

PREVALENCE OF EMOTIONAL DYSREGULATION AMONG YOUTH WITH SUBSTANCE USE DISORDER

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ABSTRACT

Purpose of the Study: This study examined the prevalence of emotional dysregulation among youth with substance use disorder (SUD) in selected rehabilitation centres in Kiambu County, Kenya.

Problem Statement: Despite ongoing treatment efforts, relapse rates among youth with SUD remain high in Kenya. Emotional dysregulation is a key factor sustaining addiction, yet rehabilitation programs often emphasize detoxification and general counseling while neglecting structured psychological interventions. Dialectical Behavior Therapy (DBT) has shown global effectiveness in enhancing emotional regulation, but its application in Kenyan settings is limited.

Methodology: A quasi-experimental design was employed, involving 108 inpatients aged 18–35 years across four rehabilitation centers. A sample of 68 participants was purposively selected and randomly assigned to experimental and control groups. Standardized self-report instruments including the Difficulties in Emotion Regulation Scale (DERS-16), Beck Anxiety Inventory (BAI), Beck Depression Inventory-II (BDI-II), and the Brief Substance Craving Scale (BSCS) were administered. Data was analyzed using chi-square tests, Pearson correlations, regression analysis, ANOVA, paired t-tests, and effect size measures.

Results: The findings indicated that 89.8% of participants exhibited emotional dysregulation, with 51.9% presenting moderate and 14.8% severe levels. Emotional dysregulation was strongly associated with substance cravings, anxiety, and depression. Key difficulties included impulse control, poor emotional awareness, and limited coping strategies, all of which heightened relapse vulnerability.

Conclusion: Emotional dysregulation is pervasive among youth with SUD in Kiambu County and undermines recovery outcomes.

Recommendations: Integrating DBT into rehabilitation programs is recommended to strengthen coping skills, reduce cravings, enhance treatment adherence, and minimize relapse. Policymakers should prioritize DBT adoption and expand professional training to enhance evidence-based care.

Keywords: *Emotional dysregulation, substance use disorder, Dialectical Behavior Therapy, Kenya, youth, rehabilitation*

BACKGROUND TO THE STUDY

Substance Use Disorder (SUD) remains a significant public health concern, particularly among the youth, severely impacting emotional well-being, mental health, and overall quality of life (Chen, 2021). Emotional dysregulation is a key factor contributing to substance use behaviour, with individuals turning to drugs and alcohol as maladaptive coping mechanisms to manage distressing emotions (Chen, 2021). When left untreated, emotional dysregulation perpetuates addiction and increases vulnerability to co-occurring mental health disorders such as anxiety and depression (Rady et al., 2021). The cycle of substance use and emotional instability presents a major challenge in rehabilitation settings, where relapse rates remain high despite conventional treatment approaches (Harvey et al., 2019).

Youth in rehabilitation centres face additional challenges as these environments remove external triggers while exposing individuals to internal emotional stressors such as loneliness, frustration, and dysphoria (Dhumal et al., 2021). Emotional dysregulation amplifies cravings and impulsivity, which undermines recovery efforts when unaddressed (Wangenstein & Hystad, 2022). Traditional rehabilitation models focus primarily on detoxification, general counseling, and behavioral therapy, yet fail to incorporate structured interventions targeting emotional regulation (Ramadan

et al., 2024). Dialectical behavior therapy (DBT) has emerged as an effective intervention for managing emotional dysregulation by integrating mindfulness, distress tolerance, emotion regulation, and interpersonal effectiveness strategies (Harvey et al., 2019). DBT significantly reduces relapse rates, improves psychological resilience, and fosters long-term emotional stability among individuals recovering from SUDs (Dimeff et al., 2021).

Over 35 million people worldwide suffer from drug use problems, with substance dependence raising mortality, mental health issues, and socioeconomic pressures (UNODC, 2022). Substance use among youth is often linked to emotional dysregulation, where individuals struggle to manage negative emotions and resort to maladaptive coping mechanisms (Harvey et al., 2019). DBT, originally created by Marsha Linehan for borderline personality disorder, helps people control emotions through cognitive-behavioral techniques combined with mindfulness practices (Linehan, 2020; Linehan & Wilks, 2015). Studies demonstrate DBT's effectiveness in reducing emotional dysregulation and substance dependence by equipping individuals with distress tolerance and interpersonal effectiveness skills (Robins & Chapman, 2004; Reddy & Vijay, 2017).

The United States faces a significant substance use crisis, with over 10% of individuals aged 18-25 struggling with SUDs (NIDA, 2022). Emotional dysregulation has been identified as a core factor influencing substance use, as individuals with poor emotional regulation skills engage in impulsive behaviors including substance abuse (Rizvi et al., 2016). DBT has been widely integrated into U.S. treatment programs, with studies showing significant reductions in substance cravings and relapse rates (Giannelli et al., 2019). India reports over 7.2 million individuals suffering from opioid dependence, with emotional dysregulation playing a significant role in sustaining addiction (Ministry of Social Justice and Empowerment, 2021; Ambekar et al., 2019). DBT has proven effective in treating emotional dysregulation among individuals with SUDs in India, with participants reporting improved distress tolerance and reduced relapse likelihood (Reddy & Vijay, 2017). However, limited awareness and accessibility remain key implementation challenges (Nabavi et al., 2021).

Nigeria estimates over 14.3 million people suffer from drug-related disorders, with emotional dysregulation as a significant underlying factor (NDLEA, 2022). DBT implementation remains limited due to lack of trained professionals and inadequate mental health infrastructure (Koerner,

2018; Soyinka, 2021). South Africa exhibits one of Africa's highest substance use prevalence rates, with young adults facing heightened addiction risks due to socio-economic inequalities and community violence exposure (Peltzer & Ramlagan, 2020; Mbatha et al., 2021). DBT interventions have demonstrated promising results in reducing cravings and improving emotional resilience, though access remains challenging in rural areas (Koerner, 2018).

Kenya reports that at least 13% of individuals aged 15-65 suffer from SUDs, with alcohol, cannabis, and opioids being the most misused drugs. Notably, there is an overall relapse rate of 60%, highlighting the persistent challenges in achieving long-term recovery for those affected (NACADA, 2020). Despite government efforts, high relapse rates persist due to limited focus on emotional dysregulation in rehabilitation approaches (Kebenei et al., 2021). Kenya faces severe mental health professional shortages, with fewer than 500 psychiatrists serving over 50 million people (WHO, 2021). Rehabilitation centers focus primarily on detoxification and abstinence-based models, failing to equip individuals with emotional regulation skills needed to prevent relapse (Otieno & Oteyo, 2020). Socio-cultural stigma surrounding addiction discourages professional help-seeking, leading to untreated emotional dysregulation and increased relapse likelihood (Mugambi & Nyagah, 2019). Structured DBT interventions significantly improve emotional regulation and relapse prevention among individuals with co-occurring mental health and substance use disorders (Mwangi et al., 2023).

Kiambu County exhibits high substance use prevalence among youth, with young adults being the most affected group (NACADA, 2023). The county's proximity to Nairobi exposes youth to urban influences including drug accessibility and peer pressure, contributing to increased SUD cases (Mugambi et al., 2021). Urban environments exacerbate substance use through social influence and economic disparities, making intervention strategies crucial (Kimani & Wambua, 2022). Despite the severity of the issue, limited research exists on the effectiveness of psychological interventions like DBT in addressing emotional dysregulation and substance cravings within this population (Kariuki et al., 2024). Hence, the study examined the prevalence of emotional dysregulation among youth with substance use disorder in selected rehabilitation centers in Kiambu County, Kenya.

STATEMENT OF THE PROBLEM

Substance use disorder (SUD) is a significant public health issue in Kenya, particularly among the youth. This issue is further complicated by co-occurring mental disorders such as anxiety and depression, which may adversely affect treatment outcomes if not adequately addressed. According to the NACADA (2022), one in every 14 youths aged 25 – 35 years were addicted to alcohol, one in every 33 youths aged 25 – 35 years were addicted to tobacco, one in every 71 youths aged 25 – 35 years were addicted to khat, and one in every 83 youths aged 25 – 35 years were addicted to cannabis.

Emotional dysregulation plays a critical role in sustaining addiction, contributing to impulsivity, heightened stress sensitivity, and poor coping mechanisms (Rezaei et al., 2019). Many rehabilitation programs in Kenya primarily focus on detoxification, behavioral therapy, and group counseling, often neglecting structured psychological interventions that address emotional instability (Bitta et al., 2019). As a result, individuals with SUD struggle to manage their emotions, increasing their vulnerability to relapse. Untreated emotional dysregulation significantly raises the risk of continued substance use, as individuals turn to drugs or alcohol as a form of self-medication (Montaser et al., 2023). Despite global evidence supporting the effectiveness of Dialectical Behavior Therapy (DBT) in improving emotional regulation and reducing relapse rates, its application in Kenya remains minimal.

A study by Stellern et al. (2023) found that DBT significantly reduced substance cravings and impulsivity among young adults undergoing addiction treatment. Similarly, Ramadan et al. (2024) demonstrated that DBT improved distress tolerance and emotional resilience, leading to lower relapse rates among patients with co-occurring mental health disorders. These findings suggest that DBT provides a structured approach to managing emotional instability, equipping individuals with coping skills necessary for long-term recovery. In contrast, Kenyan rehabilitation centers predominantly rely on cognitive-behavioral approaches, addiction education, and peer support (Osborn et al., 2020). While these methods offer benefits, they may fail to address the deep-rooted emotional regulation difficulties that fuel substance dependence, underscoring the need for more comprehensive treatment models like DBT.

Given the high rates of substance use among the youth in Kiambu County (Karanja & Kipchumba, 2024), integrating DBT into treatment of substance use disorders could provide a crucial solution to reducing relapse rates. Evidence from Okoyo et al. (2022) highlights that conventional treatments in Kenyan rehabilitation centers focus heavily on behavioral modification without equipping individuals with emotional regulation skills, leading to recurrent cycles of treatment and relapse. By introducing DBT, rehabilitation centers could offer a targeted approach to help individuals manage stress, regulate emotions, and build resilience against substance cravings. This study aims to bridge this research gap by evaluating DBT's effectiveness in Kenyan rehabilitation settings, particularly in Kiambu County. Findings will provide empirical evidence on the potential benefits of DBT in improving mental health outcomes, informing policies to enhance psychological interventions for young adults struggling with SUD.

RESEARCH OBJECTIVE

To assess the prevalence of emotional dysregulation among youth with substance use disorder in selected rehabilitation centers in Kiambu County, Kenya

RESEARCH QUESTION

What is the prevalence of emotional dysregulation among youth with substance use disorder in selected rehabilitation centers in Kiambu County, Kenya?

THEORETICAL FRAMEWORK

A theoretical framework comprises key ideas, concepts, and theories that explain a phenomenon under study and guide the research process (Weaver, 2022). It provides a structured way to understand the relationship between variables and serves as the foundation for testing study hypotheses. In this study, three key theories provide theoretical grounding: Linehan's DBT Theory of Change, the Biopsychosocial-Cultural Model, and Schachter's Two-Factor Theory of Emotion. These theories help explain the connection between emotional dysregulation and substance use, providing insight into why DBT may be an effective intervention for young adults with SUD.

Linehan's DBT Theory of Change

Dialectical Behavior Therapy (DBT) was developed by Marsha Linehan in the late 1980s to treat individuals with borderline personality disorder who struggled with chronic emotional

dysregulation, self-harm, and suicidal behaviors (Linehan, 1993). The theory proposes that balancing acceptance and change through four core modules; mindfulness, distress tolerance, emotion regulation, and interpersonal effectiveness, enables individuals to manage emotional instability and develop adaptive coping mechanisms (Linehan, 2015; Neacsiu et al., 2014; Miller et al., 2020). DBT posits that emotional dysregulation drives substance use as individuals resort to drugs to cope with overwhelming emotions, creating cycles of dependency and maladaptive behaviors (Siedlecki, 2020; Azagba et al., 2021). This theory was relevant to the current study as it provides a structured, evidence-based framework for understanding how emotional regulation skills can reduce substance cravings, prevent relapse, and support long-term recovery among youth with SUD in Kenyan rehabilitation centers (Mwangi et al., 2021; Mertens, 2022).

Biopsychosocial-Cultural Model

The Biopsychosocial-Cultural Model (BPCM) was originally coined by Grinker (1952) and expanded by Engel (1977) to offer a multidimensional framework for understanding health conditions (Maciejewski, 2018). The model proposes that biological factors (genetic predispositions, neurochemical imbalances), psychological dimensions (coping strategies, co-occurring mental disorders), social factors (peer influence, family dynamics, socioeconomic status), and cultural elements (norms, stigma, care-seeking behaviors) interact to shape substance use disorder and emotional dysregulation (Campbell & Stanley, 2014; Mertens, 2022; Azagba et al., 2021; Lynch et al., 2019). This model was relevant to the current study as it contextualizes how Kenya's limited mental health resources, socio-cultural stigma, and urban influences in Kiambu County contribute to substance use patterns, necessitating culturally sensitive, community-driven interventions that address multiple determinants beyond individual psychology (Volkow et al., 2016; Sefidkar & Madadzadeh, 2022).

Schachter's Two-Factor Theory of Emotion

Schachter's Two-Factor Theory of Emotion was introduced by Schachter and Singer (1962) to explain emotions as the product of physiological arousal and cognitive appraisal working together (MacCormack & Lindquist, 2017). The theory proposes that physiological arousal provides emotional intensity while cognitive interpretation assigns meaning, suggesting that individuals can misinterpret arousal sources—such as mistaking withdrawal symptoms for external stressors—leading to maladaptive responses like substance use (Robinson, 2014; Dror, 2017; MacCormack

& Lindquist, 2017). This theory was relevant to the current study as it explains how youth with SUD may misattribute emotional arousal due to trauma or stress, reinforcing cycles of substance dependence, and suggests that DBT's cognitive restructuring and mindfulness techniques can help individuals accurately label emotions and manage distress without resorting to drugs (Linehan, 2015; Muthoni & Njoroge, 2023).

EMPIRICAL REVIEW

Emotional dysregulation is a significant factor contributing to substance use disorder (SUD) among young adults, acting as a predictor of relapse, poor impulse control, and treatment dropout (Daros et al., 2023; Sloan et al., 2020). The inability to regulate emotions effectively often results in heightened vulnerability to substance dependence, as individuals use substances as a coping mechanism for distressing emotions. Understanding the severity of emotional dysregulation in rehabilitation settings is crucial for developing targeted intervention strategies.

Studies utilizing the Difficulties in Emotion Regulation Scale (DERS) have demonstrated a strong correlation between severe emotional dysregulation and increased substance dependence (Sloan et al., 2020). The findings highlight that individuals with higher emotional dysregulation struggle to maintain abstinence, reinforcing the need for emotion regulation interventions in rehabilitation programs. Additionally, gender-based differences in emotional dysregulation have been identified, with research indicating that females often experience higher levels of emotional dysregulation compared to males, contributing to differing treatment outcomes (Lo et al., 2021).

Regional studies further support these findings. Research conducted in South Africa by Malinga and Wassenaar (2019) found that individuals with high emotional dysregulation are more likely to relapse within six months of completing treatment. The study emphasized that interventions focusing on emotional stability are essential in reducing relapse rates. Similarly, a meta-analysis by Aldao et al. (2022) revealed that individuals with severe emotional dysregulation are 2.8 times more likely to develop SUD and face a 35% higher relapse risk post-treatment, underscoring the urgency of integrating emotion-focused therapies into addiction treatment.

In the Kenyan context, Omondi and Wanjiru (2023) conducted a study on emotional dysregulation among youth in rehabilitation centers and found that 72% of individuals exhibited significant

difficulties in emotional control. This challenge poses a major barrier to effective treatment and long-term recovery. The study further highlighted the necessity for structured therapeutic interventions, such as Dialectical Behavior Therapy (DBT), to enhance emotional regulation and reduce the likelihood of relapse. Given these statistics, rehabilitation programs in Kiambu County should prioritize strategies that address emotional dysregulation as a core component of addiction treatment, ensuring sustained recovery outcomes for affected young adults.

Further studies provide additional evidence of the impact of emotional dysregulation on substance dependence. A longitudinal study conducted by Weiss et al. (2021) followed individuals undergoing treatment for SUD over a two-year period. The findings indicated that individuals with high emotional dysregulation scores on the DERS scale had a 48% higher likelihood of relapsing within the first year of recovery. The study recommended that rehabilitation centers integrate structured emotional regulation programs alongside conventional SUD treatment to improve outcomes.

A study by Tull et al. (2021) explored the neurological mechanisms underlying emotional dysregulation and substance use. Using functional MRI scans, the research demonstrated that individuals with SUD exhibited hyperactivity in the amygdala, a brain region associated with emotional reactivity, and reduced activity in the prefrontal cortex, which regulates impulse control. These findings highlight the neurobiological basis of emotional dysregulation and its role in substance dependence, emphasizing the need for interventions targeting both emotional and cognitive control mechanisms.

In another study, Fox et al. (2022) examined the effects of mindfulness-based interventions on emotional dysregulation among individuals in rehabilitation programs. The research found that individuals who participated in structured mindfulness training reported a 36% reduction in emotional dysregulation symptoms compared to those receiving traditional SUD treatment alone. The study suggested that mindfulness techniques be incorporated into rehabilitation programs to help individuals develop healthier coping mechanisms for distressing emotions.

METHODOLOGY

The study was anchored in post-positivism, a philosophy that considers systematic research while recognizing the impossibility of absolute objectivity (Weaver, 2022). A quasi-experimental design was employed to examine DBT's effectiveness in treating emotional dysregulation among youth with SUD in Kenya, allowing ethical, real-world testing where random assignment was not feasible. The study was conducted in four rehabilitation centers in Kiambu County chosen for comparable demographics, accessibility, and established treatment programs. The population consisted of youth aged 18–35 diagnosed with SUD and emotional dysregulation in Kiambu County, an area affected by illicit brews such as chang'aa and muguka. From 155 inpatients across four facilities, 68 participants were selected using purposive and random sampling, ensuring representation for experimental and control groups. Eligibility was confirmed through DERS-16, with exclusions for acute psychiatric or medical conditions.

Standardized instruments included a socio-demographic questionnaire and DERS-16 for emotional regulation, both validated with Cronbach's alpha values above 0.85. Instruments were pretested at a comparable center to ensure cultural appropriateness and clarity. Ethical approvals were obtained from institutional and governmental bodies, with participants providing informed consent emphasizing confidentiality, voluntary participation, and withdrawal rights. Intervention participants underwent 8 structured DBT sessions over eight weeks covering mindfulness, distress tolerance, emotion regulation, interpersonal effectiveness, radical acceptance, relapse prevention, and closure, while control participants received Treatment as Usual (TAU) consisting of unstructured counseling. Data were double-entered, consistency-checked, and securely stored, with SPSS v29 used for statistical analysis including chi-square tests, correlations, regression, ANOVA, paired t-tests, and effect size calculations to evaluate prevalence, relationships, and treatment effectiveness.

RESULTS AND DISCUSSION

This objective sought to assess the prevalence of emotional dysregulation among the youth with substance use disorder in selected rehabilitation centres in Kiambu, Kenya. The Difficulties in Emotion Regulation Scale - 16 item version (DERS-16) was used to assess the emotional

dysregulation. The total score ranges from 16-80 with higher scores indicating more difficulties with emotion regulation. Subscale raw scores have several ranges listed below. The scale is scored on a Likert scale ranging from 1(Almost never) to 5(Almost always). Thus, total scores from 16-24 would mean minimal problems of emotional dysregulation. While there is no universally accepted cutoff for DERS-16, this study categorized emotional levels as follows as; minimal (16-24), Mild (25-40), Moderate (41-55) and severe (56-80). Table 1 represents the prevalence of the various levels of emotional dysregulation among the study participants.

Table 1: Prevalence of Emotional Dysregulation among the Respondents

Levels/Severity of emotional dysregulation	Difficulties in Emotional Dysregulation				Total	
	None (16-24)		High (25-80)		N	%
	N	%	N	%		
Minimal (16-24)	11	10.2%	0	0.0%	11	10.2%
Mild (25-40)	0	0.0%	25	23.1%	25	23.1%
Moderate (41-55)	0	0.0%	56	51.9%	56	51.9%
Severe (56-80)	0	0.0%	16	14.8%	16	14.8%
Total	11	10.2%	97	89.8%	108	100%

Table 1 presents a total of 97 participants (89.8%) exhibited some level of emotional regulation. Among these, 25 (23.1%) had mild dysregulation, 56 (51.9%) showed moderate dysregulation, and 16 (14.8%) had indications of severe emotional dysregulation. 11(10.2%) of the respondents had minimal emotional dysregulation. The emotional dysregulation had different scales, which are non-acceptance (3 items: 9, 10, 13): The Nonacceptance of Emotional Responses subscale assesses negative secondary responses to negative emotions and non-accepting reactions to distress (range 3-15)-Goals (3 items: 3, 7, 15). The Difficulties Engaging in Goal-Directed Behavior subscale measures difficulties concentrating and accomplishing tasks when experiencing negative emotions (range 3-15)-Impulse (3 items: 4, 8, 11): The Impulse Control Difficulties subscale reflects difficulties remaining in control of behavior when experiencing negative emotions (range 3-15)-Strategies (5 items: 5, 6, 12, 14, 16): The Limited Access to Emotional Regulation Strategies subscale assesses the belief that little can be done to regulate emotions effectively when upset (range 5-25)-Clarity (2 items: 1, 2): The Lack of Emotional Clarity subscale reflects the degree to which individuals know and understand the emotions they experience (range 2-10). The prevalence for each of these scales is as shown in Table 2.

Table 2: Prevalence of Emotional Dysregulation for the Different Scales (N=110)

Emotional dysregulation scale	Level	N	%
Nonacceptance of emotional responses,	Low (3-9)	79	73.1
	High (10-15)	28	25.9
	Total Valid	107	99.1
Difficulty engaging in goal-directed behavior,	Low (3-9)	65	60.2
	High (10-15)	43	39.8
	Total valid	108	100.0
Impulse control difficulties,	Low (3-9)	58	53.7
	High (10-15)	50	46.3
	Total valid	108	100.0
Limited access to emotion regulation strategies	Low (5-15)	77	71.3
	High (16-25)	31	28.7
	Total valid	108	100.0
Lack of emotional clarity.	Low (2-6)	88	81.5
	High (7-10)	20	18.5
	Total valid	108	100.0

Descriptive statistics were calculated for the five subscales of emotional dysregulation. The majority of participants reported low levels of non-acceptance of emotional responses ($n = 79$, 73.1%), while 25.9% ($n = 28$) scored high on this subscale. In terms of difficulty engaging in goal-directed behaviour, 60.2% ($n = 65$) scored in the low range, whereas 39.8% ($n = 43$) scored high. For the Impulse control difficulties 58 (53.7%) had low scores, while 50 (46.3%) reported high levels of difficulty, with 46.3% ($n = 50$) scoring high. Limited access to emotion regulation strategies was reported high by 28.7% ($n = 31$), while 71.3% ($n = 77$) scored low on this dimension. Finally, lack of emotional clarity was low for 81.5% of participants ($n = 88$), with 18.5% ($n = 20$) scoring high.

Discussion of the Findings

The present study examined the prevalence and clinical implications of emotional dysregulation among youth with substance use disorder (SUD) in rehabilitation centers. Findings revealed that 89.8% of participants experienced emotional dysregulation, with the majority presenting with moderate levels. These results underscore that emotional dysregulation is not peripheral but central to the lived experiences of youth with SUD. Importantly, the study findings reflect existing literature by highlighting the vulnerability of youth populations, whose emotional regulation systems are still maturing, thereby intensifying relapse risk.

The high prevalence of emotional dysregulation observed in this study is consistent with prior evidence that individuals with SUD often struggle to regulate emotions adaptively (Linehan, 1993; Gratz & Roemer, 2004). The finding that most participants fell within the moderate range suggests that while some regulatory capacity exists, it is insufficient for long-term recovery. This supports Harned et al. (2013), who demonstrated that without targeted emotion regulation training, emotional instability fuels reliance on substances as a maladaptive coping strategy. Situated within the Kenyan rehabilitation context, the present study highlighted emotional dysregulation as a major clinical concern that transcends cultural contexts.

Participants frequently demonstrated experiential avoidance; difficulty accepting emotional experiences, which has been previously identified as a precursor to substance use (Tull et al., 2010). These findings align with DBT theory, which emphasizes that distress intolerance perpetuates maladaptive behaviors such as substance use (Linehan, 1993). Consistent with Russell et al. (2019), the results suggest that structured skills-based interventions like mindfulness and distress tolerance can reduce emotional avoidance and provide healthier ways of engaging with distressing emotions. The clinical implication is clear: without targeting emotional avoidance tendencies, detoxification-focused rehabilitation may fail to address the root cause of relapse.

The observation that emotional distress interfered with participants' ability to sustain focus on recovery goals mirrors prior evidence that emotional turmoil disrupts executive functioning and treatment engagement (Daros et al., 2024; Cavicchioli et al., 2023). This finding aligns with recommendations from DBT-based relapse prevention literature, which emphasize structured skills practice to help clients stay engaged even under emotional duress. Incorporating DBT-based mindfulness and emotion regulation skills into SUD treatment intervention programs may therefore enhance goal-directed persistence, resonating with Ndirangu et al.'s (2022) findings in Kiambu County that mindfulness training reduces emotional distress and cravings.

A substantial number of participants reported experiencing considerable difficulties with impulse control, which is widely recognized as an indicator of relapse risk (Cavicchioli et al., 2023). These findings corroborate prior studies showing that youth with SUD are particularly prone to impulsive behavior when experiencing heightened emotional stress (Harned et al., 2013). The current study extends this knowledge by contextualizing impulse control difficulties within the Kenyan youth

rehabilitation setting, reinforcing the importance of integrating mindfulness-based relapse prevention and executive functioning exercises. These strategies echo the opposite action technique highlighted by Linehan (2015) and empirically supported by Neacsiu et al. (2014), which helps clients override impulsive urges by engaging in adaptive behaviors contrary to immediate emotional states.

Findings indicated that participants felt inadequately equipped with coping mechanisms, a factor previously linked to poor relapse prevention outcomes (Mazlomi Barm Sabz et al., 2020). This is consistent with evidence from Russell et al. (2019) and Kliem et al. (2010), who emphasized the necessity of teaching practical coping skills to reduce reliance on substances. Moreover, participants struggled with emotional awareness, echoing findings from Beaulac et al. (2018) and Harvey et al. (2019), which linked poor emotional recognition to sustained dysregulation and relapse risk. The present study therefore highlights alexithymia-like tendencies within SUD populations, suggesting that reflective journaling and guided emotional identification exercises may be valuable clinical additions.

The present findings strongly reinforce the view that emotion regulation is not ancillary but central to effective rehabilitation and treatment of substance use disorders. This resonates with Cavicchioli et al. (2023), who highlighted emotional stability as essential for long-term recovery, and with Gross (2015), who emphasized adaptive coping alternatives. Importantly, this study extends prior work by situating these dynamics in a youth population, where neurodevelopmental immaturity may further complicate emotional regulation (Daros et al., 2024). Failure to address these challenges risks perpetuating relapse cycles, particularly in the youth whose heightened reactivity increases their vulnerability.

Clinically, these findings collectively underscore the clinical imperative of embedding structured emotion regulation training into SUD treatment for youth. DBT and mindfulness-based approaches have demonstrated efficacy across diverse contexts (Linehan et al., 2006; Kliem et al., 2010; Ndirangu et al., 2022), and this study supports their relevance in Kenyan rehabilitation centers. Theoretically, the results lend weight to affect regulation models of addiction, affirming that maladaptive emotional processing is a primary driver of substance use, not merely a secondary

consequence. By documenting the extent and nature of dysregulation among Kenyan youth, this study contributes culturally grounded evidence to a predominantly Western literature base.

This study confirms that emotional dysregulation is highly prevalent among youth with SUD, with manifestations including experiential avoidance, cognitive interference involving lack of acceptance, poor impulse control, limited coping strategies, and deficits in emotional awareness. These findings are broadly consistent with prior while also contributing new insights into developmental vulnerabilities and contextual factors within rehabilitation settings. The evidence underscores the importance of integrating DBT into youth rehabilitation programs as a means of breaking through the cycle of relapses and supporting sustainable recovery.

CONCLUSION

The study concludes that emotional dysregulation is pervasive and clinically significant among youth with substance use disorder in selected rehabilitation centers in Kiambu County, Kenya, with participants exhibiting difficulties across multiple dimensions including non-acceptance of emotional responses, difficulty engaging in goal-directed behavior, impulse control challenges, limited access to emotion regulation strategies, and lack of emotional clarity. The high prevalence underscores the urgent need to reframe rehabilitation and substance use treatment beyond detoxification and abstinence-based models to prioritize fostering comprehensive emotional regulation skills through structured, evidence-based interventions such as Dialectical Behavior Therapy. Traditional approaches that focus primarily on physical detoxification fail to address the underlying emotional instability that drives substance use behaviors and perpetuates cycles of relapse, leaving youth vulnerable to continued substance dependence. The findings provide empirical evidence supporting policy reforms and clinical practice changes that integrate emotion-focused therapeutic approaches into Kenya's rehabilitation framework, ultimately reducing relapse rates, improving long-term recovery outcomes, and decreasing the societal burden of substance use disorders among the youth population.

RECOMMENDATIONS

Based on the findings of this study, several key policy recommendations emerge that can help address the emotion regulation. Practitioners need to integrate emotion regulation assessment and

interventions when working with youth with substance use disorder (SUD), where skills such as mindfulness, distress tolerance, emotional regulation, and interpersonal effectiveness are incorporated as fundamental components of every client's care plan. Rather than treating these as optional or supplementary, they are to be embedded as essential modules in the treatment process. This ensures that individuals are equipped with practical strategies to manage difficult emotions, which are often at the root of cravings management, substance misuse, and comorbid mental disorders, thereby reducing the likelihood of relapse.

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