

**AN EVALUATION OF ST. MARTIN CATHOLIC SOCIAL  
APOSTOLATE'S ADDICTION TREATMENT APPROACH,  
AND INTENSIVE OUTPATIENT REHABILITATION  
PROGRAMME**

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**Publication Date: February 2026**

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**ABSTRACT**

**Purpose of Study:** The purpose was to evaluate the effectiveness of St. Martin CSA's addiction treatment approach and IOP in improving clients' quality of life and facilitating recovery.

**Problem Statement:** Laikipia County shares a significant portion of 35 million people in substance addiction globally. St. Martin (CSA) seeks to address this gap through the community-based intervention. The effectiveness of the approach remained largely unknown.

**Methodology:** Employing a mixed-method research design, the evaluation involved 133 program beneficiaries and key stakeholders. Quantitative data were collected through structured questionnaires, while qualitative insights were gathered from focus group discussions and interviews. Percentages and means, descriptive statistics, and one-way ANOVA inferential statistics were used to compare clients' functioning pre- and post-treatment. Qualitative data were analyzed thematically to identify emerging trends.

**Result:** Key findings indicated improvement in overall quality of life post-rehabilitation. Relapse was at 55% within the first six months. However, 86% sustained sobriety at the time of data collection.

**Recommendation:** There was a need for sufficient monitoring of all program activities through proper documentation of individual clients' progress and enhancement of aftercare services.

**Keywords:** *Intensive Outpatient Rehabilitation, St Martin CSA, Addiction Treatment Approach, Community-Based Rehabilitation*

## **INTRODUCTION**

St. Martin Catholic Social Apostolate (St Martin CSA) is a grassroots organization registered as a trust with the main aim of strengthening community capacities to care for and empower vulnerable people and marginalized groups by unlocking community capabilities and shifting perspectives about the poor and vulnerable people. They envision a just society in which communities uphold dignity and respect the voices of vulnerable and marginalized people. Within the vision is the Mental Health Program, established in 2010, through which a population of approximately 500,000 people in Laikipia, Nyandarua, and Baringo Counties is served. It also has outreach in Nakuru and Nairobi Counties. As a component in the mental health program, St. Martin CSA provides a free substance and drug addiction rehabilitation programme providing a range of interventions, including outreach, prevention, rehabilitation, and aftercare support services for individuals recovering from alcohol and drug addiction. Intensive Outpatient Rehabilitation intervention, which aims at providing comprehensive treatment while allowing recoverees to remain integrated within their communities, marks its uniqueness. This study assessed the effectiveness of the St Martin Rehabilitation approach and intensive outpatient rehabilitation program implemented by the organization to enrich it.

## **STATEMENT OF THE PROBLEM**

Substance and drug addiction remain a major factor in breeding an undignified, disrespected, marginalized, and vulnerable population within the community. To achieve St Martin CSA's vision for a just society where the vulnerable and marginalized are dignified and respected, a focus on rehabilitating people who are trapped in addiction is inevitable. To this population, rehabilitation services are out of reach due to the cost implications. Free, cost-effective rehabilitation as provided in St. Martin CSA provides hope. An evaluation of the effectiveness of the approach and IOP quantifies the extent to which the vision is being realized and gives direction to the future of the rehabilitation program with a focus on maximizing benefits.

## **RESEARCH OBJECTIVES**

The evaluation aimed at achieving two specific objectives.

- i. To assess clients' level of functioning before and after treatment under St Martin CSA's Addiction Treatment Approach and Intensive Outpatient Rehabilitation Programme
- ii. To evaluate the effectiveness of St. Martin's treatment approach and Intensive Outpatient Rehabilitation Program in facilitating clients' recovery.

## **RESEARCH QUESTIONS**

- i. How functional in quality of life were clients before and after addiction treatment under St Martin CSA's Addiction Treatment Approach and Intensive Outpatient Program?
- ii. How effective was St. Martin's treatment approach and Intensive Outpatient Rehabilitation Program in facilitating clients' recovery?

## **LITERATURE REVIEW**

### **Quality of Life of People in Addiction before Rehabilitation**

Globally, alcohol and drug addiction have become significant public health challenges, affecting individuals, families, and communities. According to the World Health Organization (WHO), over 35 million people worldwide suffer from substance use disorders (WHO, 2021).

The consequences of addiction are far-reaching, including physical and mental health problems, social marginalization, and an increased risk of crime and poverty. On this basis, the African Union recognized substance abuse as a key health and development issue, urging member states to adopt comprehensive policies and programs to address addiction (AU, 2020). Kenya, in particular, has faced a growing epidemic of alcohol and drug abuse. National Campaign against Drug Abuse NACADA, (2022) reports on the status of drug and substance abuse in Kenya indicated a sustained high prevalence rate in alcohol and drug abuse in the country from 2012-2021. Notably, Laikipia County (the target area of St Martin CSA's Mental Health Interventions) witnessed a sharp rise in alcohol and drug addiction. In 2017, approximately 6% of Laikipia's population struggled with alcohol and drug dependency, hence the relevance of St Martin CSA Mental Health Intervention.

Increase in drug and substance use has been associated with physical and mental health challenges, increased criminality, and myriads of socioeconomic challenges such as poverty, family and marital disintegration, illiteracy, and high mortality rates at the individual, family, community, and societal level (Khan et al, 2023; Kuria, 2013; Nyaga et al., 2021). In a study by Khan et al (2023) on adolescent substance and drug abuse in India, 72.7% (Very Poor 40.9% and Poor 31.8%) reported low quality of life, indicative of the degrading effect of drugs and substance abuse. In Kenya, separation and divorce rates among the people in addiction 21.6% and 14.6% respectively compared to 2.2% and 1.4% (KNBS, 2022; Nyaga et.al, 2021) and family status 40.1% single and 59% married among people in addiction compared to above 78.7% in females and 74.3% in males, as from age group 30 years and above national status (KNBS, 2022; Kuria, 2013) indicate life among the people in addiction is negatively disrupted. The same trends have been registered in illiteracy and economic levels, where respondents were found to be earning very low income (Kuria, 2013; Nyaga et al., 2021), indicating high poverty levels and limited capacity to meet their needs. These socioeconomic factors make people with addiction be disrespected, ignored, and rejected (Anjum et al 2020), reducing their quality of life.

People with addiction are more likely to experience comorbid physical and mental disorders, such as hypertension, liver complications, lung cancer, depression, bipolar disorder, Schizophrenia, phobias, Anxiety, and PTSD (Anjum et al 2020). The rate of 63% depression comorbidity among people with alcohol use disorder and other mental disorders was reported by Kuria (2013). Among addicts of heroin and other hard drugs, McHugh et al. (2020) found a prevalence of comorbid mental disorders among a variety of drugs to range between 8.7% for bipolar disorder to 36.1% for depression. A diagnosis of mental disorder alongside drug addiction complicates recovery (McHugh et al. 2020; Santo et al 2022). Physical and mental complications alongside drug addiction incapacitate the person in addiction in terms of self-care, self-determination, and socio-economic empowerment.

Among the domains of quality of life, the psychological domain is the worst affected by addiction to drugs and substances. Khan et al. (2023) observed the lowest mean in the psychological domain (M=9.8) in quality of life compared to the physical health domain (M=10.5), social relationships (M=10.6), and environmental (M=11.5). This is indicative that by the time the family, community, and society aspects of quality of life are being affected, the individual aspect of quality of life (self-awareness and acceptance, self-identity, self-respect and care, self-worth and efficacy, emotional and behavioural control, and eventually physical health) is highly compromised. These results are in agreement with results from a study from Ethiopia, where the majority of respondents perceived their health as negative, with 34.41% highly dissatisfied (7.8%) and dissatisfied (26.34%), and 39.52% being unsure (Tarekegn et al 2022). The situation would worsen as users of substances and drugs slip into abuse, considering the population was adolescents using substances.

### **St Martin CSA Addiction Treatment Approach and Program**

St Martin CSA is a grassroots community-based organization with its motto being, “*only through community.*” The organization holds that the community has adequate resources to address the needs of its vulnerable members. The organization, therefore, focuses on creating capacity within its target population to enhance their ability and efficacy in addressing their needs. It also rallies the community to meet the financial, social, and emotional needs of its vulnerable members. Under the St Martin CSA Approach, the basic unit of support is the family/household. The approach assumes that individuals close to the person in recovery from addiction have a pivotal role to play in promoting recovery. More so, both the family and the person in recovery should heal together for healthy coexistence and reintegration. The family/household and the person under recovery are given regular follow-ups by the volunteers and occasionally by rehabilitation workers to identify emerging issues and address them. NACADA (2025) observed that community-based treatment should emphasize social reintegration, social support, and local recovery groups by engaging a variety of stakeholders.

Alcohol and drug use and abuse are highly influenced by the social and cultural context in which it happens, as well as innate factors influencing the user or the person in addiction (Ndirangu, 2021). This presents challenges among scholars and practitioners in developing an all-inclusive “quick fix” in addiction treatment. As a result, a wide range of addiction treatment models have emerged as the literature and understanding of addiction continue to grow, with some practitioners preferring a mixed approach to addiction treatment.

St. Martin CSA employs a mixed-method approach in the treatment of drug and substance addiction. The organization’s addiction intervention is an integrative community-based approach that combines biopsychosocial, AA 12-steps and disease models in conceptualizing clients’ experiences with addiction. The mixed method allows for a holistic and personalized treatment plan and hence increases the likelihood of long-term recovery. Each component of the integrated approach used by the organization complements the other in addiction treatment. At the center is the biopsychosocial model. It supports recognition of biological, psychological, and social factors in addiction, and it addresses each domain through a comprehensive treatment approach. The mixed methods approach to addiction treatment used by St. Martin CSA aims to offer: holistic care, meet the unique needs of each patient, reduce the likelihood of relapse, and provide access to support networks beyond the clinical environment to people in and recovering from alcohol and drug addiction.

St Martin CSA conceptualizes substance use disorder as a disease, creating urgency and zeal among the local community to prevent it as well as support those in and recovering from addiction. In addition, it dispels the perception that addiction results from poor child upbringing, lack of morals, deviance, or being bewitched. Quality medical care for clients suffering from drug-induced mental and physical illnesses balances the biochemical reactions, improving the clients’ physiological functioning as well as deliberateness in making choices by reducing compulsivity (Potenza et al. 2011). Psychotherapy, such as cognitive behaviour therapy, on the other hand, addresses underlying mental health issues, such as environmental challenges, cognitive restructuring, and skills of managing depression and other mental disorders that often co-occur with addiction (McHugh et al. 2010). Social support services provided in community-based systems, such as caregivers, community volunteers, peer supporters, spiritual services, and livelihood support, assist in addressing different facets of addiction and help in tailoring treatment plans to meet individual needs based on their biological, psychological, and social conditions. Treatments based on the biopsychosocial model were noted to have improved quality of life and reduced relapse by addressing the comprehensive needs of individuals (Wangensteen, 2021). Embedded AA 12-step helps in

preparing individuals mentally for community-based recovery support. The 12-step facilitation program fosters peer support and accountability, offering individuals a structured spiritual approach to recovery to boost the likelihood of long-term sobriety (AA, 2001; Kelly et al., 2020).

The program is designed to operate in three phases, each assisting clients at different stages of behavior change (NIDA, 2020): 1) Outreach phase, 2) Treatment Phase, and 3) Aftercare Phase. The outreach phase focusses on people who are active in drugs and substance abuse, their caregivers, and their hosting community. At the treatment phase, the program is an outpatient program with an aspect of inpatient engagement for 13 weekends, which makes it unique. Clients are provided with free rehabilitation services, and therefore, the services are accessible. The incorporation of the inpatient component introduces some structure where clients are shielded from weekend temptations, intensive treatment, and peer support, hence reducing stigma, all of which were identified as weaknesses in outpatient rehabilitation (Kuyeya, 2021; White & Evans, 2020). This treatment program is recommended for persons with substance use dependence ranging from level I to level II, according to the American Society of Addiction Medicine (ASAM) Patient Placement Criteria. Clients are screened to ensure only suitable clients are admitted to the program. Others are supported by the organization to undergo an inpatient program. In the aftercare phase, participants are given a wide range of services according to their needs by the community volunteers and rehabilitation workers. The family and the community are also critical elements in relapse prevention, integration, and socioeconomic empowerment. Individuals recovering from addiction are also linked to their peers as well as AA and NA for further support. Their families and close contacts receive family therapy and other interventions to ensure that they heal together with the client to enhance the chances of seamless reintegration and adjustment to the new behavior.

### **Clients Functioning after Rehabilitation in terms of Quality of Life**

Sinking into addiction is a progressive reduction of quality of life in all its dimensions, being physical, social, psychological, and environmental. Treatment and rehabilitation should aim at improving these domains of quality of life affected by alcohol addiction. WHO (2000) guides that outcome measures may be selected from five broad domains: 1) Maintenance of abstinence/reduction in substance use. 2) Improvement in personal and social functioning. 3) Improvement in mental and physical health. 4) Reduction in health risk behaviors, and 5) Overall improvement in the level (amount) of recovery capital. The 2nd, 3rd, and 4th criteria focus on changes in clients' quality of life. In line with WHO guidance MOH, (2017) emphasized that rehabilitation programs are meant to reduce the risk of relapse by supporting change in one's social functioning, personal wellbeing, as well as that of their place, community, and the wider society.

Gachara, (2020), in a study in Kirinyaga County Kenya, observed that 75.2% and 71.7% of respondents reported satisfaction in their quality of health (42.6% at very much and 32.6% at extremely satisfied) and Quality of life (44% at very much and 27.7% at extremely satisfied), respectively, after treatment on a 6-score scale. In specific domains, the psychological domain was rated very high with 74% in very high (M=11.52, maximum score 15, SD=2.24), Social Relations domain was at a high level of 70.2% in very high (M=22.8, maximum score 30, SD=4.22). Physical health and environmental domains were rated at moderate levels, with 41.1% at very high (M=23.18, maximum score 35, SD=3.75) and 46.1% at very high (M=27.45, maximum score 40, SD=5.13), respectively. The results suggested that domains of quality of life do not develop at the same rate. Respondents were drawn from outpatient and inpatient programs from Mathari Hospital, hence, could be different from results from other institutions and modes of treatment.

In the process of recovery, clients grow to become more self-conscious and reflective, a product of awareness and self-identity on addiction and recovery (Searidge Foundation, 2022). Improving self-control and self-identity implies the need to focus on clients' psychological domain as a key factor in maintaining sobriety and making conscious decisions on all other domains of life. The process of recovery is a progressive, holistic improvement, freeing the client from factors that predisposed them to drugs and substance abuse and addiction. The rate of reduction of the factors depends on the complexity of the underlying functioning dynamics. Kuria (2013) registered a decrease in comorbidity among those who stopped (55.9% compared to those who relapsed, 44.1%), indicating improvement in physical and mental health. In addition, craving among those who stopped reduced to not every day 76.9% compared to those who relapsed 23% signifying regaining control as biochemical reaction normalized and psychosocial triggers reduced.

Kuyeya (2021) in the study on effectiveness of treatment and rehabilitation programs for drug and substance dependence in Mombasa County, Kenya, observed that after treatment clients improved in education (33%), improved in legal status (42.6%), stopped or reduced drugs use (66.1%), were accepted by family (57.4%) and started enjoying good health (59.8%). These results corroborated Gachara's (2020) findings that social and psychological domains evolved at a higher rate than physical and environmental domains. The results indicated that clients improved in social status, reducing disrespect and rejection from family and community, in addition to good health, hence a reduction in stress.

### **Effectiveness of Rehabilitation Programs in Improving Clients' Quality of Life**

WHO 2000 provides guidance in assessing the effectiveness of rehabilitation programs. In the guidance, four assessment criteria are provided. 1) Are the treatment activities implemented as were initially intended? 2) Is the treatment program getting the intended results? 3) Were the resources, such as money, community, and staff, appropriately used? and 4) Was the treatment program worthwhile? This question provides a framework for assessing whether the rehabilitation program was effective. Many studies have been done on the effectiveness of different rehabilitation approaches and programs across the globe. Many studies support the idea that individuals who actively participate in 12-step programs are more likely to maintain long-term abstinence. Attending AA regularly is more likely to achieve sustained sobriety compared to those who do not (Kelly et al., 2020; White and Evans, 2020). The group participation improved emotional well-being, self-esteem, and coping mechanisms, and reduced the sense of isolation that is often associated with addiction. Consequently, the combination of peer support and the structured framework was cited as central to the success of long-term recovery (Kelly et al. 2020).

The biopsychosocial model is effective in treating addiction by offering a comprehensive approach that addresses the full spectrum of factors contributing to substance use. Combining pharmacotherapy, psychotherapy, and social support is more effective in reducing heavy drinking and promoting long-term abstinence than either of the interventions used in isolation. The use of the pharmacological, brain-stimulating, and behavioral approaches has been found to achieve long-term remission Bassuk et al., 2016; Jonas et al., 2014). Biopsychosocial treatment in community-based recovery models is particularly successful in increasing engagement in recovery and reducing relapse rates, and provides an important buffer against social determinants that might otherwise lead to relapse (Bassuk et al. 2020).

Outpatient rehabilitation has been evaluated to have low levels of success. Some registered success rates in a period of one year ranged from 53% in the United Kingdom, 48% in the United States, 45% in Brazil, and 39% in Kenya (Oliveira & De Souza, 2022; White and Evans, 2020; Gachara, 2020). The rates are lower than in inpatient programs. Success rates of inpatient

rehabilitation measured by different studies in different countries range from 68% in the United States, 65% in the United Kingdom, 56% in India, 52% in South Africa, and 53% in Kenya (Johnson, Lewis, and Singh, 2021; Volkow et al., 2016; Gachara, 2020).

Some of the established reasons for low success rates are exposure to triggers, lack of structured environment, social stigma, and lack of access to comprehensive care (McHugh et al., 2020; Kuyeya, 2021; White and Evans, 2020). To overcome the challenges of low success rates, White (2020) suggested strengthening social support, such as encouraging attendance in peer-led groups like AA and NA in outpatient programs. In addition, Potenza et al. (2011) proposed more intensive outpatient options, such as day programs that require individuals to stay for several hours. Higher success in inpatient rehabilitation has been attributed to a controlled environment, reducing exposure to triggers, and providing patients with a focused atmosphere for recovery and provision of medical care (Owino and Odeny, 2020). Despite the success, inpatient programs are expensive, hence limiting accessibility and isolating clients from the natural environment hence need for reintegration after rehabilitation (Kuyeya, 2021). Volkow et al (2016) recommended structured aftercare, including outpatient counseling and peer support groups, to improve inpatient mode of treatment, while Johnson et al. (2021) proposed policy intervention by the introduction of sliding scale fees by the government to improve accessibility.

Intensive outpatient rehabilitation (IOP) programs are generally positioned between standard outpatient and inpatient treatment models in terms of intensity and outcomes. They achieve moderate but meaningful success rates compared to inpatient and outpatient treatment programs. Studies estimate its success rate at 60% in the United States and 62% in the United Kingdom, 50% in Mexico, and 47% in Nigeria and Kenya (Kelly and Humphreys, 2021; McCarty et al., 2014; Volkow et al., 2016; Gachara, 2020). The success rate is largely attributed to the balance that IOPs strike between structured therapeutic engagement and the flexibility that allows participants to maintain family, social, and economic responsibilities. However, intensive outpatient programs also present notable challenges. The substantial time commitment required may limit participation among individuals with full-day work or caregiving responsibilities, and continued exposure to home and community environments can increase vulnerability to relapse due to persistent triggers (Volkow et al., 2016). The St. Martin Intensive Outpatient Rehabilitation Program presents a unique hybrid model by incorporating a structured inpatient-style 13-weekend residential camp component within an outpatient framework. This blended approach differs significantly from conventional IOP models described in existing literature, making it difficult to predict outcomes based on prior studies and underscoring the need for a systematic evaluation of the program's effectiveness.

## **RESEARCH METHODOLOGY**

The study adopted the mixed-method research design, where qualitative and quantitative data were collected to answer the research questions. The study involved 133 program beneficiaries representing the total number of clients who received services from St Martin for the past two years. Key stakeholders, including family members, peer supporters, and volunteers, who were purposefully sampled, were also included in the study. Quantitative data were collected through structured questionnaires, while qualitative data was collected through focus group discussions. Statistical analyses, including percentages and means descriptive statistics as well as one-way ANOVA inferential statistics, were used to compare clients' functioning pre- and post-treatment, while qualitative data were analyzed thematically to identify emerging trends.

## RESULTS AND DISCUSSIONS

### St. Martin Program Activities

Respondents rated various program activities on a scale of 1-9 (1 meaning not helpful at all, while 9 meant perfectly helpful. Two means were computed based on two assumptions. Mean (1) assumed that all respondents were to benefit from all the program, considering that screening was done and all were considered vulnerable. Mean (2) Assumed that St Martin CSA's addiction treatment approach is client-based. Different program activities would register different levels of response rate based on the client's informed choice on activity that met his/her need. Table 1 below summarizes the findings.

**Table 1: Impact of Different Program Activities**

Program Activities	Frequency of Program Activities Rating (%) n=50											M (1)	M (2)
	Miss	1	2	3	4	5	6	7	8	9	Total		
Home Visits	18	4	2	0	4	8	4	8	12	40	300	6.00	7.31
Talks and seminars	16	6	2	0	0	4	4	4	22	42	318	6.36	7.57
Outreach	6	2	2	8	2	2	32	4	16	26	315	6.30	6.70
Screening & Assessment	6	2	4	2	2	4	4	8	16	52	360	7.20	7.73
Medical/Psychiatric Support	38	16	2	0	0	2	0	6	4	32	196	3.92	6.09
Weekend Engagement	6	4	0	0	0	0	2	2	16	70	394	7.88	8.19
Individual Therapies	14	8	0	0	0	2	8	4	18	44	322	6.44	7.33
Group Therapies	12	2	2	0	4	6	2	2	16	54	346	6.92	7.69
Marriage /Family therapies	22	8	2	2	2	4	8	6	14	32	268	5.36	6.69
AA 12 Steps	6	0	0	2	0	0	2	4	12	74	404	8.08	8.57
Relapse Prevention	6	20	8	4	2	0	4	6	14	36	279	5.58	7.61
Peer Recovery Couch	20	8	0	0	2	4	4	2	12	48	301	6.02	7.53
Family Support System	14	0	0	0	4	14	4	4	12	48	333	6.66	7.56
Peer Support System	36	6	0	2	2	8	4	6	8	28	221	4.42	6.66
After Care Follow Ups	38	8	4	0	0	2	4	6	6	32	214	4.28	6.90
Livelihood Support	52	14	0	0	0	2	0	2	4	26	152	3.04	6.00
AA and NA Groups	36	18	0	4	0	8	4	8	4	18	172	3.44	5.24
Community Involvement	12	14	6	0	10	10	10	12	0	26	247	4.94	5.43
Total											5,142	5.71	7.04

The highly rated program activity was the AA steps offered during the weekend program at 74% (M1=8.08, M2=8.57) and the weekend engagement at 70% (M1=7.88, M2=8.19). These were core program activities, with only 6% of respondents failing to rate them. The least rated program activities were Livelihood Support with 52% (M1=3.04, M2=6.00), failing to rate the program. Followed by AA and NA Groups with 36% non-response (M1=3.44, M2=5.24). The mean score for the program was M1=5.71, M2=7.04 out of the 9 expected scores

### Functioning before Rehabilitation

#### *Different Aspects of Functioning Before Rehabilitation*

The level of functioning before rehabilitation was evaluated using eight aspects. Results are presented in Table 2 below.

**Table 2: Level of Functioning Before Rehabilitation**

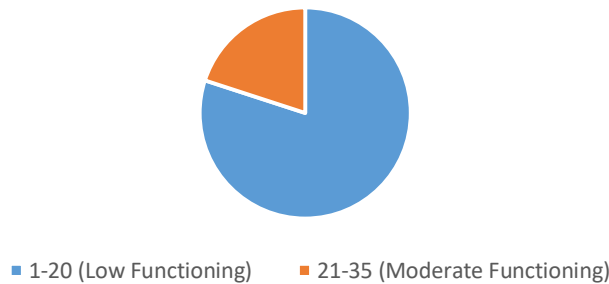
Aspect of Functioning	Cases	Rating Frequency (%)					Mean	SD
		Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree		
Strongly resisted rehabilitation	50	50.0	20.0	4.0	.0	26.0	2.32	1.68
Tried to stop unsuccessfully	50	78.0	12.0	2.0	6.0	2.0	1.42	.95
My problems motivated drug use	49	77.6	10.2	2.0	4.1	6.1	1.51	1.34
My problem with drugs was serious	49	71.4	12.2	0.0	6.1	10.2	1.71	1.35
My physical health was seriously at risk	49	67.3	16.3	8.2	2.0	6.1	1.63	1.13
Self-neglect & risk-taking behaviors	48	72.9	14.6	2.1	6.3	4.2	1.54	1.09
Had extremely low Self-Esteem & worth	48	79.2	8.3	0.0	4.2	8.3	1.54	1.23
Was disrespected and shamed by family and community	48	72.9	14.6	4.2	4.2	4.2	1.52	1.05

Before rehabilitation, respondents were low in all aspects of functioning. The most cited aspect of malfunctioning was low self-esteem and worth with 79.2% (M=1.54), then inability to stop taking the drug of choice (loss of control to drugs) at 78% (M=1.42), and having many problems that motivated drug use at 77.6% (M=1.51). Resisting idea of rehabilitation was lowest, cited by 50% of respondents (M=2.32).

**Overall Functioning Before Rehabilitation**

The total scores for various aspects of functioning were calculated. They were analyzed into three levels of functioning: Low Level (1-20), Moderate (21-35), and High functioning (36-45). Figure1, on the next page, summarizes the findings.

**Figure 1: Level of Functioning Before Rehabilitation.**



The study observed that 80% of respondents operated at low functioning before rehabilitation. Only 20% operated at a moderate level.

**Functioning after Rehabilitation**

The level of functioning after rehabilitation was assessed in fourteen aspects. Respondents rated the items on a 5-point scale from strongly disagree to strongly agree. The data was analyzed in terms of frequency and mean score. Results are summarized in Table 3 below.

**Table 3: Functioning after Rehabilitation**

Aspect of Functioning	Rating Frequency (%)						Total	Mean
	Mis- sin- g	Disa- gree	Som- ew Disa- gree	Not Sure	Som- ew Agr- ee	Stro- ngly Agr- ee		
Acceptance & choosing sobriety	2	4	4	0	20	70	221	4.42
Motivated to change voluntarily	4	4	2	0	4	86	227	4.54
Commitment to the recovery process	4	4	6	2	6	78	218	4.36
Reduced psychosocial problems	4	6	4	4	26	5	205	4.10
Relapse awareness and control	4	10	6	18	16	46	185	3.70
Confidence in sobriety after relapse	2	8	4	10	18	56	199	3.98
Drug abuse is no longer a serious risk	8	10	6	6	12	58	189	3.78
Improved in physical health	4	0	4	8	18	66	189	3.78
Have regained in Self-care	4	6	6	2	14	68	210	4.20
Satisfying family & community life	4	0	4	10	24	58	210	4.20
Improved confidence, resilience & skillfulness	4	6	2	4	18	66	212	4.24
Aware of addiction and recovery	4	6	0	0	8	82	224	4.48
Improved general view of life	4	0	0	0	14	78	225	4.50
Trust the recovery program	4	6	0	0	12	78	222	4.44

Most of the respondents acknowledged the greatest improvement in motivation to change at 86% (M=4.54) and knowledge on addiction and recovery at 82% (M=4.48). Other aspects of functioning that recorded the majority of respondents at the highest score were commitment to the recovery process (M=4.36), Change in view of life (M4.50), and trust in the recovery

process (M=4.44), all with 78%, and acceptance of change (M4.42) with 70%. Awareness of relapse and control (M=3.70) had the lowest percentage of respondents acknowledging the highest score, with 46%.

**Effectiveness of the program**

Effectiveness of the program was evaluated through the dynamics of relapse, respondents’ level of functioning after rehabilitation, and respondents’ perception of the effectiveness of the program. Later, one-way ANOVA was used to assess the mean difference in the functioning of respondents before and after rehabilitation to determine whether the change in the client’s functioning was significant or due to chance.

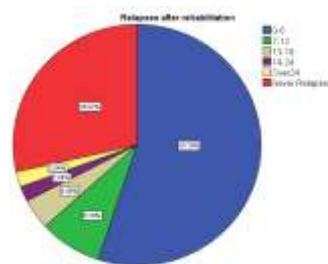
**Relapse dynamics among respondents**

In view of the effectiveness of the program, relapse dynamics were assessed in three dimensions. These are respondents' reported experience with relapse, duration of time taken to regain control after relapse, and confidence that they were sober after relapse.

**Experience with Relapse**

Respondents reported whether they relapsed at different periods after graduating from the 13-week rehabilitation engagement. The periods ranged from 1-6 months, 7-12 months, 12-18 months, 19-24 months, after 24 months, or never relapsed. Results are summarized in Figure 2 below.

**Figure 2: Relapse after Rehabilitation**

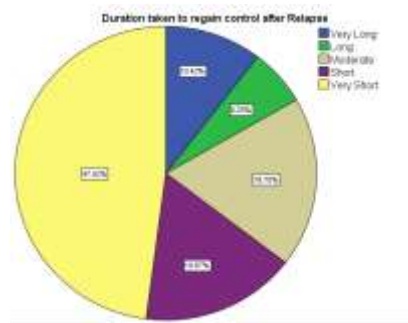


Among the respondents, 55% reported they relapsed in the first 6 months. On the other hand, 28.57% had never relapsed. Only 2.04% of respondents relapsed after remaining sober for more than 24 months.

**Duration to Regaining Control after Relapse**

To support the results on the effectiveness of the program based on the dynamics of relapses, the speed at which the respondents reacted to their relapses was assessed. The duration ranged between Very Short, Short, Moderate, Long, and Very Long. A very short period of relapse would reflect the effectiveness of the program despite the relapse. Results were presented in Figure 3 below;

**Figure 3: Duration Taken to Regain Control**

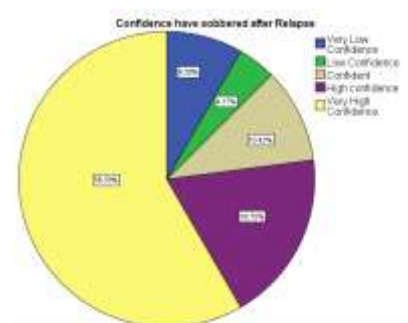


After relapsing, 47.92% of respondents reported they took a very short period to regain control and return to sobriety. In addition, 18.67% took a short period of time. Only 10.42% took a very long duration to regain control. Results indicated the program instilled in clients the capacity for self-reflection and determination.

**Confidence have Sobered despite Relapse**

The extent to which respondents were confident of their sobriety state despite relapse in their journey to recovery after rehabilitation was assessed. The level of confidence was categorized into a five-level scale, being Very Low Confidence, Low Confidence, Confident, Highly Confident, and Very Highly Confident. Results were summarized in Figure 4 below.

**Figure 4: Confidence has sobered after the relapse**

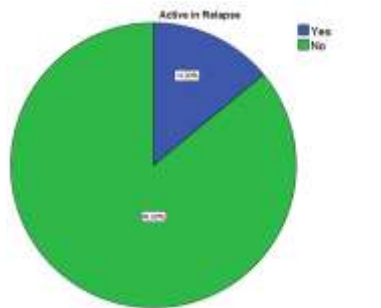


Among the respondents, 58.33% reported that they had regained very high confidence in sobriety even after relapsing. In addition, 18.75% had high confidence. Only 8.33% of respondents had very low confidence that they had sobered. The results indicated low chances of relapsing again.

**Relapse Status**

Participants indicated whether they were still active in relapse or not. The objective was to identify the rate of relapse at the time of data collection. Long-term reduction of relapse experiences can be a good measure of a community-based program's effectiveness. Results were presented in the Figure 5 below.

**Figure 5: Active in Relapse**

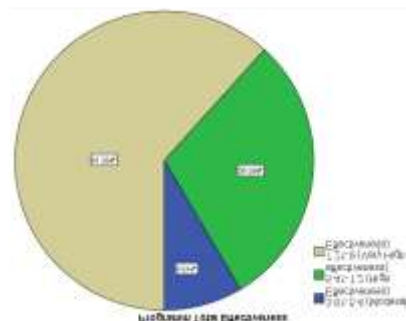


By the time of data collection, 86% of respondents were abstinent from their drug of choice. Only 14% were active in relapse. This was a very high rate of program success.

**Client Perspective on Total Program Effectiveness**

The total score for the effectiveness of all program activities was calculated, and the mean score was generated, depicting respondents’ perspective on program effectiveness. Analysis was based on two assumptions. The community-based recovery program is client-centered; hence, the mean was based on the actual number of program activities each respondent interacted with. The mean scores were analyzed into five levels of effectiveness: 1.00-1.80 (Very Low Effectiveness), 1.81-3.60 (Low Effectiveness), 3.61-5.40 (Moderate Effectiveness), 5.41-7.20 (High Effectiveness), and 7.21-9.00 (Very High Effectiveness). Results were presented in Figure 7 below.

**Figure 6: Respondents' View on Program Total Effectiveness**



The majority of respondents (67.70%) were at a very highly effective level. In addition, 29.79% scored a high effectiveness level. No single respondent was below moderate effectiveness. Results indicated that the program was effective in client’s perspective.

**Improvement in Functioning**

The comparison between the levels of functioning before and after rehabilitation was guided by the hypothesis:

H<sub>0</sub>: There was no mean difference between respondents’ levels of functioning before and after rehabilitation.

One way Analysis of Variance was used to compare the means and therefore determine whether there was a significant mean difference in functioning before and after rehabilitation. Results were summarized in Table 4 below.

**Table 4: ANOVA: Mean difference in functioning before and after Rehabilitation**

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.421	2	1.211	10.198	.000
Within Groups	5.579	47	.119		
Total	8.000	49			

One-way ANOVA analysis indicated there was a significant mean difference between the level of functioning before and after rehabilitation,  $F(2,47) = 10.198$ ,  $p = .000$  at  $p < 0.05$ . The null hypothesis was rejected, meaning the mean difference between levels of functioning before and after rehabilitation was not by chance. The rehabilitation process was therefore effective in improving the functioning of respondents.

## DISCUSSIONS

The program 18 activities for St Martin CSA Intensive Outpatient Program as confirmed by respondents' engagement included: Home Visits, Talks and Seminars, Outreach, Screening and Assessment, Medical and Psychiatric Support, Weekend Engagement, Individual Therapies, Group Therapies, Marriage and Family therapies, AA 12 Steps, Relapse Prevention, Peer Recovery Couch, Family Support System, Peer Support System, After Care Follow Ups, Livelihood Support, AA and NA Groups, Community Involvement. They were equivalent to services offered in other inpatient and outpatient rehabilitation centers UNODC, (2014). The program integrated psychological, social, and community-based strategies to support individuals in recovery. FDGs reported emphasis on fostering resilience, rebuilding social relationships, and promoting positive psychology, explaining reported high abstinence success rates of 86% (Orford et al. 2010).

Weekend Program ( $M_1 = 7.88$ ,  $M_2 = 8.19$ ) impacted the respondents the most. AA Steps was the most impactful activity, while relapse prevention performed poorly from both qualitative and quantitative data. FDG cited the program's flexibility and focus on the real-world application of recovery strategies, which enabled participants to balance rehabilitation with personal and professional responsibilities, as very helpful. Respondents noted that this model allowed them to test skills learned while maintaining autonomy (NACADA, 2025). Weekend Engagement challenged clients to face their resistances, their fears, unresolved psychological pains, and restructure their thinking through awareness creation. Low rating for relapse prevention was the program's weak point, considering weekday's exposure to environmental triggers and social temptations as cited by recoverees during FGD (Njeri et al. 2021). The results corroborated findings that AA/NA participation resulted in abstinence from drugs and substance use (Kelly et al, 2020; White and Evans, 2020).

Outreach service was rated second ( $M_1 = 6.30$ ,  $M_2 = 6.70$ ). Outreach included Home Visits, Screening and assessment, Talks on Addiction and Recovery, and Medication for physical and mental conditions before seeking admission into the program. Community volunteers, peer supporters, and caregivers, in collaboration with St Martin staff, provided the service. Results implied the important role of outreach activities in the recovery process, more so screening and assessment. However, community volunteers, peer supporters, and caregivers' FDGs reported their preparedness was uneven, underlining the need for more structured, timely, and comprehensive interventions to improve the outcomes of rehabilitation efforts as proposed by Orford et al. (2010). The medication activity performed poorly. Some clients probably had

unnoticed comorbid physical and mental illnesses, which made their progress difficult, accounting for the high initial relapse rate (European Union Drugs Agency, 2016).

The least popular service with respondents, both in qualitative and quantitative data, was Aftercare Follow-ups. Results exposed critical gaps, with ratings clustering at lower scores due to weak follow-up systems, inconsistent peer supporters' engagement, and limited livelihood support. Beneficiaries' FDG reported being left lonely, presenting a risk factor in the recovery process (Kuyeya, 2013). These weaknesses point to a disconnect between program delivery and client expectations, emphasizing the need for robust aftercare and structured support, as highlighted by Kelly et al. (2011). The findings mirror general trends in the literature that aftercare follow-ups are the most neglected aspect of treatment due to staffing, funding, attitude, and motivation issues (Kurui, Adeli, and Barasa, 2024). However, beneficiaries' FDG observed that peer and Family support were highly impactful to their emotional well-being, self-esteem, and coping mechanisms, in agreement with Kelly et al (2020) observation.

Respondents' level of functioning was very low, with only 20% functioning moderately before rehabilitation. They were fairly conscious of their malfunctioning ( $M=2.62$ ), probably because they were already frustrated by numerous attempts to stop without success, and therefore admitted they had lost control. In agreement, respondents in recovery FGD identified the enslaving nature of addiction, its effects on their psychological, social, and economic well-being, as well as the impact of the same on family and community life. These findings reinforced the consensus that addiction is a complex condition that affects multiple domains of an individual's life, as postulated by Volkow et al. (2016). Apart from psychosocial problems, their physical health had deteriorated. With reduced resistance, the majority were ready for rehabilitation, but their economic vulnerability disadvantaged them because rehabilitation services for pay were financially out of reach for them. The coming in of St. Martin's free rehabilitation service was a good opportunity, though at an advanced age for the majority, at 41-60 years.

After rehabilitation, respondents functioned remarkably well. The improvement depicted a change process where clients first accepted the challenge to face their fears and psychosocial pains, creating cognitive dissonance with the way they lived, in line with the fourth principle of motivational interviewing intervention (Latchford, 2010). The respondents, then, through self-reflective, educative, and experiential sharing activities during the active rehabilitation period, developed a positive philosophy of life, changing their general view of life. As they became more open to learn they gained more knowledge and awareness on addiction and recovery, as well as on life and self, and became motivated and chose to change despite challenges of withdrawal symptoms, improved on self-care, and better quality of life in family and community, which reduced psychosocial problems. People in recovery's FDG affirmed this observation, viewing recovery as being given a second chance to rebuild their lives. They underscored the importance of a positive mindset and self-efficacy in their recovery process. Both quantitative and qualitative data depicted recovery in terms of abstinence from substances of abuse, financial freedom, improved self-awareness, self-esteem, emotional control, and reintegration into the family and community life, corroborating Johnson et al.'s (2021) concept of recovery from addiction.

The result revealed that the aspect of function that took time to develop is managing relapses, self-efficacy (confidence that drugs are no longer a risk in their life), and regaining physical health, pointing to some weaknesses in the program, mainly in relapse prevention and aftercare activities. All respondents in stakeholders, recoverees, and staff's FGDs agreed that one major challenge is the absence of structured follow-up care after program completion, leaving graduates vulnerable to relapse. The respondents noted limited peer supporters' engagement

and few avenues for continued connection with AA or other recovery networks. They suggested leveraging technology, such as WhatsApp groups or localized AA meetings, could enhance connectivity and improve peer-led support, in support of Kelly et al. (2011). Delay in these three aspects could explain the high rate of relapse (55.10%) within the first 6 months, which is usually high, as reported in other studies at 60-80% (Lin et al., 2012). Additionally, the stakeholders and recoverees perceived inconsistency in livelihood support, creating dissatisfaction and eroding trust among clients. They pointed out that transparent and equitable resource allocation, along with vocational training programs, could bridge this gap. Finally, the disconnect between client expectations and program objectives points to a need for better alignment, communication, and monitoring of program outcomes to ensure that the goals of the intervention are being met. The fifth principle of motivational interviewing recognizes the role of clients' confidence in the process of taking action for behavior change (Latchford, 2010). Despite the weaknesses, the results point out a higher success rate for the St. Martin Intensive Outpatient program. This systematic unfolding of functioning capacity would help the rehabilitating agents to know what to expect and what interventions to fast-track the process.

After relapse majority (47.92%) indicated they took a very short time to regain control from addition to 18.67% who indicated they took a short period of time. The results indicated that the majority of respondents were self-conscious and reflective, a product of awareness and self-identity on addiction and recovery (Searidge Foundation, 2022). The 86% of sobriety depicted a very high success rate for the St. Martin Intensive Outpatient Program compared to the registered rates of 20%-80% relapse rate in Nairobi (Githae, 2016; Kuria, 2013; Kuyeya, 2021). The results as well depicted recovery as a process such that the initial relapses in isolation of accompanying relapse dynamics could not effectively reflect the effectiveness of a program (Martinelli et al 2023), though it calls for concerted efforts to minimize the initial relapse. The one-way ANOVA inferential statistic results confirmed that St. Martin Intensive Outpatient Program was effective in changing the quality of life of the individuals, as demonstrated by improvement of functioning in different aspects.

## CONCLUSION

About the program, the study concluded that: 1. St. Martin client starts their rehabilitation process at a low level of functioning physically, psychologically, socially, economically, and spiritually. 2. St. Martin CSA rehabilitation is an intensive community-based approach that aligns with global best practices and actively brings together all stake holders being professionals, Non-professional volunteers, the donor community, government agencies, and caregivers, in a strong case management base to effectively address the multidimensional nature of addiction by integrating psychological, social, and community-based strategies. 3. St. Martin CSA rehabilitation program under the name Intensive Outpatient Program is a unique integration of outpatient and inpatient methods of rehabilitation in a three-phase process: a) The outreach phase, b) The Treatment Phase, and c) The Aftercare Phase.

Relating to the success of the program: 1. The approach and the program were successful in facilitating the clients' statistically significant improvement in quality-of-life functioning, psychologically, physically, socially, and spiritually. 2. Recovery from addiction through St Martin Intensive Outpatient Program followed a process where they accept the challenge to reassess their lives and admit they had a problem then the gained knowledge and self-awareness on addiction and recovery increasing their motivation and achieve cognitive restructuring eventually they acted to change their life situation or cope with them reducing their personal, social and economic problems to maintain sobriety. 3. The weak link in the program was relapse prevention and Marriage and Family therapies at the treatment phase and the aftercare

follow-up. 4. The lack of structured aftercare services and outpatient rehabilitation limits sustained recovery and increases the risk of relapse. All in all, St Martin CSA's approach to addiction treatment is a unique holistic approach that is effective in the treatment of alcohol and drug addiction.

## RECOMMENDATIONS

- i. The organization should develop comprehensive training programs for volunteers, caregivers, and peer supporters, emphasizing role clarity, technical skills, and emotional resilience to boost their capacity as paraprofessionals in the recovery process.
- ii. There was a need for sufficient monitoring of all program activities through proper documentation of individual clients' progress from onset without compromising confidentiality, proper documentation of all rehabilitation activities, frequent program activity reports, and case conferencing. Such documentation and consultation among staff and other professional stakeholders would enhance consistency in service delivery and timely identification of gaps in services, as well as prompt response to challenges.
- iii. The program should enhance its efficiency in case management after graduating from 13 weekends program. Client engagement in terms of identifying emerging needs and connecting the clients to services to minimize the feeling of abandonment.
- iv. The program should facilitate beneficiaries to access peer support systems by exploring ways of devolving AA and NA groups, may be by facilitating formation and effectiveness of such groups through mobilizing those recovering from addiction to form local chapters, negotiating with established institutions such as churches to provide facilities such as venues and connecting new groups in clients' vicinity to resource persons for guidance and reading materials. Further, the establishment of closely monitored WhatsApp groups for recoverees in a cohort to foster connectedness and support from each other may strengthen the peer support system.
- v. There was a need to expand the concept of livelihood support to include vocational skills, align the clients' expectations to the program's capacity for financial support, equitable distribution, and reduce over-reliance on St. Martin CSA livelihood program financial support for beneficiaries and caregivers to alleviate financial stress, promote sustained recovery, and improve their reintegration into society.
- vi. Owing to the effectiveness of St Martin CSA's addiction treatment approach, the organization should invest in further research and dissemination of the outcomes. First, to contribute to the wider literature in community-based addiction treatment approaches, and second, to upscale its use.

## REFERENCES

- Alcoholics Anonymous. (2001). *Alcoholics Anonymous: The Big Book*. New York: Alcoholics Anonymous World Services.
- Anjum, W., Mubashir, A. S., Watto, S. A., Habib S., Ramzan5, M., and Mahmood, S. (2020). Adolescents with substance use disorders. *Bangabandhu Sheikh Mujib Medical University Journal*, 16(4):198-204
- African Union (2020). African Union Plan of Action on Drug Control and Crime Prevention (2019-2023). <https://www.issup.net/files/2020-09/The%20African%20Union%20Plan%20of%20Action%20on%20Drug%20Control%20and%20Crime%20Prevention%20%282019-2023%29%20160920.pdf>
- Bassuk, E. L., Hanson, J., Greene, R. N., Richard, M., & Laudet, A. (2016). Peer-delivered recovery support services for addictions. *Journal of Substance Abuse Treatment*, 63, 1–<https://doi.org/10.1016/j.jsat.2016.01.003>
- Chi, F. W., Weisner C., Grella, C. E. Hser, Y., Moore, C. and Mertens, J. (2013). Does age at first disorders in Europe (Perspectives on drugs).
- Gachara E. (2020) Perceptions on quality of life among persons recovering from alcohol use in Kirinyaga County, Kenya. *African Journal of Alcohol & Drug Abuse*, 412: 12-26
- Githae, E. N. (2016). Family Emotional Over-involvement and Relapse among Inpatients Alcoholic in Nairobi, Kenya; Nairobi. *IOSR Journal of Humanities and Social Science*, 21(07): 44-50.
- Johnson, K., Lewis, P., & Singh, R. (2021). *Effective Practices in* Johnson, R., Williams, P., & Brown, L. (2021). *Pathways to dignity: The role of Community reintegration in addiction recovery*. *International Journal of Addiction Studies*, 42(1), 56-72.
- Jonas, D. E., Amick, H. R., Feltner, C., Bobashev, G., Thomas, K., Wines, R., and Garbutt, J. C. (2014). Pharmacotherapy for adults with alcohol use disorders in outpatient settings: A systematic review and meta-analysis. *JAMA*, 311(18), 1889–1900. <https://doi.org/10.1001/jama.2014.3628>
- Kelly, J. F., Stout, R. L., Magill, M., & Tonigan, J. S. (2011). The role of Alcoholics Anonymous in mobilizing adaptive social network changes: A prospective lagged mediational analysis. *Drug and Alcohol Dependence*, 114(2–3), 119–126.
- Kelly, J. F., Abry, A., Ferri, M., & Humphreys, K. (2020). Alcoholics Anonymous and 12-step facilitation treatments for alcohol use disorder: A distillation of a 2020 Cochrane review for clinicians and policy makers. *Alcohol and Alcoholism*, 55(6), 641–651. <https://doi.org/10.1093/alcalc/agaa050>
- Khan, R., Ahsan, M. S., Shah, M. T. R., Dutta, B. K., & Nath, M. C. (2023). Quality of life among adolescents with substance use disorders. *Bangabandhu Sheikh Mujib Medical University Journal*, 16(4). <https://doi.org/10.3329/bsmmuj.v16i4.60341>
- KNBS (2022). *Kenya Population and Housing Census: Analytical Report on Fertility and Nuptiality Volume VI*: Kenya National Bureau of Statistics, Nairobi, Kenya.
- Kuria, M. W. (2013). Factors Associated with Relapse and Remission of Alcohol Dependent Persons after Community Based Treatment. *Open Journal of Psychiatry* 3(2): 264-272.
- Kurui, K. D., Adeli, S. and Senior F. B. (2024). Challenges Faced by Rehabilitation Centres in Management of Drug and Substance Abuse in Uasin Gishu, Kenya. *The International Journal of Humanities & Social Studies*, 9(9): 12-16

- Kuyeya, F. (2021). Effectiveness of Treatment and Rehabilitation Programs for Drug And Substance Dependence in Mombasa County, Kenya. *African Journal of Alcohol & Drug Abuse* (6), 3-14
- Latchford, G. (2010). *A brief guide to Motivational Interviewing*. [https://www.drugsandalcohol.ie/17873/1/Motivational Interviewing brief guide.pdf](https://www.drugsandalcohol.ie/17873/1/Motivational%20Interviewing%20brief%20guide.pdf)
- Lin E., Witten K., Casswell S., and You R. (2012). Neighbourhood matters: Perceptions of neighborhood cohesiveness and associations with alcohol, cannabis, and tobacco use, *Drug and Alcohol Review*, 31(4), 402-412, <https://doi.org/10.1111/j.1465-3362.2011.00385.x>
- Martinelli TF, Roeg DPK, Bellaert L, Van de Mheen D, and Nagelhout GE. (2023). Understanding the Process of Drug Addiction Recovery Through First-Hand Experiences: A Qualitative Study in the Netherlands Using Lifeline Interviews. *Qual Health Res.* (10):857-870. doi: 10.1177/10497323231174161. Epub 2023 Jun 6. PMID: 37279186; PMCID: PMC10426251.
- McHugh, R. , Hearon, B. A. and Otto, M. W. (2010). Cognitive behavioral therapy for substance use disorders. *Psychiatr Clin North Am*; 33(3):511-25. doi: 10.1016/j.psc.2010.04.012. PMID: 20599130; PMCID: PMC2897895.
- McHugh, R. K., Sugarman, D. E. Meyer, L., Fitzmaurice, G. M. and Greenfield, S. F. (2020). The relationship between perceived stress and depression in substance use disorder treatment, *Drug and Alcohol Dependence*, *Drug and Alcohol Dependence* 207, <https://doi.org/10.1016/j.drugalcdep.2019.107819>Get rights and content
- NCADA (2022). Fourteenth (14<sup>th</sup>) Edition Biannual Report on the Status of Alcohol and Drug abuse Control in Kenya. [https://parliament.go.ke/sites/default/files/2022-04/Fourteenth%20\(14th\)%20Edition%20of%20BIANNUAL%20Report%20on%20the%20status%20of%20Alcohol%20and%20drug%20abuse%20control%20in%20Kenya%20-%20NACADA.pdf](https://parliament.go.ke/sites/default/files/2022-04/Fourteenth%20(14th)%20Edition%20of%20BIANNUAL%20Report%20on%20the%20status%20of%20Alcohol%20and%20drug%20abuse%20control%20in%20Kenya%20-%20NACADA.pdf)
- NACADA (2025), Community-Based Rehabilitation Framework for Substance Use Disorders, <https://nacada.go.ke/sites/default/files/2025-04/CBR%20Framework%20for%20Substance%20Use%20Disorders.pdf>
- Ndirangu, J. (2021). *Factors Affecting Alcoholics' Participation in Development Projects in Nyahururu Sub-County, Laikipia County, Kenya: Experiences of People Recovering From Alcoholism Before and in Recovery. Masters of Arts Degree Thesis in Sociology. Egerton University.*
- NIDA, (2020) *Recovery at the Crossroads. The Five Stages of Addiction Recovery.* <https://www.racnj.com/the-five-stages-of-addiction-recovery/>
- Njeri, C. W., Kibe, P. W., & Kimani, M. W. (2021). Community-based addiction recovery programs: Effectiveness and challenges in Kenya. *African Journal of Addiction Studies*, 3(2), 45–59.
- Nyaga, J., Mwaura P., Mutundu K., Njeru D., Juma, G. and Were T. (2021) Socio-Economic and Health Consequences of Drugs and Substance Use in Gachie, a Peri-Urban Town on the Outskirts of Nairobi. *African Journal of Alcohol & Drug Abuse*: 6, 67-80
- Orford, J., Copello, A., Velleman, R., & Templeton, L. (2010). *Addiction and family dynamics: A biopsychosocial approach.* *Addiction Journal*, 104(3), 396-409.

- Orford, J., Copello, A., Velleman, R., & Templeton, L. (2010). Family members affected by a close relative's addiction: The stress-strain-coping-support model. *Drugs: Education, Prevention and Policy*, 17(sup1), 36–43.
- Owino, G. E., Ndetei, D. M., Mwayo, A. W., & Khasakhala, L. I. (2020). Challenges in addressing substance use disorders in rural Kenya: The role of community health volunteers. *East African Medical Journal*, 97(7), 233–240.
- Potenza, M. N., Sofuoglu, M., Carroll, K. M., & Rounsaville, B. J. (2011). *Neuroscience of behavioral and pharmacological treatments for addictions*. *Neuron*, 69(4), 695–712. <https://doi.org/10.1016/j.neuron.2011.02.009>
- Santo, T., Campbell, G. Gisev, Martino-Burke, N.D. Wilson, J., Colledge-Frisby, S. Clark, B., Tran, L. T. and Degenhardt, L. (2022) Prevalence of mental disorders among people with opioid use disorder: A systematic review and meta-analysis. <https://doi.org/10.1016/j.drugalcdep.2022.109551>
- Searidge Foundation (2022). Self-Awareness and Addiction. <https://searidgedrugrehab.com/article/addiction-self-awareness/>
- Tarekegn, G. E., G. N., Tilahun, S. Y., Kassew, T., Demilew, D., Oumer, M., Alemu1, K. Yesuf, Y. M., Getnet, B., Melkam, M., Mehari, E. A. and Alemayehu B. F. (2022). Quality of life and associated factors among the youth with substance use in Northwest Ethiopia: Using structural equation modeling. <https://pmc.ncbi.nlm.nih.gov/articles/PMC9488770/pdf/pone.0274768.pdf>
- UNODC (2014) Community-Based Treatment and Care for Drug Use and Dependence Information Brief for Southeast Asia [https://www.unodc.org/roseap/uploads/archive/documents/cbtx/cbtx\\_brief\\_EN.pdf](https://www.unodc.org/roseap/uploads/archive/documents/cbtx/cbtx_brief_EN.pdf)
- European Union Drugs Agency (2016). European Drug Report 2016: Trends and Developments [https://www.euda.europa.eu/publications/edr/trends-developments/2016\\_en](https://www.euda.europa.eu/publications/edr/trends-developments/2016_en)
- Volkow, N. D., Koob, G. F., & McLellan, A. T. (2016). *Neurobiological advances from the brain disease model of addiction*. *The New England Journal of Medicine*, 374(4), 363–371.
- Wangensteen, T., Hvalvik, S., and Bondas, T. (2021). *Substance use disorder and recovery — A qualitative analysis of recovery processes more than four years after treatment*. *Substance Abuse Treatment, Prevention, and Policy*, 16, Article 56. <https://doi.org/10.1186/s13011-021-00372-x>
- White, W. L. (2012). *Recovery/remission from substance use disorders: An analysis of reported outcomes in 415 scientific reports, 1868–2011*. *Drug and Alcohol Review*, 31(1), 93–101. <https://doi.org/10.1111/j.1465-3362.2011.00385.x>
- White, W. L., & Evans, A. C. (2020). *Peer Support in Addiction Recovery Programs: Evidence and Best Practices*. Chicago: Recovery Research Institute.
- World Health Organization (2000). Evaluation of psychoactive substance use disorders treatment. Workbook series. Workbooks retrieved on April 3, 2007 from: [http://www.who.int/substance\\_abuse/publications/psychoactives/en/index.html](http://www.who.int/substance_abuse/publications/psychoactives/en/index.html)

World Health Organization (2021), *Voluntary care model for persons who use drugs resulted in an over 90% completion rate for treatment.*  
<https://www.who.int/philippines/news/detail/12-11-2021-voluntary-care-model-for-persons-who-use-drugs-resulted-in-over-90-completion-for-treatment-rate>

Witkiewitz, K., Vowles, K. E., & McCallion, E. (2019). Processes of change in addiction recovery: Mediators of outcomes. *Addictive Behaviors, 94*, 48-55.