

## The relationship between depressive disorders and substance use among women in addiction recovery in Kiambu County, Kenya

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### Abstract

Depressive disorders have far-reaching ramifications especially to affected women since they cannot manage their lives and families well. The intent of this paper was to investigate the relationship between depressive disorders and substance use among women in addiction recovery in Kiambu County. Descriptive research design was employed to evaluate the four selected recovery centres in Kiambu with a sample of 36 participants from a population of 120 individuals. Data was collected using questionnaires, in-depth interviews and focus group discussions. Descriptive analysis was used for quantitative data while qualitative data was analysed thematically. Correlation analysis was used to establish the relationship between depressive disorders symptoms and substance use. The findings identified domestic violence, feeling guilty and feeling worthless as symptoms of depressive disorder symptoms associated with substance use. A strong relationship was established between

depressive disorders and substance use with more than 60% of respondents attesting to this. Correlation analysis established strong positive ( $r=0.603$ ) association between domestic violence and substance use. The study recommended the recovery centers to engage competent and experienced psychiatrists and psychologists in mental health in order to deliver their services effectively and professionally. The study will benefit both the National and County governments in coming up with effective policies to deal with depressive disorders and substance use among women. This will go a long way in reducing the number of women under substance use in Kiambu County and the country at large.

**Keywords:** Substance use, depressive disorders, treatment and rehabilitation

### Introduction

Globally, depressive disorders are becoming a common risk factor for suicide worldwide. According to WHO [2017] report, depressive disorders are creating critical challenges for individuals with the illness thereby affecting their families, communities, and work place and general populations. The report further posits that 4.4% of the global population has been affected and that the Diagnostic Statistical Manual for Mental Disorders (DSM-5) classifies depressive disorders as disruptive mood deregulation disorder, major depressive disorder associated with major depressive episode, persistent depressive

disorders or dysthymia (WHO, 2017). Related study also shows depressive disorders to be premenstrual dysphonic disorder, substance/ medication-induced depressive disorder, and depressive disorder due to another medical condition. A study by Thomas & Seedat (2018), posits that depressive disorders in adults increase in prevalence of 20 to 30 years of age whereas the illness continues to increase in middle age. The study further postulate that among the depressive disorders that were introduced during the review in the changes of DSM5, were the disruptive mood dysregulation disorder (DMD) and the premenstrual dysphonic disorders (PMDD) as the two new disorders included in the manual.

A report released by WHO (2020) postulate that women are more prone to depressive disorders than men. The study further posit that at least 800,000 individuals die on yearly basis due to suicide related to depressive disorders, which is the second leading cause of death between 15 to 29 years. In India and China, WHO (2017) reported the number of depressive cases were estimated to be 322 million. A study carried out in America by Liu et al (2019), posit that the number of cases of depression worldwide increased from 17.2 million in 1990 to 25.8 million in 2017 representing an increase of 49.86%. Another study by Morin (2020) reveals that the statistical percentage of women with depression is 8.7% and 5.3% depressive issues with men. A study carried out within 26 counties in United Kingdom (U.K), postulate that depressive disorder had

a high prevalence that contributed suicidal, homicidal and disability in the world (Mental Health Foundation, 2016).

The global report released in Austria - Vienna, reveals that women with depressive disorders are more likely to engage in substance use leading to bizarre behaviours (UNODC, 2018). In Switzerland, the most likely population to get depressive disorders are those faced with poverty, lack of employment, grief, divorce or separation, trauma, relocations, alcohol and drug use (WHO, 2017). In Hong Kong the number of women taking newer anti-psychotics drugs for the depressive treatment was estimated to rise by 65% (WHO, 2017). A statistical study carried out in Indian States on mental disorders showed that major depressive disorders (MDD) and anxiety disorders (AD) manifested predominantly during adulthood (WHO, 2019). The study further supported that the prevalence percentages 3.1-3.6% for depressive disorders, 3.0-3.5% for anxiety disorders and 0.2-0.3% for schizophrenia disorder. Thus, depressive disorders outnumbered other disorders varied 1.9 times among the Indian States with 45.7 million.

In Africa there are similar challenges of depressive disorders affecting women. A study carried out in Uganda by StrongMinds (2016) revealed that by year 2015 over 1800 women were diagnosed with depressive illnesses. The study further posits that an estimation of 86% of women was treated through therapy intervention. The same study projected that by year 2025 an approximate number of two million women with depressive issues will

have been treated. The studies across sub-Saharan Africa especially in Ghana and Côte d'Ivoire showed high prevalence of antenatal depression rating from 27 and 33% (Osok et al., 2018). Similar studies showed that in Ethiopia, the prevalence of antenatal depression was 24.94%, and in Tanzania it was 39.5%.

Kenya is reported to have higher number of populations with depressive issues. A study carried out by Jacob (2017) states that an estimate statistic of 1.9 million Kenyans is ailing from depression related to substance abuse. The study further posits Kenya as being ranked the sixth country in Africa with cases of depressive disorders. Another study carried out in Nairobi, Kenya by Osok et al., (2018) postulates that depression in Sub-Saharan Africa is leading to suicide. The study further revealed that mental health services in Sub-Saharan Africa have demonstrated to be mostly restricted to tertiary psychiatric facilities and therefore accessing treatment services becomes difficulty.

Close (2020) postulates that there is a relationship between depression and substance abuse. The study revealed that 33% of patients with major depressive disorders engage in substance abuse whereas 16% of women showed postpartum depressive symptoms after giving birth. A report by NIDA (2019), reveals that the mental disorders which include depression, bipolar disorder, Attention-Deficit Hyperactivity Disorder (ADHD), psychotic illness, borderline personality disorder, and antisocial personality have a high like a hood

to be caused by substance use disorders. The study further noted that among the individuals above 18 years of age have one out of four who have suffered from Severe Mental Illness (SMI) also have Substance Use Disorders (SUD).

Study by Liu et al (2019), states that one to seven individuals (15%) have one or more mental or substance use disorders. The study noted that there is an overlap between major depressive disorder (MDDs) and substance use disorders (SUDs) with an estimated prevalence of co-occurring disorders ranging from 40% for the individuals with major depressive disorders (MDDs). According to Ritchie and Max (2018), the mental and substance use disorders are common.

Another study by the Editorial Staff (2019) posits a relationship between mood disorders like depression and substance abuse, with those diagnosed with depressive disorders being more likely to abuse substances than those without mood disorders. A report released by SAMHSA (2019), reveals an estimated 9.2 million adults aged 18 and above comprising 3.7 per-cents of all adults showed both mental illnesses and substance use disorder (SUD). Whereas in the year 2017, around 3.2 million adults with 1.3 per-cents of all adults demonstrated co-occurring Severe Mental Illness (SMI) and substance use disorders (SUD).

In Africa, mental disorders have been viewed as a disease brought about by the individuals themselves who engage in illegal drugs (Gberie, 2017). Further, the study noted

that the aspect of substance use may be one reason given by African governments to not prioritize mental health issues. According to Arpa (2017) when women are depressed, they tend to experience a feeling of guilt, excessive sleeping, overeating, visiting friends, and engaging in house chores substance use to overcome depression.

National Authority for the Campaign Against Alcohol and Drug Abuse (NACADA) is a body that coordinate, facilitate, educate and create awareness to fights against substance abuse in Kenya. According to the Ministry of Health drug and substance abuse- report of 2015, there is a causal relationship between harmful use of substance abuse like alcohol and a variety of mental and behavioural disorders and other non-communicable diseases (Kimbui et al., 2018).

The studies reviewed have presented contextual research gaps, since some of the studies on the relationship between depressive disorders and substance use have focused on different contexts from this study. The study by Close (2020) focused on the worldwide as well as (Gberie, 2017) focusing on the African context. Even though their contribution to the topic is relevant, the contextual focus is not necessarily Kenyan. In Kenya, studies such as that of Kimbui et al (2018) and the National Authority for the Campaign Against Alcohol Drug Abuse (NACADA) report of 2015 establishing the relationship between substance use and behavioral disorders have also presented contextual research gaps since they have not necessarily focused on women recovering from treatment centers and par-

ticularly in Kiambu County. Contextual differences are important and this study gives a different angle considering that it is not yet clear what leads people with depressive disorder to choose to abuse substance, yet substances such as alcohol, marijuana, khat, and other hard drugs are not always readily available or cheap to acquire. The researcher is therefore confronted with the question as of why women with depressive disorders choose substance use over other alternatives to overcome their depression.

Kiambu County is one of the counties in Kenya with the highest number of recovery centers with significant number of women undergoing treatment and rehabilitation. Kiambu County is a metropolis county with high population and growing economic activities. The County has many markets places where alcohol and drugs are accessible for all ages (Muriithi, 2018). There are non-governmental recovery centres renowned for the treatment of both women and men with depressive and addiction issues. The pharmacotherapy, psychotherapy, family therapy as well as Alcoholic Anonymous (A.A) and Narcotic Anonymous (N.A) support systems are offered for depressive disorders management and sobriety. This study focused on the depressive disorders of substance use among women in addiction recovery in Kiambu County. The independent variable was the depressive disorders and the dependent variable was substance use.

Ideally, the depressive disorders and substance use among women is an alarming issue today. Several cases of depressive illness

are raising concerns, and the issue is leading to hopelessness, social withdrawal as well as lack of interest in day-to-day activities. The depressive illness among women is causing mental health problems creating a worse scenario to the individual's life satisfaction and the well-being of a woman. Consequently, women encounter major challenges like marital problems leading to strained relationships including divorce, separation or even being widowed. Other women who are jobless face challenges of poverty, low self-esteem shame and guilty leading to low life satisfaction hence at high risk of depressive disorders and ultimately substance use. Strong Minds (2016), projected that by 2025 an approximate number of two million women with depressive issues will have been treated depressive disorders illness. A study by WHO (2017) postulates that the number of women taking newer anti-psychotics drugs for the depressive treatment was estimated to rise by 65%. Meanwhile, Kimbui, Kuria, Yator, & Kumar (2018) point out that depression and other mood disorders are often associated with substance use. Despite the interventions of depressive disorders on substance use in Kenya, there is a high prevalence of depressive disorders among women. Wekesah and Kigongo (2019) found that several depressive issues in Kenya remain undiagnosed and unidentified due to few trained psychiatrists within the country thus causing inadequate service delivery of mental health awareness and management. This challenge, if not effectively addressed will escalate leaving behind unattended women who are potentially productive in life. Therefore, it was against

this background that the current study sought to assess the relationship between depressive disorders and substance use among women in addiction recovery in Kiambu County, Kenya.

This was done by responding to the following specific objective:

The study aimed at establishing the relationship between depressive disorders and substance use among women in addiction recovery in Kiambu County in Kenya.

## Research Methodology

The study adopted correlational study design in order to systematically describe the study phenomenon from a sample drawn from a predetermined population. The population comprised of 120 women aged 18 years and above who were recovering from addiction and the staff working at the four selected treatment centres including: Retreat rehabilitation centre, Blessed Talbot rehabilitation centre, Care Tech medical and rehabilitation, and Teen Challenge rehabilitation centre in Kiambu County. The key informants were senior policy makers, psychiatrist and psychologist. A sample of 36 respondents which represents 30% of the target population was used in the study. Purposive sampling was used to select treatment and recovery centers as well as the key informants for interviews. In addition, convenience sampling was used in the selection of the focus group respondents where the researcher picked the women in the rehabilitation centre with the greatest number of female patients. Data was collected using questionnaires, interview schedule

sheets and focus group discussions. The study employed both quantitative and qualitative methods. Descriptive statistics were used for quantitative data and presented using tables, graphs; pie charts and percentages with the use of MS excel to facilitate quick reference for analysis. Qualitative data obtained from interview guides and focus group discussions was coded, interpreted and analyzed along the study objectives. Data was presented using thick descriptions and verbatim quotes. Correlation analysis was used to test the relationship between depressive disorders and substance use among women in addiction recovery in Kiambu County.

## Results

Data was analysed from a sample of 36 participants with a response rate of 100%. This comprised of 36 women who were drug and substance users as well as 4 key informants in the four selected treatment and recovery centres in Kiambu County. The highest number of women in the addiction

recovery and treatment centres were below the age of 45 years with majority (25.0%) being in the age category 26-35 years. Majority of the women in the centres were separated (33.8%), single (25.7%) and divorced (19.8%) with very few having other marital status (6.0%). Most of the women in the centres had one child (37.1%) and two children (30.4%), three children constituted (16.9%) while those who had more than three children and no child comprised of (7.8%) each. Majority of the women had attained secondary education (33.6%), graduate (25.0%) and tertiary education (19.8%) with very few (9.5%) having primary education. Notably, (40.5%) of women in the addiction recovery and treatment centres were manual labourers, (38.8%) were employed, and those in business constituted (17.3%) while (3.4%) did not specify their income generating activities. There were 4 key informants who included a psychiatrist, psychologists, and a senior policy maker.

**Table 1: Demographic characteristics of the participants**

Characteristics of the respondents	frequency	percentage	characteristics of the respondents	frequency	percentage
Age			Level of education		
15-25 years	3	9.5%	Primary	3	9.5%
26-35 years	9	25.0%	Secondary	13	33.6%
36-45 years	8	23.2%	Tertiary	7	19.8%
46-55 years	6	16.4%	Graduate	9	25.0%
56-65 years	6	15.5%	Others	4	12.10%
66 and above years	4	10.3%			
Marital status			Income Generating activities		
Single	9	25.7%	Manual labourer	15	40.5%
Separated	13	33.8%	Employed	14	38.8%
Divorced	7	19.8%	Business	6	17.3%
Widowed	5	14.7%	N/A	1	3.4%
Others	2	6.0%			
Number of children					
None	3	7.8%			
One child	13	37.1%			
Two children	11	30.4%			
Three children	6	16.9%			
More than 3 children	3	7.8%			

## Demographic characteristics of the participants

### The Relationship between Depressive Disorders and Substance Use

Generally, the research findings revealed that majority of the respondents' depressive disorders related with drug use

among women in addiction recovery in Kiambu County with a mean of 2.61 and standard deviation of 1.215. The study findings on the relationship between specific depressive disorders and drug use among women in addiction recovery in Kiambu County are shown in table 2.

**Table 2: The Relationship between Depressive Disorders and Substance Use**

Relationship between Depressive Disorders and Substance Use	1	2	3	4	5	Mean	S.D
I used substances because of constant physical and emotional abuse I experienced from my husband	2.6%	14.7%	13.0%	31.0%	38.7%	2.93	1.233
Domestic violence and threats from my husband resulted in our separation and this led me to substance use	5.2%	11.2%	15.5%	27.6%	40.5%	2.73	1.281
I used substances because I had periods where I was generally dissatisfied with life due to separation with my family	6.8%	12.1%	13.0%	31.9%	36.2%	2.42	1.256
There have been periods when I felt guilty due to divorce which led to substances use	7.4%	12.1%	16.4%	31.0%	33.1%	2.70	1.224
There have been times when I really got down on myself and felt worthless and this led to substance use	4.3%	8.6%	17.3%	34.5%	35.3%	2.33	1.103
Unemployment made the future seem hopeless and things could not improve this led me to substance use	6.0%	19.3%	13.8%	32.8%	37.1%	2.56	1.192
Aggregate Score						2.61	1.215

Source: (Researcher, 2022)

These findings, the means and standard deviation clearly demonstrated that depressive disorders had a relationship with substance use among women in addiction and recovery centres within Kiambu County.

### Multiple Correlation analysis

Multiple correlation analysis was employed to determine the relationship between depressive disorders aspects and substance use among women in addiction recovery in Kiambu County. The depressive disorders variable was manifested by the following symptoms:

domestic violence, feeling guilty and feeling worthless. Correlation analysis was conducted at 5% significance level with 1-tailed test to determine the outcome. This meant that the significance level was a critical value set at 0.005 and above in which the association was deemed to be significant otherwise it was insignificant.

The strength of the correlation was normally measured based on the Pearson correlation scale. The correlation coefficient ranges from -10 to +10 and the closer the coefficient is to +10 or the -10. The more closely are the two are related. Table 3 below depicts the results

**Table 3: Multiple Correlation Analysis**

		Substance use	Domestic violence	Feeling guilty	Feeling worthless
Substance use	Pearson correlation sig. (2-tailed)				
Domestic violence	Pearson correlation sig. (2-tailed)	.603 .000	1		
Feeling guilty	Pearson correlation sig. (2-tailed)	.588 .000	.623** .000	1	
Feeling worthless	Pearson correlation sig. (2-tailed)	.575 .000	.698 .000	.645** .000	1

Source: Researcher (2022)

Table 3 reveals that there was a relationship between depressive disorders symptoms (domestic violence, feeling guilty and feeling worthless) and substance use among women in addiction recovery in Kiambu County. The correlation coefficient for association between domestic violence and Substance Use was .603 with (P=.0.000); the coefficient for association between feeling guilty and substance use was 0.588 with (P=0.000); and

the coefficients for association between feeling worthless and substance use was 0.575 with (P=0.000). This implies that the association between domestic violence and feeling of guilty that was likely to lead to substance use was 0.623 with (P=0.000). The correlation coefficient between feeling guilty and feeling worthless likely to lead to substance use among women in addiction recovery was 0.645 with (P=0.000). According to these

findings, it is apparent that all the depressive disorder variables (domestic violence, feeling guilty and feeling worthless) correlated with substance use. The study established strong and positive correlation coefficients which were greater than 0.50. This depicts significant relationship between the variables. Based on these correlation coefficients, there is a significant relationship between depressive disorders and substance use among women in addiction recovery in Kiambu County with domestic violence being the most significant with the highest correlation coefficient with substance use.

## Discussion

The general objective of the study was to establish the influence of depressive disorders on substance use among women in addiction recovery in Kiambu County, Kenya. The study found out that the highest number of women in addiction recovery and treatment centres in Kiambu County was 45 years and below. This means majority of the women below the age of 45 years are in their child-bearing age and are more likely to be suffering from depression associated with childbirth such as prenatal, perinatal or postpartum depression. Additionally, majority of individuals below 45 years are in their youthful stage and are more likely to experience depressive risk factors and stressors including unemployment, financial challenges and domestic violence. This concurs with the study by Close (2020) which revealed that nearly 16% of women who suffer major depressive disorder in their reproductive age show postpartum depressive symptoms after giving birth. The

study also found out that majority of women in addiction and recovery Centres in Kiambu County were once married couples who later on divorced, separated or widowed. Women in these marital statuses are likely to have low life satisfaction hence at high risk of depressive disorders and ultimately substance use. This concurs with the study by Granti, et al. (2016) in the United States of America, which found out that major depressive disorders and Drug Use Disorder (DUD) was estimated to be 95% among younger and unmarried individuals. According to the study findings, more than 60% of women in addiction and recovery centres in Kiambu County had between one and two children an indication that idleness was as a result of poor parenthood. Most women in addiction and recovery centres had not attained university level of education. Manual labour category had the highest number of respondents, an indication that life's challenges can lead to women getting depressive issues (2018). Arpa (2017), reported that women who are depressed, tend to experience a feeling of guilt, excessive sleeping, overeating, visiting friends, and engaging in house chores substance use to overcome depression.

The specific objective of the study was to establish the relationship between depressive disorders and substance use among women in addiction recovery in Kiambu County. Generally, the research findings revealed that majority of the respondents' related depressive disorders with drug use among women in addiction recovery in Kiambu County with a mean of 2.61 and standard

deviation of 1.215. The study identified domestic violence, feeling guilty and feeling worthless as depressive disorders associated with substance use. According to the study findings domestic violence had a mean (M) of 2.73 and a standard deviation of 1.281, Feeling guilty had a mean (M) of 2.70 and a standard deviation of 1.224 while those who felt worthless at times and indulged in substance use had a mean (M) of 2.33 and a standard deviation of 1.103. These findings, the means and standard deviation clearly demonstrate that depressive disorders had a relationship with substance use among women in addiction and recovery centres within Kiambu County. The results concur with the study by Close (2020) who found that depression had a relationship with substance abuse. The study further revealed that 33% of patients who had major depressive disorders engage in substance abuse. Correlation analysis results established strong and positive correlation coefficients which were greater than 0.50. This depicted significant relationship between the variables. Based on correlation analysis findings, there was a significant relationship between depressive disorders and substance use among women in addiction recovery in Kiambu County with domestic violence being the most significant with the highest correlation coefficient (.603) with substance use. The study corroborates with study carried out in Ghana by Bonful and Anum (2019) which revealed significance relationship between depression and substance use. The similar study also showed that the depression had been singled out as the most important cause of mental health diseases related and

disability among women in their productive life in Ghana.

The key informants in addiction recovery centers including; the psychiatrist, psychologist, senior policy maker and a staff member found:

*(The relationship between depressive disorders and substance abuse. The depressive disorders occasioned by issues such as domestic violence, emotional abuse, financial constraints as well as strained relationship resulted in substance use among the women. Challenges resulting from joblessness, unfavorable employment conditions, low income, cases of divorce and financial challenges were found to be the cause depressive disorders which led women indulge in substance use. Additionally, distressing events and life experience such as marriage challenges, childbearing responsibilities as well as society expectation for women caused depressive disorder resulting to substance abuse).*

The results corresponded with the study by Gberie (2017) who found that individuals with depression illness results from distorted thoughts and judgments that result due to lack of sufficient coping skills on stressful

and traumatic experiences such as abuses, marriage and financial challenges.

Results from the focus group discussions indicated that domestic violence occasioned by poverty and joblessness contributed to their depressive disorders that later made them indulge in substance use. Feeling worthless and feeling guilty particularly after walking away from their marriage and the pressure from their families to reconcile with their husband further pushed them to substance use due to depression. This concurs with the study by Wekesah and Kigongo (2019) who found that depression illness among many women in Kenya were as a result of socioeconomic and financial challenges, lack of sufficient coping skills as well as traumatic life experiences.

## Conclusion and recommendation

Based on study results, it is apparent that there is relationship between depressive disorder symptoms and substance use among women in addiction recovery in Kiambu County, Kenya. The study identified symptoms of depressive disorders including domestic violence, feeling guilty and feeling worthless that were associated with substance use.

The correlation analysis findings, established significant relationship between domestic violence and substance use. Domestic violence depicted highest positive correlation coefficient of (.603) with substance use.

The study recommends that the national and the county governments' need to ensure that family disputes are minimized by creating public awareness and intensifying campaigns against domestic violence; there is reduction of rehabilitation cost to enable more women to be treated to become more employable. The two levels of government should ensure that good policy is put in place that minimizes issues of depression. This would help avoiding depression that resulted from joblessness, low income, and financial challenges. The recovery centres should come up with programmes that are effective when dealing with depressive disorders. The recovery centers should engage competent and experienced psychiatrist and psychologist in mental health in order to deliver their services effectively and professionally. The National government in collaboration with the County government of Kiambu need to reinforce more existing laws and policies intended to bring down the number of women under substance use.

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