Title: "You cannot sell what you have not tasted" Relapse among Alcohol Use Disorder Patients In Sub-Saharan Africa: Case Study of Post War Conflict Gulu District, Northern Uganda – A Health Care Worker Perspective

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Relapse among Alcohol Use Disorders - provider perspective

Abstract

Introduction: Relapse among individuals with Alcohol Use Disorders (AUD) remains a major public health concern, in Sub-Saharan Africa and places an additional strain on already overstretched healthcare systems in these resource-limited settings. Gulu District, in Uganda has a history of conflict and displacement, which contributed to a high prevalence of Alcohol use as a coping mechanism for daily challenges of life. Little is known about the triggers of relapse and so we assessed the potential causes for relapse among AUD patients in Gulu District, from a Health Care Worker Perspective.

Methods: We conducted in-depth qualitative research among Health Care Workers working with assessment, counseling, case management, therapy, and healthcare of AUD patients at the main regional referral hospital in Gulu. We conducted semi structured interviews to explore triggers and contributing factors to relapse among their patients. We analyzed the information generated using thematic content analysis to identify common themes and patterns related to factors contributing to relapse.

Results: The results showed a high prevalence of relapse among AUD patients and health workers placed it at an average of 80% of them returning to the facility within one year post treatment. Four themes were generated as the major challenges and barriers affecting effectiveness of AUD treatment. Theme 1 Inadequate resources for provision of treatment, Theme 2; Sub-optimal treatment approaches and models, Theme 3; Patient engagement and support at facility and community level and theme 4; Priority actions for relapse prevention. Recommendations included human resource strengthening, allocation of more resources for AUD treatment, establishment of community-based initiatives and programs and establishment of dedicated additions units

Conclusion: The relapse rates for AUD were high and results highlight critical challenges in AUD treatment in resource limited settings and provide actionable recommendations for improving services, enhancing community engagement, and reducing relapse rates among patients with AUDs.

Introduction:

Globally, substance use disorders (SUDs) have become a major public health concern, rising sharply in prevalence, and strongly contributing to Disability-Adjusted Life Years (DALYs)[1–3]. Apart from the estimated disease burden, SUDs further contribute to morbidity and mortality through their association with various medical conditions, including infectious diseases such as hepatitis B, hepatitis C, HIV, and tuberculosis and non-communicable diseases such as cancers, chronic pulmonary issues, cardiovascular diseases, and gastrointestinal disorders[4]. Alcohol Use Disorders (AUDs) are the major contributors to the burden posed by SUDs.

According to the Global Status Report on Alcohol, the harmful use of alcohol was responsible for the death of almost 3 million people, or contributing to about 5.3% of all deaths. Alcohol consumption rates in Sub saharan Africa (SSA) are among the highest globally, with an estimated per capita consumption of 9.4 liters of pure alcohol per year[4]. The prevalence of AUDs varies across different countries within Africa, with studies reporting about 1.1% in the region[5] and yet between different countries in SSA it ranged from 0.1% to 33.2%[6]. However, due to underreporting and a high rate of unrecorded alcohol consumption, the true burden of AUD is actually underestimated[5].

Uganda grapples with high per capita alcohol consumption, underage alcohol use, and episodes of heavy drinking. The per capita alcohol consumption in Uganda is 12.21 liters per year, making it the African country with the highest alcohol consumption[7]. The prevalence of AUDs in Uganda is estimated at about 9.8% of the adult population[8] and Northern Uganda shoulders a disproportionate burden of these AUDs with a reported prevalence of about 46% in males and 1 % in females[9]. Northern Uganda, is a unique case study due to the direct and indirect impacts of a two-decade civil war between the Lord's Resistance Army and the Ugandan government, which significantly influenced patterns of alcohol use and further exacerbated the AUDs issues [8–10].

The situation is further compounded by the unprepared healthcare system which is ill-equipped to address the needs of individuals with substance use disorders. Limited access to quality healthcare, coupled with stigma surrounding AUDs hinders the effectiveness of interventions[11]. Additionally, those affected are often face social exclusion, discrimination, stigma, and isolation, further hindering their ability to seek assistance. Consequently, AUDs perpetuates a destructive cycle that places significant burdens on the individual, families and communities[12].

Despite the prevalence of AUD in this region, there is a paucity of research exploring the specific triggers of relapse among affected individuals following treatment. Understanding the factors linked to relapse is essential for designing effective strategies to prevent relapse.

However, there is ambiguity in its definition as it varies across the recovery pathways, in variuos studies and treatment settings and is subjective. This poses inconsistencies in how relapse is conceptualized and measured[16]. The definition of relapse varies widely from any deviation from abstinence from alcohol to consequences of alcohol consumption such as rehospitalization for AUDs or physical and social consequences[17].

For this study a conservative defiition of relapse was used. Relapse was defined as the need for rehospitalization at the Mental Health Unit within one year following the initial treatment due to a recurrence of symptoms or AUDs problems. This definition emphasized the clinical severity and recurrence of symptoms necessitating inpatient care or treatment interventions within one year after an initial period of stabilization or recovery. We aimed to fill the knowledge gap on exploratory factors contributing to relapse among AUD patients in Northern Uganda from the perspective of healthcare workers.

Methods:

Study Design

This study utilized a qualitative research design employing an exploratory and descriptive research design that involved semi-structured interviews with health workers directly involved in the treatment and care of individuals with AUD in Gulu District. Qualitative methods were chosen to gain a deeper understanding of relapse triggers, challenges, and healthcare worker perspectives in this unique setting.

Study Setting

The research was conducted at the Gulu Regional referral Mental Health Unit in Gulu District, which is situated within the Acholi Sub-region of Northern Uganda. The Acholi Sub-region encompasses several districts, including Gulu, Amuru, Nwoya, and Pader, among others. Gulu District, the focus of this study, is the largest and most populous district in the Acholi Sub-region. This region has a complex and turbulent history, marked by decades of armed conflict and insurgency. It was one of the regions most affected by the Lord's Resistance Army (LRA) rebellion, which ravaged Northern Uganda for over two decades. The conflict resulted in widespread displacement, loss of lives, and profound socio-economic disruptions, leaving a lasting impact on the population.

The Mental Health Unit is housed within Gulu Regional Referral Hospital, which is the major referral healthcare facility in this region. The patient population served by the Unit reflects the complex mental health needs of the region. Many patients present with mental health conditions exacerbated by experiences of conflict, displacement, poverty, and social marginalization. The unit provides care to individuals across the lifespan, from children to

elderly individuals, addressing both acute and chronic mental health challenges inclusive of AUDs.

Sampling and Participants

A purposive sampling technique was employed to recruit healthcare workers directly involved in the treatment and care of patients with AUD at the Mental Health Unit in Gulu Regional referral hospital. Participants included clinical psychologists, psychiatric nurses, counselors, and community health workers with diverse experiences and perspectives related to AUD treatment.

Data Collection

Semi-structured interviews were conducted to explore health workers' experiences and perceptions regarding relapse among AUD patients. An interview guide was developed based on the study objectives and relevant literature review. The guide included open-ended questions covering topics such as perceptions of relapse triggers, challenges in relapse prevention, healthcare system factors influencing relapse outcomes, and recommendations for improving relapse prevention strategies. Although the interview guide was present, the questions were not rigid but rather guided how we interacted with participants. Interviews were audio-recorded and transcribed verbatim for analysis. A total of 6 face-to-face semi-structured interviews were conducted for not more than 60 minutes each.

Data Analysis

We conducted thematic content analysis to identify key themes and patterns in health workers' narratives related to relapse among AUD patients.

The audio recordings of the interviews were transcribed verbatim to produce a written transcript by an independent transcriber prior to verification and editing for accuracy. Data were coded manually and organized into themes related to relapse among AUD patients, as perceived by healthcare workers.

Ethical Considerations

Ethical approval was obtained from Makerere University School of Public Health Research Ethics Committee (MakSPH-REC) as part of the AQUALEFF study prior to data collection. Additionally, administrative clearance to conduct research at Gulu Regional referral Hospital was obtained. Informed consent was obtained from all participants, emphasizing voluntary participation, confidentiality, and anonymity throughout the study. Ethical guidelines were strictly adhered to during all stages of the research.

Results:

Through in-depth coding and analysis of the interview data, several prominent themes emerged that shed light on the factors contributing to relapse among AUD patients from the Health worker perspective. We conducted a total of 6 interviews with 2 clinical psychologists, 1 psychiatric nurses, 1 counselor, and 2 community health workers. The participants reported a high prevalence of relapse among AUD patients in Gulu District and approximated it to about 80% of the patients experiencing relapse within 1 year post-treatment.

Themes and sub-themes from qualitative interviews

Four key themes emerged that described the factors contributing to relapse among AUD patients, from the perspective of healthcare workers: (i) Inadequate resources for provision of treatment, (ii) Sub-optimal treatment approaches and models, (iii) Patient risk factors and support at facility and community level, and (iv) Priority actions for relapse prevention. Results of the themes and sub-themes are presented graphically in Figure. 1.

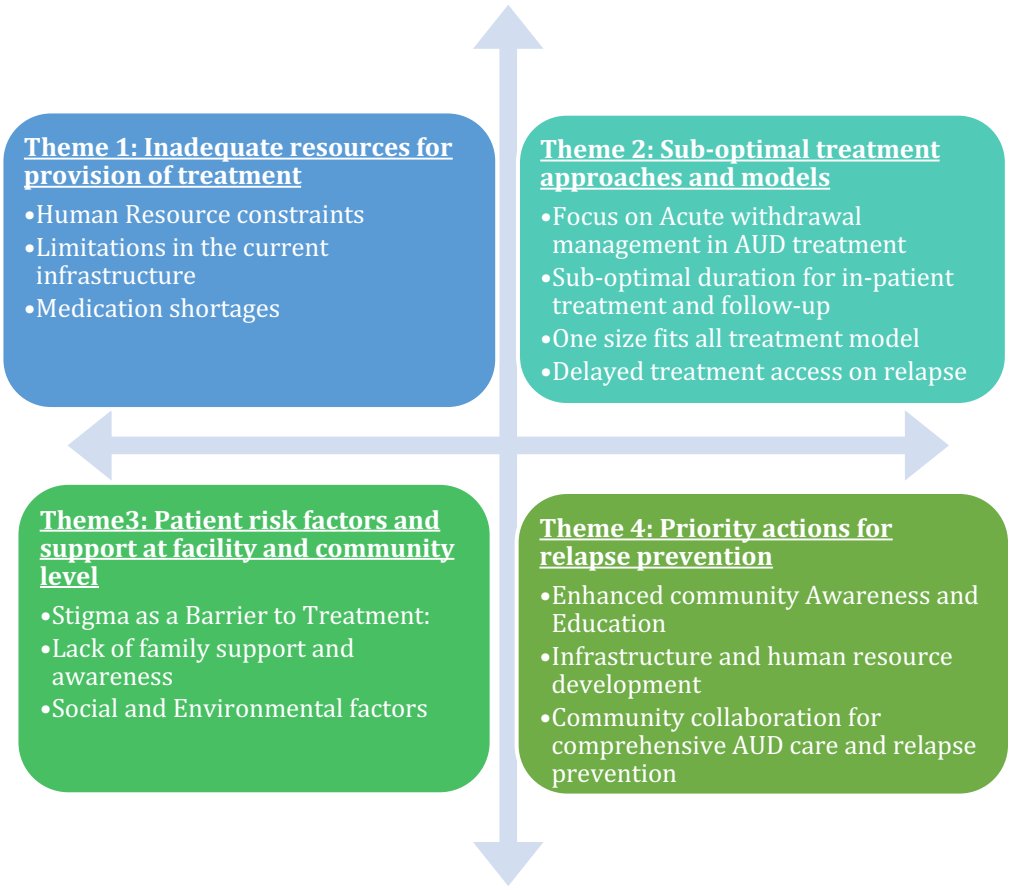

Figure 1: Major themes and sub-themes

Theme 1: Inadequate resources for provision of treatment

Human resource constraints

All the participants highlighted the challenge of limited human resources for the services rendered at the facility. The unit has a total of 06 staff that offer care to all patients accessing treatment from the Acholi sub region. Additionally, they highlighted that the facility lacks dedicated counselors or psychologists, necessitating clinical teams to fulfill these roles alongside their primary responsibilities. This dual role lead to increased workload and potential compromises in the quality of care provided to patients with AUD. Without specialized professionals, such as addiction counselors or occupational therapists, the unit struggles to offer comprehensive and evidence-based therapies tailored to the unique needs of individuals with AUDs. Further more the staff lacked the required skills for treatment of AUDs as they expressed lack of sufficient specialized knowledge in the field of AUD treatment.

> *"Human Resource is one of major challenges we face here at the unit, for example, there is no attached counsellor or psychologist at the unit. So as the clinical team we try to fill up these gaps but haphazardly. We have limited skills in the delivery of some of these services because we mainly have clinical knowledge and lack that technical knowledge specialized for addictions management. Also they do not have materials for other therapies like occupational therapy, and other things for other therapies."*

> *"Some of the staff are not as committed, especially during at night. They feel overwhelmed with the workload"*

Health System Set-Up for AUD Management

Participants highlighted that in Uganda, the health system's structure includes Village Health Teams (VHTs), Health Centre II, III, and IV levels, and general hospitals. However, there are significant gaps in the training and capacity of health workers to manage AUDs effectively. Strengthening this system and building capacity could greatly improve access to treatment for patients, particularly in rural areas where transportation is a major challenge.

> *"There are almost no health workers well trained to manage AUD at various levels of the health system and though these places a nearer to the people they cannot access AUD services there and this makes it hard for a patient to recover as they can not come back for review at the regional referral hospital because transport is a challenge. If this system was strengthened and capacity built it would help the patients get treatment from nearby areas to improve access."*

" The health system levels from general hospital right to Health Centre II are not helping. People by-pass all those levels and come to the regional referral and yet the distance and transport costs are very high, they come from far villages."

Additionally, the stage at which the patients sought treatment significantly influenced the likelihood of relapse. Patient who often seek treatment at advanced stages of addiction often struggled to maintain sobriety and were more likely to relapse

"By the time some of these patients come to the facility, they are really doing badly. Some are even brought in by good Samaritans and for some the families have already taken in enough of the addiction that they only drop them here at the facility."

Limitations of the current physical mental health unit infrastructure

The participants highlighted a limitation of the current infrastructure for the AUD unit that presents challenges in delivering effective care. The inadequate physical space and layout within the facility impedes the delivery of comprehensive services. Limited space restricts the ability to separate patients with AUD from those with other mental health conditions, thus compromising tailored treatment approaches. Additionally, insufficient facilities for recreational activities or therapeutic sessions hinder holistic patient care and recovery programs.

There is also a lack of physical boundaries around the unit which allows patients to freely move in and out of the unit, presenting significant challenges for treatment and patient management. Without proper security measures, patients have unrestricted access to external environments where they may encounter triggers or have opportunities to obtain alcohol or other substances, undermining the treatment efforts within the unit. Patients' ability to leave the unit at will can disrupt treatment schedules, compromise therapeutic interventions, and increase the risk of relapse.

"Our unit here is an open space and the patients can come in and go out whenever they want. Some of them actually sneak in these substances and so we are trying to do detoxing, but the person is taking in more of the substances. I remember there was a patient with whom the peers smuggled in weed for him. This facility needs to be kept fenced so that our efforts are not frustrated"

"space is a major issue here, some of the treatment models we would implement require space but because of lack of space we even end up mixing patients with mental health issues together with those that have addictions"

Medication Shortages

The unit faces challenges with drug stockouts, limiting treatment options. Because this happens sometimes, some clients may leave the facility without receiving adequate treatment, believing they are not benefiting from the care provided due to the constraints imposed by these shortages.

> *"There are frequent medication shortages that prevent provision of optimal treatment and the reliance on first-line medications that may not align with best practices. These clients get tired because they feel like they are not being helped and yet at times our hands are tied."*

Theme 2: Sub-optimal treatment approaches and models

The theme of treatment approaches and effectiveness provided glimpse into the shortcomings of the current interventions and how the health workers thought it contributed to the high relapse rates among individuals with AUD at the unit.

Focus on Acute withdrawal Management in AUD Treatment

The primary focus of treatment for AUD patients at this unit revolved around managing acute withdrawal symptoms associated with alcohol cessation, stabilizing patients during detoxification and addressing acute medical complications that arise from alcohol withdrawal. This intervention typically involves medical supervision to ensure safety during detoxification, including monitoring vital signs and administering medications to alleviate withdrawal discomfort. While essential for patient safety, this narrow focus on symptom management neglected addressing the underlying psychological, social, and behavioral factors contributing to AUDs and recovery journey. The limited scope of interventions does not address underlying issues, develop coping strategies, and stabilize individuals before transitioning back to the community. This can increase the likelihood of relapse post-discharge.

> *"There is no clear model of management of the AUD patients and we mainly treat these patients symptomatically. The model we are currently using at the unit is the general one for all other mental health patients"*

The symptomatic treatment approach neglects the underlying factors contributing to AUD and fails to provide comprehensive care tailored to the specific needs of individuals. This fragmented approach contributes to higher rates of relapse as it does not address the root causes and psychological aspects associated with AUD.

One size fits all treatment model

Tailoring treatment to individual needs was challenging due to limited resources and systemic constraints. The "one size fits all" approach which is currently being implemented was highlighted as ineffective in addressing the complex needs of patients. The constraints related to staffing, infrastructure, and available interventions restrict the ability to customize treatment plans according to individual needs. As a result, treatment has relied on a "one size fits all" approach, which fails to adequately address the diverse and multifaceted aspects of AUD in various patients. The limitations in tailoring treatment to individual often led to treatment resistance, high dropout rates, and increased risk of relapse.

> *"Some of the Health Workers think AUD is a biological condition and tend to focus on mainly the biological things…treating the symptoms…they ignore other aspects and yet these are equally important… we do not do thorough assessments to critically understand the categories of our patients. Some of our patients are brought to the unit either tied but we fail to classify and treat them in the one size fits all way."*

Sub-optimal duration follow-up of clients

There is inadequate follow-up care of the patients once discharged. Without robust follow-up services, individuals may face difficulties in maintaining sobriety, accessing needed resources, or managing triggers and stressors effectively.

> *"The time provided to the patients is very low… two weeks is not sufficient to treat these addictions. The other private addiction units give their patients atleast 3 months and yet for us we only look at treating the psychotic issues and then discharge."*

> *"There is no pro-active follow-up of the patients in the communities to understand how patients are managing in the communities they go back to. We just sit back here at the facilities and wait for the patients, hoping they will come back to the facility."*

Theme 3: Patient risk factors and support at facility and community level

Stigma as a Barrier to Treatment

Some of the participants emphasized the harmful impact of stigmatizing language, such as terms like "addict" or "abuser," used by some health workers, which perpetuates negative stereotypes. Other

participants were unaware that using the term addict was stigmatizing. These labels carry implicit moral judgments that can sabotage recovery efforts, intensify feelings of shame or self-stigma, and frustrate recovery progress. Participants emphasized the importance of adopting more supportive and non-stigmatizing terminology to promote recovery and reduce the stigma associated with AUD.

Societal stigma also contributed to social isolation, diminished family support, and fostered negative community attitudes, all of which deter acceptance of treatment and adherence to interventions which is as a significant precipitant of relapse.

> *"AUD is looked at as bad behaviour and a person is already given a terrible label – "useless" and this person gives themselves this label too. Labeling creates a lot of stigma in the community and the facility and it makes it hard for the family to change the mindset to offer treatment. The health workers needs to play an important role such that this person is welcomed back and a person who uses substances is not looked at as wasted"*

> *"These client's express willingness to quit, but upon returning to their communities, they face rejection…they are still looked at as addicts and the rest of the community does not want to associate and the family members themselves do not want anything to do with the patients because of the problems addiction has caused to them."*

> *"Rather use medically assisted withdrawal …and detoxification is a stigmatizing language and this has stigma attached to it and this language needs to be revised."*

> *"I have an issue with AA groups and it is my last resort because I do not agree with the labeling they use – Alcoholics Anonymous. Many patients are not okay with this label, and the group often does not provide a comprehensive solution. They can be termed as Relapse prevention support groups – instead of looking at it as AA and it should be able to support the person as a whole."*

Lack of Family Support and Awareness:

Family involvement and support were identified as crucial but lacking for most of the cases. Families often lacked knowledge about AUD and its treatment and often viewed it as bad behaviour, leading to limited support for their patients. Lack of family involvement contributes to poor treatment outcomes. The lack of familial involvement created barriers to seeking help or staying engaged in treatment. Many patients were admitted to the facility but lacked food as there were no family members to support them with basic needs as food. In turn they would abandon the treatment at the facility and return home.

> *"The significant other or family member sometimes greatly contribute to the relapse of the patient, by the time the person comes at the facility they are treated*

as rejects and the relatives have been pushed to the limits and are at the level where they are almost giving up. It is rare that the family comes to support even when they are admitted"

Social and Environmental Factors:

Poor social support, employment instability, and exposure to substance-using peers were highlighted as key contributors. Participants emphasized that inadequate social support was a major driver of relapse, noting that returning to the same environment and social circles hindered efforts to implement positive changes post discharge. Additionally, the ready availability of substances in service users' communities posed a significant challenge to maintaining sobriety. This environment-induced influence undermines treatment efforts, particularly when individuals lack control over their surroundings and for some it is a source of their livelihood. The lack of community-based programs for relapse prevention in the post-war conflict environment of Gulu District exacerbated the problem.

"I have a patient who is always coming back to the facility with alcohol induced psychosis. This patient is about female - 40 years and her source of employment is making alcohol – the local brew and she is where she earns a living and pay for school fees for her children. She usually tells me that you cannot sell what you have not tasted. So, all we do is wait for her to come back to the facility and continue managing the psychotic symptoms."

Age-Specific and Population-Specific Challenges in AUD Treatment

Participants reported that AUD affects individuals differently depending on their age group and specific life circumstances. Each group faces unique challenges that can significantly influence the risk of relapse. Adolescents often face significant peer pressure to engage in alcohol use, which can be difficult to resist. Additionally, their rapid development and emotional changes during adolescence often affected their decision-making and impulse control, increasing vulnerability to relapse. For the geriatric population, they often experienced social isolation, which leads to feelings of loneliness and depression, triggering relapse. Additionally, they face emotional challenges due to the impact of their children growing up and leaving home which lead to feelings of abandonment and depression. The LGBTQ+ Individuals faced constant discrimination and stigma can lead to heightened stress and mental health issues, increasing the risk of alcohol use and relapse. There were also reports of military veterans who have PTSD which can drive alcohol use as a form of self-medication, complicating their recovery and increasing the risk of relapse.

Adolescents have challenges in regard to peer pressure, developmental stages with their rapid brain development and emotional changes which can affect decision making and impulse control. The geriatric population have issues to do with social isolation, medication interactions, physical health issues and empty nest syndrome, retirement transitions leading to loss of identity and changes in social roles. This challenge in adjustment to new reality of life and failing to cope with new conditions in life can be a trigger to relapse while other special populations like the

LGBTQ+ faced constant discrimination, stigma, identity-related stressors, and minority stress can lead to relapse"

Comorbidities: Mental and Medical Illnesses with AUD

Comorbidities, both mental and medical, significantly impacted the treatment of AUD and were triggers for relapse if not properly managed. Patients with both AUD and mental health disorders (e.g., depression, anxiety, bipolar disorder, schizophrenia) faced more complex treatment challenges increasing the likelihood of relapse. Patients with chronic medical conditions such as liver disease, cardiovascular issues, diabetes, and respiratory problems made treatment of AUD challenging and had a high likelihood of relapsing.

Theme 4: Priority actions for relapse prevention

Enhanced Community Awareness and Education:

Participants stressed the necessity of widespread awareness campaigns to destigmatize addiction and enhance community understanding of AUDs. By addressing misconceptions and promoting empathy, these campaigns can play a crucial role in supporting individuals in recovery and reducing relapse rates. The participants believed that mass awareness campaigns can challenge negative stereotypes and stigmatizing attitudes towards individuals struggling with AUD. By educating the public about the complex nature of addiction as a medical condition rather than a moral failing, these campaigns aim to reduce discrimination and social exclusion faced by individuals in recovery. Destigmatization can foster a supportive environment that encourages individuals to seek treatment and engage in recovery-oriented behaviors. Additionally, participants believed that addressing stigma and improving community understanding will also reduce barriers to treatment. When individuals feel accepted and supported, they are more likely to seek help for SUD without fear of judgment or rejection.

"We need to conduct sensitization of the community about addictions and this should be start from the school. We also need to have community-based programmes like support AAs"

Infrastructure and human resource development:

Participants emphasized the need to enhance facility infrastructure, such as erecting fences, to prevent substance smuggling and unauthorized access to addictive substances within treatment facilities. Erecting physical barriers can help restrict the availability of substances and create a more secure treatment environment, reducing the risk of relapse due to external triggers. Additionally, participants highlighted the importance of increasing technical expertise through training and recruitment. This includes hiring specialized staff, such as addiction counselors, psychologists, and psychiatrists, with specific training and expertise in SUD treatment. Training programs can also enhance the skills of existing healthcare professionals to better address the complex needs of individuals with addiction. By improving facility infrastructure and increasing technical expertise,

healthcare facilities can offer comprehensive and evidence-based treatment modalities that address the root causes of addiction, reduce relapse rates, and support sustained recovery.

Community Collaboration for comprehensive AUD Care and Relapse Prevention:

Participants emphasized the need for healthcare systems to collaborate closely with community organizations and grassroots initiatives that specialize in substance abuse treatment and support. By partnering with these organizations, healthcare facilities can extend their reach and tap into community resources that enhance prevention, treatment, and recovery efforts for individuals with SUD. By leveraging community partnerships, healthcare facilities can reach underserved populations, reduce stigma, and improve engagement in care, ultimately leading to improved outcomes and reduced relapse rates.

Multidisciplinary and Collaborative Approach

An effective referral system is essential for managing comorbidities and AUD. Effective management requires thorough assessments, integrated care plans, and a multidisciplinary approach to address all aspects of a patient's health. This includes both external referrals (from community healthcare providers to treatment facilities) and internal referrals (between departments within the same facility) to ensure a coordinated and comprehensive treatment plan. Referral systems facilitate seamless transitions between different levels of care, ensuring continuity and coordination of services. Intensifying community-based interventions, sensitization programs, and support groups to strengthen long-term recovery outcomes is important. Additionally, a multidisciplinary approach involving addiction specialists, mental health professionals, medical doctors, occupational therapists, and social workers is necessary to address the multifaceted needs of patients with AUD and comorbid conditions.

> *"Medical comorbidity if overlooked might not be resolved and create situations that are complicated, and it affects the treatment and recovery. For a person to get well, we need all hands-on deck. "*
>
> *“The other issue comorbidities both mental illness with AUD and medical illness with AUD can also be a trigger to relapse if not handled well. That's why on the referral system it should be both external referral from outside hospital from the community then also from within interdepartmental referral system for multidisciplinary approach and collaborative approach for a comprehensive treatment plan.”*

Discussion

This study investigated factors contributing to relapse among individuals with Alcohol Use Disorder (AUD) from the perspective of healthcare workers in Gulu District, Uganda. Through qualitative

interviews, several prominent themes emerged, offering insights into challenges within the treatment landscape and potential avenues for relapse prevention.

The findings revealed a concerning rate of relapse, with approximately 75.1% of patients experiencing relapse within 45 days post-treatment. Consistent with previous research, the observed high prevalence of relapse within a short period post-treatment underscores the persistent challenges in achieving long-term recovery for individuals with AUD[18,19]. Some studies have concluded that relapse will always be a part of the recovering process in SUDs[18,20]. This high relapse rate not only impacts individuals but also raises doubts about the effectiveness of current treatment approaches among both healthcare workers and the community. The perception of low treatment success rates undermines confidence in substance abuse treatment systems, potentially deterring individuals from seeking help and eroding support for treatment initiatives. Doubts on treatment effectiveness due to perceived low success rates resonate with studies emphasizing the complex nature of addiction and the need for tailored, evidence-based interventions[21,22].

A critical theme identified was the inadequacy of resources and infrastructure within treatment facilities. Limited human resources, including a shortage of specialized staff such as counselors and psychologists, pose significant challenges in delivering comprehensive and tailored care. The absence of dedicated addiction treatment professionals alongside clinical duties results in increased workload and compromises the quality of care provided. Furthermore, limitations in facility infrastructure, such as inadequate space and security measures, hindered effective treatment delivery and patient management, contributing to relapse risks. Shortages of medication and health workers, non-adherence to the treatment schedule and negative staff-client interactions have been reported to contribute to relapse[23].

The study highlighted a predominant focus on acute withdrawal management and symptomatic treatment, neglecting holistic and individualized approaches necessary for sustained recovery. The "one size fits all" treatment model fails to address the diverse and complex needs of individuals with AUD, leading to treatment resistance, dropout, and ultimately, relapse. Additionally, sub-optimal in-patient treatment durations coupled with inadequate follow-up care post-discharge limit the effectiveness of interventions in addressing underlying issues and supporting long-term recovery.

Stigmatizing language and negative stereotypes perpetuated by healthcare workers and the community contribute significantly to social isolation, limited family support, and negative treatment perceptions. Labeling individuals with AUD as "addicts" or "abusers" undermines recovery efforts, intensifies self-stigma, and deters acceptance of treatment. The fear of being labeled or judged negatively by society leads to secrecy and reluctance to disclose their struggles with SUD. This reluctance stems from concerns about potential repercussions, including social exclusion, discrimination, and loss of respect. [24].

Family involvement and support are crucial yet lacking due to limited understanding of AUD and its treatment, creating barriers to seeking help and sustaining recovery. Family-related challenges, including lack of support and understanding, are consistent with studies highlighting the importance of family involvement in addiction treatment and recovery[25,26]. Families should not be seen as part of the problem rather as part of the solution in SUD treatment, and family involvement should be an essential part of treatment and recovery planning. Therefore families need to be furnished with the right information in order to understand the importance and gains of their involvement in the

treatment process. Other studies have also revealed that individuals who have strong family support systems were found to be less likely to relapse[27].

Study Limitations

While this study provides valuable insights into the factors contributing to relapse among individuals with Alcohol Use Disorder (AUD) from a healthcare worker perspective, several limitations should be acknowledged.

The study included a limited number of participants, comprising clinical psychologists, psychiatric nurses, counselors, and community health workers from a specific geographical area. This may limit the generalizability of the findings to other healthcare settings or regions with different resource constraints and treatment approaches. The perspectives shared by participants may be influenced by their specific roles within the healthcare system and their personal experiences, which could introduce bias into the data. For example, clinicians directly involved in addiction treatment may focus more on clinical challenges, while community health workers may emphasize community-level barriers.

The study was conducted within a specific cultural, social, and healthcare context, namely the Gulu District. Factors unique to this setting, such as post-war conditions, local treatment practices, and community dynamics, may influence the identified themes and recommendations, limiting their applicability to other contexts.

Conclusion

The findings highlight multifaceted challenges within the healthcare system that hinder effective AUD treatment and relapse prevention efforts. Key themes emerged, included inadequate resources for treatment provision, sub-optimal treatment approaches, stigma and community perceptions, resource and systemic challenges, and recommendations for future directions.

Recommendations for future actions include enhancing facility infrastructure, increasing technical expertise through training and recruitment, strengthening collaboration and referral systems with community organizations, and promoting comprehensive AUD care and relapse prevention initiatives. By addressing the identified barriers and implementing evidence-based strategies, healthcare systems can better support individuals with AUD on their recovery journey and enhance overall treatment effectiveness.

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