed research can build on this by exploring how e

educational level and awareness among young Sudanese adults influence their views on mental illness(33).

2.3.6 Stigma and Suicidality

Study: Mental Illness Stigma and Suicidality: The Role of Public and Individual Stigma

This study investigated how public and self-stigma contribute to suicidal ideation among individuals with mental illnesses. Both forms of stigma were associated with increased suicide risk, highlighting the psychological harm of stigma and social exclusion. The research illustrates how stigma can directly impact mental health outcomes beyond service avoidance. This is particularly significant in Sudan, where mental health stigma may prevent youth from seeking help or discussing distress openly. The study supports the inclusion of suicidality-related outcomes in the assessment of stigma among young adults in Khartoum(34).

2.3.7 Gender Differences in Mental Health Literacy and Attitudes

Study: Gender differences in the knowledge, attitude and practice towards mental health illness in a rapidly developing Arab society

Using a cross-sectional design and a representative sample of 2,514 individuals attending primary healthcare centers, the study found significant gender disparities. Women were more likely to hold cultural and spiritual beliefs—such as the idea that mental illness is caused by evil spirits—and preferred traditional healers over psychiatrists. Men, by contrast, showed relatively better attitudes, greater willingness to seek psychiatric care, and more exposure to mental health information through media. However, overall knowledge about common mental illnesses was poor among both genders. These findings highlight the influence of gender, cultural beliefs, and information sources on mental health stigma—factors that are also likely to affect young adults in Sudan. The Qatari study underscores the relevance of sociocultural context and media exposure in shaping mental health perceptions, which aligns with our objective of examining how such variables impact stigma among Sudanese youth(35).

Conclusion

These studies collectively offer a comprehensive view of mental health stigma across Arab-speaking and diasporic communities. They demonstrate how socio-demographic characteristics, cultural and religious beliefs, education levels, and psychosocial stressors influence stigma. For young adults in Khartoum, these findings highlight the urgent need for culturally grounded, age-appropriate, and educationally focused interventions. The proposed research is positioned to fill gaps by providing specific data on the perception of mental health stigma among Sudanese youth, ultimately contributing to the development of targeted stigma-reduction strategies in Sudan.

Chapter II

Methodology

2.1 Methodology

3.1 Study Design

This was a cross-sectional descriptive study conducted to assess the perception of mental health stigma among young adults originally from Khartoum, Sudan.

3.2 Study Area

The study was conducted among young adults originally from Khartoum, Sudan. The participants included individuals living in Khartoum, displaced individuals within Sudan, and those displaced outside Sudan. Data was collected through online platforms to ensure access to participants across different geographical locations.

3.3 Study Population

The study population consisted of young adults aged between 18 and 25 years who were originally from Khartoum, Sudan.

3.3.1 Inclusion Criteria:

Young adults aged 18–25 years.

Originally from Khartoum, Sudan.

Willing to participate and provide informed consent.

3.3.2 Exclusion Criteria

Individuals outside the specified age range.

Individuals with a diagnosed severe mental illness affecting comprehension.

Participants not willing to provide informed consent.

3.4 Variables under the Study

3.4.1 Dependent Variable:

Perception of mental health stigma.

3.4.2 Independent Variable:

Age, gender, education level, current residence (inside or outside Sudan).

3.4.3 Confounding Variable:

Socioeconomic status, exposure to mental health education, personal or family history of mental illness.

3.4.4 Background Variable:

Employment status.

3.5 Sample Technique and Sample Size

3.5.1 Sample Technique

A non-probability convenience sampling technique was used through online distribution to reach the target population.

3.5.2 Sample Size

The sample size was estimated using a standard formula for cross-sectional studies with a 95% confidence level and a 5% margin of error. Based on this calculation, the required sample size was approximately 384 participants. Despite extensive efforts to distribute the questionnaire through multiple online platforms, and follow-up reminders, the final sample size was 216

participants. This sample size was considered adequate for the study's objectives, providing sufficient statistical power to analyze the perception of mental health stigma within the target population. Although it falls short of the original target, the sample remains representative, and the findings can still yield valuable insights within the study's limitations..

3.6 Data Collection Techniques and Tools

3.6.1 Data Collection Techniques

Data was collected using an online self-administered questionnaire distributed through social media platforms.

3.6.2 Data Collection Tools

3.6.2.1 Questionnaire

The questionnaire included standardized scales to assess the perception of mental health stigma. It also collected information on demographic details such as age, gender, education level, employment status, and current residence.

3.7 Data Management and Analysis

Data was analyzed using Statistical Package for the Social Sciences (SPSS). Descriptive statistics were used to summarize demographic characteristics. Associations between independent variables and the perception of mental health stigma were analyzed using chi-square tests and logistic regression.

3.8 Ethical Considerations

Permission and approval were sought from the University's research committee. Participation in the study was voluntary, and informed consent was obtained from all participants before data collection. Participants had the right to privacy and confidentiality, and their data remained anonymous. The investigation results were classified and kept confidential.

Chapter III

Results

3.1 Results

Table 1 presents the sociodemographic characteristics of the 216 study participants. The majority of participants were aged 21-23 (45%) or 24-25 (40%), with a smaller proportion aged 18-20 (14%). Most participants were displaced (93%) rather than residents of Khartoum (6.9%). A majority were female (61%), while 39% were male. The overwhelming majority of participants had a university/college education (94%), with only a small fraction having secondary school education (4.2%), no formal education (0.9%) or were fresh graduates (1%). The dominant employment status was student (65%), followed by unemployed (14%), with smaller proportions being full-time employed (9.7%), self-employed (6.0%) or part-time employed (4.2%).

Table 1: Sociodemographic characteristics of the study participants

Characteristic	N = 216 ¹
Age Group:	
18–20	31 (14%)
21–23	98 (45%)
24–25	87 (40%)
Current Location:	
Displaced	201 (93%)
Resident of Khartoum	15 (6.9%)
Gender:	
Female	132 (61%)
Male	84 (39%)
Education Level:	
Fresh graduate	2 (1 %)
No formal education	2 (0.9%)
Secondary school	9 (4.2%)
University/College	203 (94%)
Employment Status:	

Characteristic	N = 216 ¹
Full-time employed	21 (9.7%)
Part-time employed	9 (4.2%)
Self-employed	13 (6.0%)
Student	141 (65%)
Unemployed	30 (14%)
¹ n (%)	

Table 2 outlines the awareness and perceptions of mental health stigma among the 216 study participants. A significant majority (66%) had heard of the term "mental health stigma." Overwhelmingly, participants believed mental health issues are treated differently than physical health issues in their community (79%), with smaller proportions being unsure (14%) or disagreeing (6.9%). Perceptions of the strength of mental health stigma in Khartoum were high, with the majority rating it as either very strong (42%) or strong (38%). When asked about the general attitude towards those with mental health problems in Khartoum, most participants rated it as somewhat negative (35%), with a further 20% rating it as very negative. Only 10% and 14% felt the attitudes were somewhat supportive or very supportive, respectively. Regarding comfort in befriending someone with a mental health condition, a majority indicated that it would depend (53%), while 34% responded positively, and 13% responded negatively.

Table 2: Awareness and Perceptions of Mental Health Stigma of the study participants

Characteristic	N = 216 ¹
Have you ever heard of the term "mental health stigma"?	143 (66%)
Do you think mental health issues are treated differently compared to physical health issues in your community?	
No	15 (6.9%)
Not sure	30 (14%)
Yes	171 (79%)

Characteristic	N = 216 ¹
How strongly do you believe mental health stigma exists in Khartoum?	
Moderate	38 (18%)
None	1 (0.5%)
Strong	82 (38%)
Very strong	91 (42%)
Weak	4 (1.9%)
How would you rate the general attitude of people in Khartoum toward those with mental health problems?	
Neutral	44 (20%)
Somewhat negative	75 (35%)
Somewhat supportive	22 (10%)
Very negative	44 (20%)
Very supportive	31 (14%)
Would you feel comfortable being friends with someone with a mental health condition?	
It depends	114 (53%)
No	29 (13%)
Yes	73 (34%)
¹ n (%)	

Table 3 details the social, cultural, and educational influences on the study participants' perceptions of mental health. A large majority (69%) believed cultural beliefs are very important in shaping perceptions of mental health, with a further 21% considering them somewhat important. Over half (57%) believed that religion plays a role in shaping attitudes toward mental health in Khartoum, while 25% were unsure and 19% disagreed. The vast majority (82%) thought that some people in their community associate mental illness with supernatural causes, with 16%

stating this sometimes happens. Most participants felt their level of education significantly influences their perception of mental health stigma, with 58% saying "a lot" and 27% saying "a little". Finally, just over half (55%) reported that their school/university had discussed mental health, while 27% said no and 18% were unsure. Also illustrates the diverse sources that influence mental health perceptions among the 216 participants. Multiple sources were identified, with family, friends/peers, healthcare professionals, personal experiences, social media, and traditional media frequently mentioned in various combinations. Social media alone (12%) and Family alone (10%) were also commonly listed. When asked about the most trusted source for mental health information, the majority (64%) cited healthcare providers, followed by family (12%) and media (8.3%). Religious leaders were the least trusted source by a majority of participants (3.2%)

Table 3: Social, Cultural, and Educational Influences of the study participants

Characteristic	N = 216¹
How important do you think cultural beliefs are in shaping perceptions of mental health?	
Not important	14 (6.5%)
Not sure	8 (3.7%)
Somewhat important	45 (21%)
Very important	149 (69%)
Do you believe that religion plays a role in shaping attitudes toward mental health in Khartoum?	
No	40 (19%)
Not sure	53 (25%)
Yes	123 (57%)
Do you think some people in your community associate mental illness with	

Characteristic	N = 216 ¹
supernatural causes (e.g., evil eye, spirits)?	
No	3 (1.4%)
Sometimes	35 (16%)
Yes	178 (82%)
How much does your level of education influence your perception of mental health stigma?	
A little	59 (27%)
A lot	125 (58%)
Not at all	20 (9.3%)
Not sure	12 (5.6%)
Did your school/university ever discuss mental health?	
I don't remember	39 (18%)
No	58 (27%)
Yes	119 (55%)
¹ n (%)	

Table 4 presents the effects of mental health stigma on the study participants. The vast majority (87%) believed that mental health stigma affects young adults' willingness to seek help. A significant proportion of participants (62%) reported having experienced a mental health issue or felt the need for mental health support. Among those who reported needing support, 48.12% had avoided seeking it due to fear of judgment. The overwhelming majority perceived the effect of mental health stigma on social inclusion as either somewhat negative (47%) or strongly negative

(49%). Similarly, most participants felt that stigma impacts access to mental health care negatively, with 33% saying somewhat negative and 60% saying strongly negative. Finally, a strong majority (69%) believed that people with mental health conditions face discrimination in workplaces/schools.

Table 4: Effects of Mental Health Stigma of the study participants

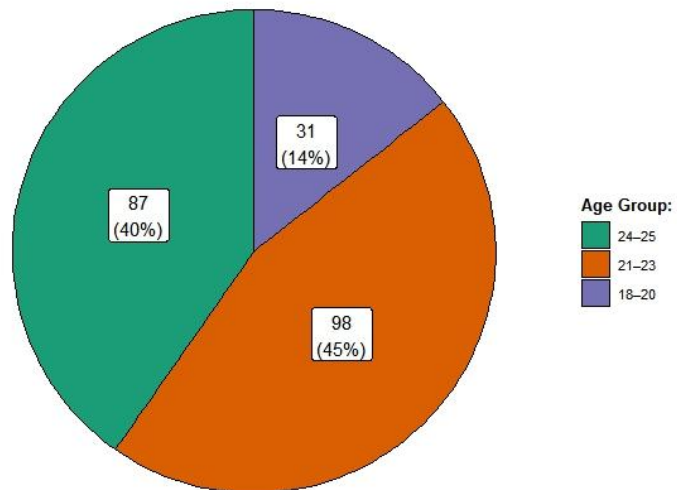
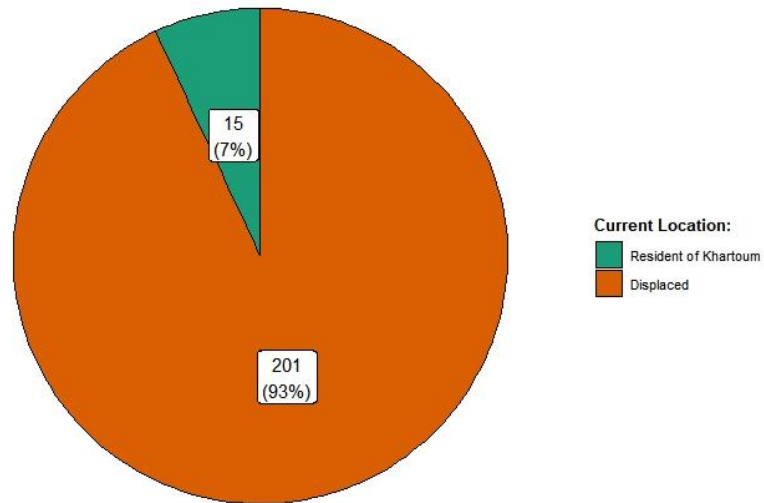
Characteristic	N = 216 ¹
Do you believe mental health stigma affects young adults' willingness to seek help?	
No	4 (1.9%)
Sometimes	24 (11%)
Yes	188 (87%)
Have you ever experienced a mental health issue or felt the need for mental health support	
No	66 (31%)
Prefer not to say	17 (7.9%)
Yes	133 (62%)
If answered "Yes"	
Have you ever avoided seeking mental health support due to fear of judgment	
	N= 133
No	60 (45.1%)
Prefer not to say	9 (6.7%)
Yes	64(48.1%)
How does mental health stigma affect social inclusion?	
No impact	5 (2.3%)

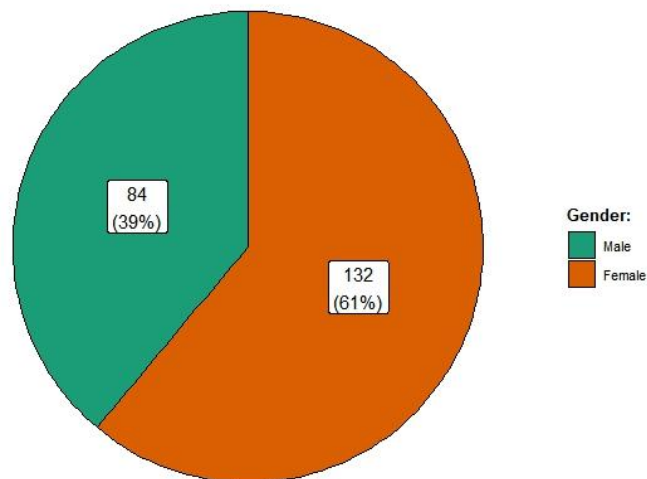
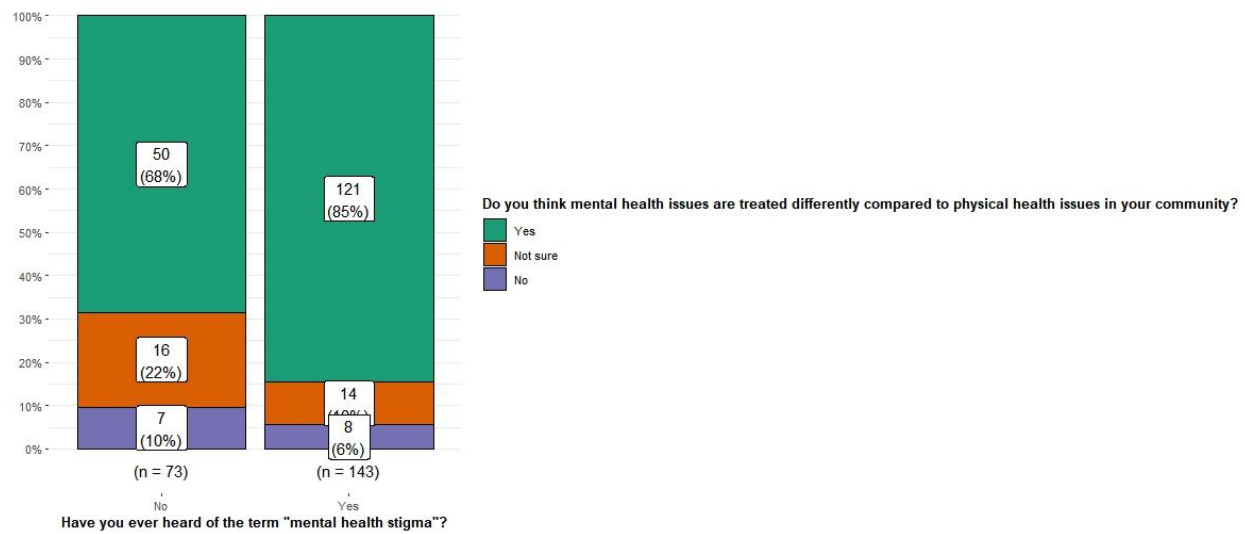
Characteristic	N = 216 ¹
Positive effect	5 (2.3%)
Somewhat negative	101 (47%)
Strongly negative	105 (49%)
How does stigma impact access to mental health care?	
No impact	8 (3.7%)
Positive	7 (3.2%)
Somewhat negative	72 (33%)
Strongly negative	129 (60%)
Do you think people with mental health conditions face discrimination in workplaces/schools?	
No	19 (8.8%)
Not sure	47 (22%)
Yes	150 (69%)
¹ n (%)	

Table 5 focuses on personal experiences and opinions related to mental health stigma. A strong majority (69%) thought that people with mental health conditions face discrimination in workplaces/schools. Fifteen percent (15%) of participants reported having personally experienced mental health stigma. Regarding fear of judgment if speaking about mental health struggles, 40% were not afraid, while 29% were somewhat afraid, and 11% were very afraid. For reducing mental health stigma in Khartoum, education campaigns were seen as the most effective solution by half of the participants (50%), followed by media awareness (29%), religious leader involvement (11%) and policy changes (10%).

Table 5: Personal Experiences and Opinions of the study participants

Characteristic	N = 216¹
Do you think people with mental health conditions face discrimination in workplaces/schools?	
No	19 (8.8%)
Not sure	47 (22%)
Yes	150 (69%)
Have you ever personally experienced mental health stigma?	
Yes	33 (15%)
How afraid are you of being judged if you spoke about mental health struggles?	
Neutral	45 (21%)
Not afraid	86 (40%)
Somewhat afraid	62 (29%)
Very afraid	23 (11%)
What do you think would reduce mental health stigma in Khartoum?	
Education campaigns	108 (50%)
Media awareness	62 (29%)
Policy changes	22 (10%)
Religious leader involvement	24 (11%)
¹ n (%)	





Open-Ended Questions

This section analyzes participants' personal responses to open-ended questions about mental health stigma. It offers insight into their understanding and perceptions beyond multiple-choice answers.

Table 5 Respondents' Personal Definitions of Mental Health Stigma, 145 individuals (67.1%) provided a correct or appropriate definition, demonstrating a good level of awareness. Meanwhile, 31 participants (14.4%) responded with "I don't know," indicating uncertainty or lack of knowledge on the topic. Additionally, 40 respondents (18.5%) gave unrelated or incorrect

answers that did not pertain to mental health stigma, reflecting a gap in understanding among a significant portion of the sample.

Characteristic	N=216 ¹
Correctly Identified Definition	145 (67.1)
Uncertain responses	31 (14.4)
Irrelevant/Unrelated Responses	40 (18.5)

Table 6 Focuses on the individual who experienced stigma. 183 participants (84.7%) reported having no experience with stigma. Meanwhile, 33 participants (15.2%) indicated having experienced stigma. Among those who reported experiencing stigma, the majority, 16 participants (48.4%), cited peers such as friends or classmates as the source. Additionally, 11 participants (33.3%) identified family members as the source of stigma, and 6 participants (18.8%) attributed the stigma to colleagues or the workplace environment.

Characteristic	N=216 ¹
No Experience with stigma	183 (84.7)
Experienced stigma :	33 (15.2)
- Family Members	11 (33.3)
- Peers (e.g., Friends, Classmates)	16 (48.4)
- colleagues/workplace Environment	6 (18.8)

Chapter VI

Discussion, Conclusion and Recommendations

4.1 DISCUSSION

This study assessed the perception of mental health stigma among young adults aged 18–25 in Khartoum, Sudan, with particular emphasis on displaced populations. The findings revealed a high level of awareness of mental health stigma and a widespread perception of its negative impact on help-seeking behavior, social inclusion, and access to care. This aligns with international literature and provides evidence-based insight into a stigmatized and under-researched topic in the Sudanese context.

A major finding was that 66% of participants had heard of the term “mental health stigma,” and 79% agreed that mental illness is treated differently than physical illness in their communities. These figures suggest a substantial baseline awareness, likely influenced by high levels of education (94% had university/college education), and widespread exposure to social media and informal peer discussions. However, the fact that only 34% said they would comfortably befriend someone with a mental illness while 53% said "it depends" reflects persistent ambivalence and hesitation, revealing that knowledge does not always equate to acceptance.

Stigma perception was especially strong, with 42% perceiving it as “very strong” and 38% as “strong” in Khartoum. This high perceived stigma corresponds with prior studies in low- and middle-income countries, where mental illness is frequently linked to shame, weakness, or supernatural causes. In our study, 82% of participants agreed that mental illness is sometimes linked to beliefs in supernatural forces (e.g., spirits or the evil eye). This cultural attribution directly impacts how individuals and their families react to mental illness, often delaying or avoiding formal psychiatric consultation and instead seeking traditional or religious remedies.

The effect of stigma on help-seeking was significant. While 62% of participants reported experiencing a mental health issue or the need for support, only a portion sought help, 48.1% explicitly avoided doing so due to fear of judgment. This is consistent with global findings, where

internalized stigma, fear of social exclusion, and lack of mental health literacy often prevent individuals from pursuing care even when in distress. The role of stigma in obstructing timely mental health intervention is particularly concerning in displaced populations, who are more likely to experience trauma, instability, and reduced access to formal health services.

Participants also highlighted the adverse effects of stigma on social integration and healthcare accessibility: 49% reported stigma strongly reduces social inclusion, and 60% said it strongly hinders access to care. These responses reinforce the cyclical nature of stigma, where discrimination and social avoidance fuel silence, and silence reinforces stigma. Furthermore, 69% of respondents affirmed that stigma leads to discrimination in educational or professional settings, perpetuating socioeconomic exclusion.

Sociocultural influences were also prominent. Cultural beliefs were rated “very important” by 69% in shaping mental health perceptions, while 57% agreed religion plays a role. This dual influence of culture and religion may contribute both to supportive and stigmatizing frameworks. While religious involvement can provide community and coping, it may also propagate fatalistic or punitive interpretations of mental illness. Interestingly, when asked to identify trusted sources for mental health information, 64% of participants cited healthcare professionals, while only 3.2% chose religious leaders, indicating some mistrust or perceived inadequacy of religious figures in this domain.

The role of education was evident: 58% said their education level greatly shaped their perception of mental health, and 55% said their academic institution had addressed mental health topics. Despite this, a large segment still expressed fear of judgment: 29% were somewhat afraid, and 11% were very afraid of discussing mental health issues.

This suggests educational exposure may not fully address emotional or cultural barriers to openness.

The results also identified the most preferred interventions to reduce stigma. Education campaigns were endorsed by 50% of participants, followed by media awareness (29%). Religious leader involvement and policy change were selected by fewer participants (11% and 10%, respectively), possibly indicating perceived inefficacy or lack of relevance. The strong preference for media and educational interventions highlights a growing reliance on modern communication and formal learning over traditional systems.

The gender distribution (61% female) may have influenced some results, as women in several studies are more likely to report and empathize with mental health issues. Additionally, the dominance of displaced participants (93%) reflects the disproportionate psychological burden faced by this vulnerable group. Displacement often involves trauma, disconnection from social support, and economic hardship, all of which exacerbate mental distress while simultaneously intensifying the effects of stigma.

Finally, The influence of family and peer networks is crucial in both the experience and perception of mental health stigma. Among the 15.2% of participants who reported encountering stigma, peer networks (48.4%) and family members (33.3%) were the primary sources, underscoring the significant role these groups play in shaping stigma. This aligns with findings that family (10%) and social media (12%) are key sources influencing perception. Given that stigma is often encountered in social and familial settings, with a notable presence in professional environments, interventions should focus on equipping families with psycho-education. Additionally, enhancing the public image of mental health professionals could be vital, as healthcare providers hold a high level of trust. Harnessing the power of peer and family networks through targeted campaigns can help reduce stigma and improve mental health outcomes.

4.2 Limitations

this study was the smaller-than-expected sample size. While the study aimed for 384 participants, only **216 participated**. Despite considerable efforts in distributing the questionnaire to a diverse group, this reduction in participants may limit the generalization of the findings and could affect

the statistical power of the analysis. However, 216 participants still provide a substantial sample size that offers meaningful insights into the topic. This should be taken into account when interpreting the results.

4.3 Conclusion

This study conclude the significant presence of mental health stigma among young adults in Khartoum, Sudan, with a notable proportion of displaced participants.

While awareness of mental health issues is relatively high due to education and exposure to digital media, stigma remains deeply rooted in cultural and religious beliefs, leading to negative perceptions, social exclusion, and reluctance to seek help. Despite these challenges, the findings suggest an opportunity for progress.

Participants showed strong support for educational interventions and trusted healthcare professionals as reliable sources of mental health information. The pervasive stigma, exacerbated by displacement, calls for culturally sensitive, multi-level strategies to reduce mental health discrimination and improve access to care.

Addressing this issue through public awareness campaigns, education, and policy reforms could foster a more inclusive environment for mental health support in Khartoum.

4.4 RECOMMENDATIONS

Based on the findings of this study on the perception of mental health stigma among young adults in Khartoum, Sudan (2025), the following recommendations are proposed:

1. Mental Health Education Campaigns

Implement nationwide awareness programs targeting youth through schools, universities, and community centers about mental health stigma (18.5% of the participants provided irrelevant answers while 14.4 stated they didn't know the definition).

Design culturally appropriate, evidence-based campaigns addressing misconceptions, especially the supernatural beliefs (noted in 82% of participants).

Use simplified, relatable language and personal testimonies to reduce fear and increase empathy.

2. Curriculum Integration

Integrate mental health education formally into secondary school and university curricula and ensure coverage of stigma, early symptoms, coping strategies, and when/how to seek help.

Equip teachers and academic counselors with training to provide basic mental health support and referrals.

3. Capacity Building for Healthcare Providers

Train front-line healthcare workers in stigma-sensitive communication and youth-friendly mental health services.

Develop referral networks between general practitioners and specialized mental health professionals to improve access.

4. Utilize Trusted Information Channels

Leverage healthcare professionals (trusted by 64% of respondents) in community engagement, public talks, and health days.

Partner with media platforms, including social media, to disseminate mental health information—targeting both youth and families.

5. Targeted Interventions for Displaced Populations

Develop mobile mental health clinics or outreach programs for internally displaced communities, recognizing their unique vulnerabilities.

Provide psychosocial support programs.

6. Engage Families and Community Leaders

Conduct family-centered psycho-education sessions to address stigma at the household level.

While only 3.2% of respondents trusted religious leaders for mental health advice, selective training of open-minded religious figures may help shift narratives in faith-based settings.

7. Policy Reform and Institutional Commitment

Advocate for national mental health policies that include stigma reduction as a key goal.

Mandate anti-discrimination protections in schools and workplaces to protect individuals with mental health conditions.

8. Create Safe Spaces for Youth Expression

Establish peer support groups in academic institutions and community centers.

Encourage storytelling, art, and digital platforms as tools for young people to discuss mental health safely.

9. Further Research

Conduct longitudinal studies to monitor changes in stigma perception post-intervention.

Explore gender-based differences and the role of social media in shaping stigma among youth.

These recommendations aim to address the multi-layered drivers of mental health stigma identified in the study: educational, cultural, structural, and interpersonal. A comprehensive, inclusive, and community engaged approach is essential for reducing stigma and improving mental health outcomes for young adults in Sudan.

REFERENCES

1. World Health Organisation. World mental health report: Transforming mental health for all. World Health Organization [Internet]. 2022 [cited 2025 May 8];28. Available from: <https://www.who.int/publications/i/item/9789240049338>
2. Patel V, Saxena S, Lund C, Thornicroft G, Baingana F, Bolton P, et al. The Lancet Commission on global mental health and sustainable development. The Lancet [Internet]. 2018 Oct 27 [cited 2025 May 8];392(10157):1553–98. Available from: <https://pubmed.ncbi.nlm.nih.gov/30314863/>
3. Charlson F, van Ommeren M, Flaxman A, Cornett J, Whiteford H, Saxena S. New WHO prevalence estimates of mental disorders in conflict settings: a systematic review and meta-analysis. The Lancet [Internet]. 2019 Jul 20 [cited 2025 May 8];394(10194):240–8. Available from: <https://pubmed.ncbi.nlm.nih.gov/31200992/>
4. Gearing RE, MacKenzie MJ, Ibrahim RW, Brewer KB, Batayneh JS, Schwalbe CSJ. Stigma and Mental Health Treatment of Adolescents with Depression in Jordan. Community Ment Health J [Internet]. 2015 Jan 1 [cited 2025 May 8];51(1):111–7. Available from: <https://pubmed.ncbi.nlm.nih.gov/25027014/>
5. Document - UNHCR - Sudan Regional Refugee Response 2024 - June 2024 [Internet]. [cited 2025 May 8]. Available from: <https://data.unhcr.org/en/documents/details/109664>
6. Mental Health Awareness and Stigma in Nigeria [Internet]. [cited 2025 May 8]. Available from: <https://inquirer.ng/2024/11/18/mental-health-awareness-and-stigma-in-nigeria/>
7. Ali AMA, Adam OAM, Salem SEM, Hamad SHI, Ahmed NEM, Ali HMA, et al. Prevalence of physical and mental health problems among internally displaced persons in White Nile state, Sudan 2023: a cross sectional study. BMC Public Health [Internet]. 2024 Dec 1 [cited 2025 May 8];24(1):1–15. Available from: <https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-024-20972-1>
8. Mental Health in Sudan - The Borgen Project [Internet]. [cited 2025 May 8]. Available from: <https://borgenproject.org/mental-health-in-sudan/>
9. Hassan AA, Idrees MB, Al-Nafeesah A, Alharbi HY, AlEed A, Adam I. Depression and Anxiety Among Adolescents in Northern Sudan: A School-Based Cross-Sectional Study. Medicina (B Aires) [Internet]. 2025 Feb 1 [cited 2025 May 8];61(2):228. Available from: <https://pmc.ncbi.nlm.nih.gov/articles/PMC11857361/>
10. Klik KA, Williams SL, Reynolds KJ. Toward understanding mental illness stigma and help-seeking: A social identity perspective. Soc Sci Med [Internet]. 2019 Feb 1 [cited 2025 May 8];222:35–43. Available from: <https://pubmed.ncbi.nlm.nih.gov/30599434/>
11. Fekih-Romdhane F, Daher-Nashif S, Stambouli M, Alhuwailah A, Helmy M, Shuwiekh HAM, et al. Mental illness stigma as a moderator in the relationship between religiosity and help-seeking attitudes among Muslims from 16 Arab countries. BMC Public Health [Internet]. 2023 Dec 1 [cited 2025 May 8];23(1):1–10. Available from: <https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-023-16622-7>
12. CDC. About Mental Health | Mental Health | CDC [Internet]. 2023 [cited 2025 May 8]. Available from: <https://www.cdc.gov/mental-health/about/index.html>

13. Mental Health By the Numbers | NAMI [Internet]. [cited 2025 May 8]. Available from: <https://www.nami.org/about-mental-illness/mental-health-by-the-numbers/>
14. Corrigan P. How stigma interferes with mental health care. *American Psychologist* [Internet]. 2004 Oct [cited 2025 May 8];59(7):614–25. Available from: <https://pubmed.ncbi.nlm.nih.gov/15491256/>
15. Link BG, Struening EL, Neese-Todd S, Asmussen S, Phelan JC. The consequences of stigma for the self-esteem of people with mental illnesses. *Psychiatric Services*. 2001;52(12):1621–6.
16. Mojtabai R, Olfson M, Sampson NA, Jin R, Druss B, Wang PS, et al. Barriers to mental health treatment: Results from the National Comorbidity Survey Replication. *Psychol Med* [Internet]. 2011 Aug [cited 2025 May 8];41(8):1751–61. Available from: <https://pubmed.ncbi.nlm.nih.gov/21134315/>
17. Gureje O, Lasebikan VO, Kola L, Makanjuola VA. Lifetime and 12-month prevalence of mental disorders in the Nigerian Survey of Mental Health and Well-Being. *British Journal of Psychiatry* [Internet]. 2006 May [cited 2025 May 8];188(MAY):465–71. Available from: <https://pubmed.ncbi.nlm.nih.gov/16648534/>
18. Clement S, Schauman O, Graham T, Maggioni F, Evans-Lacko S, Bezborodovs N, et al. What is the impact of mental health-related stigma on help-seeking? A systematic review of quantitative and qualitative studies. *Psychol Med* [Internet]. 2015 Jan 12 [cited 2025 May 8];45(1):11–27. Available from: <https://pubmed.ncbi.nlm.nih.gov/24569086/>
19. Fardouly J, Diedrichs PC, Vartanian LR, Halliwell E. Social comparisons on social media: THE impact of Facebook on young women’s body image concerns and mood. *Body Image*. 2015 Mar 1;13:38–45.
20. Corrigan PW, Druss BG, Perlick DA. The impact of mental illness stigma on seeking and participating in mental health care. *Psychological Science in the Public Interest, Supplement* [Internet]. 2014 Jan 1 [cited 2025 May 8];15(2):37–70. Available from: <https://pubmed.ncbi.nlm.nih.gov/26171956/>
21. Arnett JJ. Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*. 2000;55(5):469–80.
22. Awad MSA, Alrahim MMAA, Awadelkareem RAM, Khalafallah Elhaj MA, Abdelrahman Ibrahim MM. Assessment of displaced Sudanese school-age children’s mental health at Ad-Damar, River Nile, Sudan, 2024: a descriptive cross-sectional study. *BMC Public Health* [Internet]. 2024 Dec 1 [cited 2025 May 8];24(1):1–9. Available from: <https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-024-21043-1>
23. Alqasir A, Ohtsuka K. The Impact of Religio-Cultural Beliefs and Superstitions in Shaping the Understanding of Mental Disorders and Mental Health Treatment among Arab Muslims. *J Spiritual Ment Health* [Internet]. 2024 Jul 2 [cited 2025 May 8];26(3):279–302. Available from: <https://www.tandfonline.com/doi/pdf/10.1080/19349637.2023.2224778>
24. Altamih RAA, Elmahi OKO. Social interactions within the Sudanese healthcare system: traditional healers and psychiatrists. *BJPsych Int* [Internet]. 2023 May [cited 2025 May 8];20(2):29. Available from: <https://pmc.ncbi.nlm.nih.gov/articles/PMC10895484/>

25. Ali SH, Agyapong VIO. Barriers to mental health service utilisation in Sudan - perspectives of carers and psychiatrists. *BMC Health Serv Res* [Internet]. 2016 Jan 27 [cited 2025 May 8];16(1):31. Available from: <https://pmc.ncbi.nlm.nih.gov/articles/PMC4729143/>
26. Sorketti EA, Zuraida NZ, Habil MH. The traditional belief system in relation to mental health and psychiatric services in Sudan. *International Psychiatry* [Internet]. 2012 Feb [cited 2025 May 8];9(1):18–9. Available from: <https://www.cambridge.org/core/journals/international-psychiatry/article/traditional-belief-system-in-relation-to-mental-health-and-psychiatric-services-in-sudan/B2F91E01FA46B082C80EED6D164BA987>
27. Osman AHM, Bakhiet A, Elmusharaf S, Omer A, Abdelrahman A. Sudan's mental health service: challenges and future horizons. *BJPsych Int* [Internet]. 2020 Feb [cited 2025 May 8];17(1):17. Available from: <https://pmc.ncbi.nlm.nih.gov/articles/PMC8277530/>
28. Bashir MBA, Mohamed SOA, Nkfusai CN, Bede F, Oladimeji O, Tsoka-Gwegweni JM, et al. Assessment of minor psychiatric morbidity, stressors, and barriers of seeking help among medical students at the university of khartoum, Khartoum, Sudan. *Pan African Medical Journal* [Internet]. 2020 [cited 2025 May 8];35. Available from: <https://pubmed.ncbi.nlm.nih.gov/32537090/>
29. Al Omari O, Valsaraj BP, Khatatbeh M, Al-Jubouri MB, Emam M, Al Hashmi I, et al. Self and public stigma towards mental illnesses and its predictors among university students in 11 Arabic-speaking countries: A multi-site study. *Int J Ment Health Nurs* [Internet]. 2023 Dec 1 [cited 2025 May 8];32(6):1745–55. Available from: [/doi/pdf/10.1111/inm.13206](https://doi.org/10.1111/inm.13206)
30. Alemi Q, Mefom E, Montgomery S, Marius Koga P, Stempel C, F Reimann JO. Acculturative stress, stigma, and mental health challenges: emic perspectives from Somali young adults in San Diego county's "Little Mogadishu." 2021 [cited 2025 May 8]; Available from: <https://doi.org/10.1080/13557858.2021.1910930>
31. Sanhori Z, Eide AH, Ayazi T, Mdala I, Lien L. Change in Mental Health Stigma After a Brief Intervention Among Internally Displaced Persons in Central Sudan. *Community Ment Health J* [Internet]. [cited 2025 May 8];0. Available from: <https://doi.org/10.1007/s10597-019-00375-y>
32. Fekih-Romdhane F, Jahrami H, Stambouli M, Alhuwailah A, Helmy M, Shuwiekh HAM, et al. Cross-cultural comparison of mental illness stigma and help-seeking attitudes: a multinational population-based study from 16 Arab countries and 10,036 individuals. *Soc Psychiatry Psychiatr Epidemiol* [Internet]. 2023 Apr 1 [cited 2025 May 8];58(4):641–56. Available from: <https://link.springer.com/article/10.1007/s00127-022-02403-x>
33. Swed S, Sohib S, Hassan NAIF, Almoshantaf MB, Alkadi SMS, AbdelQadir YH, et al. Stigmatizing attitudes towards depression among university students in Syria. *PLoS One* [Internet]. 2022 Sep 1 [cited 2025 May 8];17(9):e0273483. Available from: <https://pmc.ncbi.nlm.nih.gov/articles/PMC9477282/>
34. Oexle N, Waldmann T, Staiger T, Xu Z, Rüsche N. Mental illness stigma and suicidality: the role of public and individual stigma. *Epidemiol Psychiatr Sci* [Internet]. 2016 Apr 1 [cited 2025 May 8];27(2):169. Available from: <https://pmc.ncbi.nlm.nih.gov/articles/PMC6998948/>

ANNEXES

The Questionnaire Of The study Link