

ASSESSING THE EFFECTIVENESS OF SOCIAL WORK INTERVENTIONS FOR ADOLESCENTS WITH SUBSTANCE-INDUCED MENTAL HEALTH ISSUES

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Abstract

Substance use among adolescents in Nigeria has emerged as a significant public health concern, frequently co-occurring with mental health issues such as depression, anxiety, and behavioral disorders. Social work interventions are crucial in managing these complex cases, yet empirical evidence regarding their effectiveness, particularly within the Nigerian context, remains limited. This mixed-methods study, employing a convergent parallel design, aimed to examine the current level of social work interventions provided for adolescents with substance-induced mental health issues at Lagos State University Teaching Hospital (LASUTH) and to evaluate the effect of these interventions on the mental health outcomes of affected adolescents. Quantitative data were collected from 251 adolescents using structured questionnaires, while qualitative insights were gathered through in-depth interviews with social workers. Findings revealed that social work interventions are provided to a high extent, with a significant positive correlation ($r = 0.652$, $p < 0.01$) observed between social work interventions and improved mental health outcomes. The study concludes that while social work interventions play a vital role in improving mental health outcomes, their optimal effectiveness is constrained by various systemic and socio-cultural factors. Recommendations include prioritizing the recruitment and training of specialized social workers, strengthening community-based awareness, and improving multidisciplinary collaboration to enhance intervention effectiveness and recovery outcomes for adolescents.

Keywords: Adolescents, Social Work Interventions, Substance-Induced Mental Health Issues, Psycho-social Support, Treatment Outcomes.

I. Introduction

Adolescence represents a critical developmental period characterized by significant physical, emotional, and social changes, often accompanied by increased vulnerability to psychological and behavioral challenges (Nawi et al., 2021). Globally, the co-occurrence of mental health and substance use disorders among adolescents poses a substantial public health challenge, with profound implications for individuals, families, and communities (Kirkbride et al., 2024). In the United States, national surveys indicate that approximately 45% of teenagers diagnosed with a mental health disorder also present with a substance use disorder, highlighting the high comorbidity of these conditions (SAMSHA). Similar trends are observed in Canada and Europe, where the prevalence of dual diagnosis among adolescents in treatment settings can range from 55% to 80%, underscoring the pervasive nature of this issue across diverse geographical and socio economic landscapes (Vanasse et al., 2021).

In many developing countries, including Nigeria, the situation is further exacerbated by limited awareness, inadequate mental health infrastructure, pervasive stigma, and scarce resources (Uchechukwu et al., 2023). Nigeria, with over 40% of its population under 18, faces a significant gap in adolescent mental health services, a challenge compounded by rapid urbanization and socio-economic disparities (Ikechukwu et al., 2019). Socio-cultural factors such as poverty, family dysfunction, peer pressure, and exposure to trauma

contribute to an increased risk of both mental illness and substance use among Nigerian adolescents (Gidiagba et al., 2023).

Despite the critical role of social workers in providing counseling, psychosocial support, and rehabilitation services, there is a notable lack of empirical research evaluating the effectiveness of these interventions within the Nigerian context. This gap limits the development of evidence-based practices and hinders the capacity of healthcare systems to effectively respond to this growing problem. Social workers are strategically positioned to offer holistic, person-centered care that addresses not just clinical symptoms, but also the social, emotional, educational, and familial dimensions of adolescent health.

Social work interventions are expected to enhance recovery, improve treatment adherence, reduce relapse, and promote psychosocial stability. When properly implemented and evaluated, these interventions should enable adolescents to regain emotional well-being, maintain social functioning, and achieve long-term recovery. However, the current reality indicates that adolescents with substance-induced mental health issues continue to face significant health, social, and psychological challenges, resulting in poor mental health outcomes, increased substance use, school dropout, family conflict, and heightened risk of delinquency (Frimpong & Guerrero, 2020). Observations from clinical practice suggest that many adolescents continue to experience recurrent hospital visits, poor treatment compliance, and relapse, indicating that current interventions may not adequately address their complex needs (Rapp et al., 2022).

This presents a critical gap in practice, as social workers are uniquely positioned to offer comprehensive support. This study addresses these critical gaps by focusing on Lagos State University Teaching Hospital (LASUTH), a major tertiary healthcare facility in Nigeria. The primary goal is to provide empirical evidence on the effectiveness of social work interventions for adolescents with substance-induced mental health issues. Specifically, this study aims to:

Examine the current level of social work interventions provided for adolescents with substance-induced mental health issues at LASUTH.

Evaluate the effect of social work interventions on the mental health outcomes of adolescents with substance-induced mental health issues at LASUTH.

Through the investigation of the objectives listed above, this research seeks to contribute to a better understanding of social work practice in this specialized area, highlight best practices, identify existing gaps, and inform the development of more effective intervention strategies and institutional policies within the Nigerian healthcare system. The findings are expected to benefit policymakers, healthcare professionals, and ultimately, adolescents struggling with co-occurring substance use and mental health challenges, fostering improved recovery and reintegration into society.

II. Conceptual Review

Social Work Interventions in Mental Health Care

Social work plays a pivotal role in mental health care, particularly in addressing the complex needs of individuals with co-occurring disorders. Social workers employ a range of interventions, including counseling, case management, advocacy, and psychosocial support, to promote recovery and enhance well-being (Lloyd et al., 2020). In the context of substance-induced mental health issues, social work interventions are crucial for providing comprehensive care that extends beyond medical treatment to encompass the social, environmental, and psychological factors influencing an individual's health (Nawi et al., 2021). These interventions often involve individual and group therapy, family-based approaches, and linkage to community resources, all aimed at fostering resilience, improving coping skills, and facilitating social reintegration (McHugh et al., 2024).

Substance Use and Mental Health in Adolescents

Adolescence is a period of heightened vulnerability to substance use, which can significantly impact mental health development (Hasler & Clark, 2023). The use of

psychoactive substances during this critical developmental stage can alter brain chemistry, increasing the risk of various mental health disorders such as depression, anxiety, psychosis, and behavioral disturbances (Moitra et al., 2023). The consequences extend to social withdrawal, poor academic performance, family conflicts, and an increased risk of delinquency (Ghaemi, 2009).

III. Theoretical Framework Biopsychosocial Model

The Biopsychosocial Model, proposed by Engel (Peterson, 2023), provides a comprehensive framework for understanding health and illness by integrating biological, psychological, and social factors. In the context of substance-induced mental health issues among adolescents, this model emphasizes that biological predispositions, psychological factors (e.g., coping mechanisms, personality traits, emotional regulation), and social influences (e.g., family dynamics, peer pressure, cultural norms, socioeconomic status) all interact to contribute to the development, maintenance, and recovery from these conditions.

Systems Theory

Systems Theory posits that individuals are part of interconnected systems (e.g., family, school, community) and that changes in one part of the system can affect the entire system (Rapp et al., 2022). For adolescents with substance-induced mental health issues, this theory highlights the importance of understanding and intervening within these various systems. Family systems, peer groups, and school environments can either contribute to or mitigate the risks associated with substance use and mental health problems (Smith et al., 2025). Social workers, utilizing a systems perspective, engage with these different levels to identify strengths, address dysfunctions, and mobilize resources, thereby creating a supportive environment for the adolescent's recovery (Larsen et al., 2022).

Empirical Review

Numerous studies have explored the effectiveness of interventions for co-occurring substance use and mental health disorders. Integrated treatment approaches have shown to reduce substance-related problems and improve global functioning among adolescents (Okafor & Uchenna 2022). Research also indicates that baseline mental health symptoms are strong predictors of persistent mental health issues, emphasizing the need for sustained integrated interventions (Uchechukwu et al., 2023). In Nigeria, studies have demonstrated that structured psychosocial support significantly improves treatment adherence and mental health stability (Creswell et al., 2017), and community-based programs lead to higher recovery rates (Somohano et al., 2022). However, much of the existing evidence, particularly on social work-specific interventions, is derived from Western contexts, limiting its generalizability to diverse cultural settings like Nigeria (Leonhardt et al., 2022). This study aims to bridge this gap by providing context-specific empirical data.

IV. Methodology

This study adopted a mixed-methods research design, specifically a convergent parallel design. This approach involved the simultaneous collection and analysis of both quantitative and qualitative data. The quantitative component utilized structured questionnaires to gather numerical data on the level and effects of social work interventions, allowing for statistical analysis. The qualitative component involved in-depth interviews with selected social workers to explore their experiences, challenges, and perspectives, providing rich contextual insights. The study was conducted at Lagos State University Teaching Hospital (LASUTH), located in Lagos State, Nigeria.

The target population included adolescents diagnosed with substance-induced mental health issues receiving care at LASUTH, and social workers with at least six months of experience in managing such cases. For the quantitative component, a sample of 251 adolescents was determined using the Yamane sample size formula. Systematic random sampling was employed to select eligible adolescent patients, ensuring representativeness.

For the qualitative component, purposive sampling was used to select social workers directly involved in the assessment, treatment, and management of adolescents with substance-induced mental health conditions.

The research instrument comprised a standardized self-developed questionnaire for quantitative data collection and an in-depth interview guide for qualitative data. The questionnaire included sections on demographic information, assessment of social work interventions, and effects on mental health outcomes, rated on a Likert scale. The instrument's validity was ensured through expert review, and reliability was assessed using Cronbach's Alpha, with coefficients ranging from 0.737 to 0.815, indicating acceptable internal consistency. Quantitative data were analyzed using Statistical Package for Social Sciences (SPSS, v27), employing descriptive statistics (frequency distribution tables and percentages) and inferential statistics (Pearson Moment Correlation). Qualitative data from interviews were analyzed thematically to identify recurring patterns and insights.

V. Results and Findings
Demographic Information of Respondents

Table 1: Demographic Information of Respondents

Variable	Item	Frequency	Percentage
Age	12-15	67	26.7%
	16-20	53	21.1%
	21-25	53	21.1%
	30 years & above	38	15.1%
Gender	Male	112	44.6%
	Female	139	55.4%
Educational Status	Primary	26	10.4%
	Secondary	64	25.5%
	Tertiary	117	46.6%
	Out of school	44	17.5%
Duration of Treatment at LASUTH	Less than 3 months	27	10.8%
	3-6 months	199	79.3%
	Above 6 months	25	10.0%
Living Arrangement	With parents	98	39.0%
	With relatives	63	25.1%
	Alone	69	27.5%
	Other	21	8.4%

The demographic profile of the 251 adolescent respondents is presented in Table 1. The majority of participants were female (55.4%), with males constituting 44.6%. The age distribution showed a significant proportion of early adolescents (12-15 years: 26.7%), followed by 16-20 years (21.1%) and 21-25 years (21.1%). In terms of educational status, 46.6% had tertiary education, 25.5% secondary, and 10.4% primary, with 17.5% out of school. A large majority (79.3%) had been receiving treatment at LASUTH for 3-6 months, and 39.0% lived with their parents.

Participant	Gender	Age Range	Qualification	Years of Experience	Area of Practice
P1	Female	30-39	B.Sc Social Work	5-10 years	Mental Health Unit
P2	Male	40-49	M.Sc Social Work	10+ years	Psychiatric Unit

The qualitative interview involved two social workers at Lagos State University Teaching Hospital (LASUTH). As shown in Table X, the participants varied in gender, age, educational background, and years of professional experience. Both participants have experience working within mental health-related units, which provides relevant insights into social work interventions for adolescents with substance-induced mental health issues.

Quantitative Analysis

The Current Level of Social Work Interventions

Table 2: Assessment of Social Work Interventions

Items	Mean	SD
Social workers provide regular counseling sessions for my condition.	4.49	1.06
I receive psychosocial support from social workers during treatment.	3.74	1.15
Social workers involve my family in my treatment process.	3.15	1.15
Social workers educate me about the effects of substance use on my mental health.	3.07	1.28
Social workers help me develop coping strategies for substance-related triggers.	3.18	1.51
Social workers link me to helpful community or rehabilitation services.	3.43	1.48
Social workers monitor my progress during treatment sessions.	3.51	1.46
Overall Average Weighted Mean	3.51	1.29

Key: 1-1.49=Not at all; 1.5-2.49=Low extent; 2.5-3.49=Moderate extent; 3.5-4.49=High extent; 4.5-5.0=Very high extent

Table 2 presents the assessment of social work interventions provided to adolescents at LASUTH. Respondents generally agreed that social work interventions are provided to a high extent (overall average weighted mean = 3.51, SD = 1.29). Specifically, social workers were perceived to provide regular counseling sessions ($\bar{x}=4.49$, SD=1.06) and psychosocial support ($\bar{x}=3.74$, SD=1.15) to a high extent. Family involvement in the treatment process ($\bar{x}=3.15$, SD=1.15), education about the effects of substance use ($\bar{x}=3.07$, SD=1.28), and assistance in developing coping strategies ($\bar{x}=3.18$, SD=1.51) were reported to a moderate extent. Social workers also linked respondents to community services ($\bar{x}=3.43$, SD=1.48) and monitored their progress ($\bar{x}=3.51$, SD=1.46) to a moderate to high extent.

The Effect of Social Work Interventions on Mental Health Outcomes

Table 3: Effects of Social Work Interventions on Mental Health Outcomes

Items	Mean	SD
Social work intervention has helped reduce my emotional distress.	4.51	0.90
My overall mental health has improved since receiving social work support.	3.69	1.16
Social work services have helped me manage substance-related cravings.	3.29	1.11
I feel more confident in coping with my mental health challenges.	3.14	1.25
Social work intervention has helped me stay consistent with my treatment plan.	3.23	1.40
I experience less anxiety and fear due to social work support.	3.49	1.58
Social work services have improved my ability to make better decisions.	3.42	1.54
Overall Average Weighted Mean	3.53	1.27

Key: 1-1.49=Strongly Disagree; 1.5-2.49=Disagree; 2.5-3.49=Undecided; 3.5-4.49=Agree; 4.5-5.0=Strongly Agree

Table 3 illustrates the perceived effects of social work interventions on mental health outcomes. Respondents strongly agreed that social work intervention reduced their emotional distress ($\bar{x}=4.51$, SD=0.90) and agreed that their overall mental health had improved ($\bar{x}=3.69$, SD=1.16). However, respondents were largely undecided regarding the interventions' help in managing substance-related cravings ($\bar{x}=3.29$, SD=1.11), feeling more confident in coping ($\bar{x}=3.14$, SD=1.25), staying consistent with treatment plans ($\bar{x}=3.23$, SD=1.40), experiencing less anxiety and fear ($\bar{x}=3.49$, SD=1.58), and improving decision-making abilities ($\bar{x}=3.42$, SD=1.54). The overall average weighted mean of 3.53 (SD=1.27) indicates a general agreement that social work interventions positively influenced mental health outcomes.

Table 4: Pearson Moment Correlation showing relationship between social work interventions and improvement in mental health outcomes

	Social Work Interventions	Mental Health Outcomes
Social Work Interventions	Pearson Correlation	1
	Sig. (2-tailed)	
	N	251
Mental Health Outcomes	Pearson Correlation	0.652**
	Sig. (2-tailed)	0.010
	N	251

Note: Correlation is significant at the 0.01 level (2-tailed).

Furthermore, a Pearson Moment Correlation analysis as revealed in Table 4 above revealed a positive and statistically significant relationship between social work interventions and mental health outcomes ($r = 0.652$, $p < 0.01$). This indicates that increased social work interventions are associated with improved mental health outcomes among the respondents, leading to the rejection of the null hypothesis.

Qualitative Results

Qualitative data, gathered from in-depth interviews with social workers, provided nuanced insights into the provision and effectiveness of interventions, as well as the challenges encountered. The analysis revealed several key themes, particularly concerning factors limiting effectiveness and strategies for enhancement. Social workers consistently highlighted structural and systemic barriers. Inadequate staffing and infrastructure were frequently cited; "I think the major challenge is staffing... we need to have enough individuals or social workers that can attend to communities (P1, Social Worker)". These statements underscore the impact of human resource shortages and insufficient hospital infrastructure on the quality and continuity of care (Knight et al., 2024).

Stigma and societal perception emerged as another significant barrier. Participants explained that; "There is stigma within the community... it makes them label people and isolate the adolescents (P2, Social Worker)". This highlights how cultural beliefs and societal stigma contribute to delayed help-seeking and poor engagement with social work services, thereby undermining intervention effectiveness (Pedersen et al., 2020). Social workers also proposed several strategies for improvement. Community outreach and policy regulation were emphasized; "We need more outreaches and more policies... alcohol is very cheap and easily accessible (P1, Social Worker)". These suggestions point to the need for increased public awareness and stricter regulations to control substance accessibility (Loban et al., 2022).

Specialized training and professional development were deemed crucial. Participant highlighted; "We have to have knowledge of what adolescents are going through before we can come in as professionals (P2, Social Worker)". This indicates a clear need for age specific expertise to enhance intervention effectiveness (Horigan et al., 2023). Family and school involvements were identified as critical. Social workers explained; "Early warnings should come from the school through poor academic performance... families and schools should work together (P2, Social Worker)". These insights emphasize the role of these institutions in early detection, prevention, and providing a supportive environment (Hawkins et al., 2022). Finally, multidisciplinary collaboration was stressed. A participant mentioned; "Getting different specialists involved such as psychologists and medical practitioners can help address different aspects of substance abuse (P1, Social Worker)". This underscores the importance of an integrated approach involving various healthcare professionals to address the biological, psychological, and social aspects comprehensively (McHugh et al., 2024).

Triangulation of Quantitative and Qualitative Findings

The triangulation of quantitative and qualitative findings revealed a strong convergence across key areas of the study, enhancing the validity and depth of the research. The quantitative data indicated that social work interventions, such as counseling and psychosocial support, are provided to a moderate to high extent. This was corroborated

by qualitative responses, where social workers confirmed the availability of these services but also highlighted systemic constraints impacting their delivery. Both data sets confirmed that interventions contribute to improved mental health outcomes, though qualitative insights provided a deeper understanding of the inconsistencies and limitations, such as relapse and poor follow-up, which hinder sustained effectiveness. Crucially, both quantitative and qualitative findings strongly aligned on the factors limiting effectiveness, including inadequate staffing, limited resources, and societal stigma. Similarly, the recommended strategies for improvement, such as increased training, awareness campaigns, and multidisciplinary collaboration, were consistently supported by both data sources. This integrated perspective provides a holistic understanding of the challenges and opportunities for enhancing social work interventions in this context.

VI. Discussion of Findings

This study aimed to assess the effectiveness of social work interventions for adolescents with substance-induced mental health issues at LASUTH, focusing on the level of interventions provided and their impact on mental health outcomes. The findings offer valuable insights into the current state of practice and highlight areas for improvement within the Nigerian healthcare context. Regarding the current level of social work interventions, the quantitative results indicated that social workers provide regular counseling sessions and psychosocial support to a high extent. This aligns with the foundational role of social work in mental health care, emphasizing direct engagement and emotional support (Patel et al., 2024). The moderate extent of family involvement, education on substance use effects, and coping strategy development suggests that while these crucial components are present, there is room for strengthening their implementation. The qualitative data further illuminated these findings, with social workers confirming the provision of services but also acknowledging the limitations imposed by systemic challenges like inadequate staffing and resources. This suggests a discrepancy between the perceived availability of services and the optimal delivery due to practical constraints. The importance of family engagement in adolescent substance abuse treatment is well documented, as family support can significantly improve adherence and reduce relapse rates. Therefore, enhancing this aspect of intervention is critical.

The effect of social work interventions on mental health outcomes revealed a significant positive relationship, indicating that increased social work interventions are associated with improved mental health outcomes. Specifically, respondents strongly agreed that interventions reduced emotional distress and improved overall mental health. This finding is consistent with existing literature that underscores the efficacy of structured social work interventions in alleviating psychological distress and promoting emotional well-being among adolescents with substance use disorders (Ghaemi, 2009). However, the quantitative results showing respondents were largely undecided about the interventions' help in managing substance-related cravings suggest a nuanced picture. While social work interventions provide essential emotional support and guidance, they may not fully address the neurobiological and behavioral components of substance cravings, indicating a need for specialized or integrated therapeutic modalities such as cognitive-behavioral therapy or family-based interventions. The consistent monitoring of progress by social workers, reported to a high extent, is crucial for personalized intervention strategies and evaluating treatment effectiveness (Henderson et al., 2021).

The qualitative findings further elaborated on the challenges and strategies. The issue of inadequate staffing and infrastructure directly impacts the capacity of social workers to provide comprehensive and consistent care, leading to increased workload and potentially reduced quality of care (Henderson et al., 2024). This structural limitation can undermine the positive effects observed from interventions. The pervasive stigma and societal perception surrounding substance use and mental health in Nigeria significantly hinder help-seeking behaviors and engagement with services, as families may prioritize non-medical solutions

(Rapp et al., 2021). This cultural barrier necessitates targeted community awareness campaigns and policy regulations to destigmatize these conditions and promote early intervention.

Strategies for enhancement, as identified by social workers, include community outreach and policy regulation to control substance accessibility and increase public awareness (Peterson, 2023). The call for specialized training and professional development underscores the need for age-specific expertise to effectively address adolescent behaviors and developmental needs (Creswell & Clark, 2017). Furthermore, family and school involvements are critical for early detection, prevention, and creating a supportive environment for recovery (Smith et al., 2025). Finally, multidisciplinary collaboration among social workers, psychologists, psychiatrists, and other healthcare professionals is essential for an integrated approach that addresses the biological, psychological, and social aspects of substance-induced mental health issues comprehensively (Larsen et al., 2022). The triangulation of findings confirms that while social work interventions are vital, their full potential is often constrained by these systemic and socio-cultural factors, necessitating a multi-pronged approach to improve effectiveness.

VII. Conclusion

This study provides empirical evidence on the effectiveness of social work interventions for adolescents with substance-induced mental health issues at LASUTH, Nigeria. It confirms that social work interventions are actively provided and significantly contribute to improved mental health outcomes, particularly in reducing emotional distress and enhancing overall mental well-being. However, the study also highlights significant structural, professional, and societal challenges, including inadequate resources, staffing shortages, and pervasive stigma, which limit the optimal effectiveness of these interventions. The mixed-methods approach allowed for a comprehensive understanding, revealing both the positive impact of social work and the systemic barriers that need to be addressed for sustained improvement in adolescent mental health and recovery.

VIII. Recommendations

Based on the findings of this study, the following recommendations are put forth to enhance the effectiveness of social work interventions for adolescents with substance induced mental health issues:

Healthcare institutions and policymakers should prioritize the recruitment and training of specialized social workers in adolescent mental health and substance use. Investment in mental health infrastructure, including adequate bed spaces and resources, is crucial to support comprehensive intervention delivery.

Implement targeted community outreach programs and public awareness campaigns to destigmatize substance use and mental health issues among adolescents. These initiatives should educate families and communities about the importance of early intervention and professional help, challenging cultural beliefs that hinder treatment-seeking.

Develop and implement specialized training curricula for social workers focusing on age-specific expertise in adolescent development, substance use patterns, and evidence based intervention strategies for co-occurring disorders. Continuous professional development should be encouraged to keep social workers abreast of best practices.

Foster stronger collaboration and communication among social workers, psychiatrists, psychologists, and other healthcare professionals. Regular interdisciplinary meetings and integrated care models can ensure a holistic approach to addressing the biological, psychological, and social needs of adolescents.

Promote active involvement of families and schools in the treatment and prevention process. Schools can integrate drug abuse education into their curricula and serve as platforms for early identification, while families can provide crucial emotional support

and monitoring.

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