



## Sociodemographic Factors and the Prevalence of Depression among Patients at Rumuigbo Psychiatric Hospital, Obio/Akpor Local Government Area

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### Abstract

This study investigated the prevalence of depression and socio-demographic determinants among patients attending psychiatric hospitals, Rumuigbo, Obio/Akpor Local Government Area. The study was guided by six objectives, six research questions and five hypotheses. Literature was reviewed under conceptual framework, theoretical framework and empirical review. The research design adopted for this study was descriptive. The population consisted of all 141 depression cases recorded from 2018 to 2021 based on the Psychiatric Hospital Record. All the cases were included in the study. The instrument for data collection in this study was a proforma. The data analysis was done with the aid of the Statistical Product for Service Solution (SPSS) version 23.0. To analyze the data collected, the researcher adopted descriptive statistics of percentage to answer research questions and inferential statistics of Chi-square at 0.05 alpha level. The result showed that the prevalence of depression among patients attending psychiatric hospitals, in Rumuigbo, was high (97.9%). Depression was more among those aged 15-24 years 29(100), females 81(98.8%), those divorced 1(100), civil servants 33(100) and students 44(100), and patients who had tertiary education 64(100) and secondary education 72(97.3) respectively. The tested hypotheses revealed a significant relationship between the prevalence of depression among patients and demographic factors such as marital status ( $\chi^2$ -value = 14.35, df = 4,  $p < 0.05$ ), occupation ( $\chi^2$ -value = 59.73, df = 4,  $p < 0.05$ ) and educational level ( $\chi^2$ -value = 15.53, df = 2,  $p < 0.05$ ). Based on the findings of the study, it was concluded that the prevalence of depression among patients attending psychiatric hospitals, in Rumuigbo, was high (97.9%) and the socio-demographic determinants were marital status, occupation, and educational level. Recommendation made among others was that health care planners should pay attention to socio-demographic factors of patients when planning and designing health programmes for them as this will enhance the better management of depression among patients.

**Keywords:** Depression, Determinants, Demographic, Prevalence, Patients

### Introduction

Depression, a silent affliction of mental health, has wrought havoc upon many sufferers, being identified as the primary cause of disability globally by the United Nations health agency. With an estimated 300 million individuals affected worldwide, depression affects approximately 4.4% of the global populace, marking an 18% increase between 2005 and 2015, as reported by the UN World Health Organization. Despite its prevalence, Wang et al. (2017) reveal that between 76% to 85% of depressed individuals in low- and middle-income nations remain untreated. This lack of treatment stems from various obstacles such as inaccurate assessment, scarcity of trained healthcare providers, social stigma, and inadequate resources. Additionally, societal misconceptions perpetuate this stigma, suggesting that those with mental illness are fundamentally different and can only recover if they choose to do so.

Depression is widely recognized as a prevalent emotional issue among older adults. It typically occurs less frequently during middle age, becomes more common in late adulthood, and reaches its highest level in adults age 80 and older. Studies have found that among older adults living independently, depressive symptoms have been reported in varying percentages, ranging from 11% to 44%, with an average of approximately 20%. However, a higher proportion, around

43%, of elderly individuals residing in institutions have been diagnosed with depression (Laird et al., 2019). Depression is characterized by a dysphoric mood or a loss of interest and pleasure in various aspects of life, including leisure activities. Symptoms encompass a range of experiences such as diminished appetite, insomnia or excessive sleepiness, fatigue, psychomotor agitation or retardation, feelings of guilt, difficulty concentrating, impaired cognitive function, and suicidal ideation (American Psychiatric Association, 2013). Late-life depression shares similarities with depression in younger individuals, often presenting as withdrawal and despondency. Additionally, individuals may exhibit sluggishness, particularly in the morning, disrupted sleep patterns including difficulty maintaining sleep, excessive daytime sleepiness, or staying in bed throughout the day, indicating severe depression. Common indicators also include frequent crying, fatigue, loss of pleasure, reduced interest in sexual activity, vague complaints, decreased energy levels, and diminished appetite (Zingone et al., 2015). There is some evidence that depression is a genetic disorder; however, some have argued that there are discrepancies in certain demographic contexts. Age can in a way determine the prevalence of depression. Age is the number of days, weeks, months, or years an individual has lived here on earth. It is often measured in years.

According to Rohrbaugh et al. (2019), The onset of depression typically occurs before the age of 35 for 70% of adults, with 25% experiencing it after the age of 50, reaching its lowest point around 45 years old. This higher incidence among the young suggests a discrepancy between perceived functional abilities and expectations. Despite expectations that factors like loneliness, declining health, and the loss of friends would contribute to higher rates of depression in the elderly, studies show the opposite trend. Blanchflower and Oswald (2019) reported that the average person's happiness hits its lowest point around age 44. While depression affects both young and elderly individuals, the majority affected are women, according to the World Health Organization (2015). Studies consistently demonstrate gender disparities in depressive disorders, with women having up to twice the prevalence rate compared to men, whether diagnosed clinically or observed through subclinical symptoms (Bebbington & Nolen-Hoeksema, 2016). Factors contributing to these differences include trauma, victimization (such as sexual abuse), role overload (such as caregiving responsibilities for children and the elderly), and socioeconomic status. Women may be more vulnerable to depression even when faced with similar stressors as men, attributed to biological responses, self-concept, coping mechanisms, and the stresses inherent in marital relationships (Bebbington, 2016).

Marital status may also play a role, with married individuals potentially experiencing greater depression due to the responsibilities of maintaining a household and family. Research suggests that married women are diagnosed with depression more frequently than single women (Ifabumuyi, 1983). To buttress the foregoing, Brown et al. (2020) highlighted that the positive impact of marriage primarily benefits men, resulting in increased suffering for women. Particularly in married relationships, the likelihood of depression among women is heightened if they lack financial stability from employment. Research has consistently shown a correlation between depression and employment status. For example, Comino et al. (2018) observed an elevated risk of depressive symptoms among unemployed individuals, and Andersen et al. (2019) demonstrated a significant link between depression and unemployment. However, findings from Nigeria, as reported by Afolabi et al. (2018), did not find a substantial association between depression and unemployment among general outpatients. Education level also exhibits a notable correlation with depression. Several studies conducted in Nigeria and other countries have indicated a higher prevalence of depression among individuals with lower levels of education. Okulate (2019) discovered that a majority of depressed patients in Nigeria had limited education. Similarly, Barkow et al. (2013) reported similar findings in an international study examining risk factors for depression in primary care across 15 countries. However, a contrasting result demonstrating higher rates of depression among those with higher levels of education emerged from a community study in Canada (Akhtar-Denesh & Landen, 2017).

In addition, having a low educational status gives the individual greater chances of financial instability which in this time of economic crisis in Rivers State and the world at large, can put such a person at greater risk of depression due to survival difficulty. Depression constitutes a significant contributor to the overall burden of mental health illnesses. Its ramifications extend to public health, increasing the likelihood of dementia, premature death due to physical ailments, and affecting child growth and development through maternal depression. The COVID-19 pandemic has exacerbated this issue, leading to a surge in depression levels, reaching alarming levels of devastation for many individuals. This is even worsened by the economic crisis ravaging the world with the worst hit in Nigeria, putting many in a difficult situation of inability to meet up with demands for survival due to loss of job, unemployment, high cost of living, and setback in business. The foregoing has contributed to depression states in individuals and families, often expressed in Quick mood modification, fleeting feelings of despair, diminished interest in once-enjoyed

activities, disturbances in sleep patterns, social withdrawal, altered appetite, and trouble focusing. Despite the foregoing, no commensurate attention has been given to depression by scholars and health professionals. This ought not to be but, in this part of the world where the study is carried out, priority is on physical health rather than mental or emotional health. However, the deficit in the latter has sent many to their early grave silently thus, the need to bring it to the fore. Therefore, this study investigated the prevalence of depression and socio-demographic determinants among patients attending Psychiatric hospitals, in Rumuigbo, Obio/Akpor Local Government Area.

The study provided answers to the following research questions:

1. What is the prevalence of depression among patients attending Psychiatric Hospital, in Rumuigbo, Obio/Akpor Local Government Area?
2. What is the prevalence of depression among patients attending Psychiatric Hospital, Rumuigbo, Obio/Akpor Local Government Area based on age?
3. What is the prevalence of depression among patients attending Psychiatric Hospital, Rumuigbo, Obio/Akpor Local Government Area based on gender?
4. What is the prevalence of depression among patients attending Psychiatric Hospital in Rumuigbo, Obio/Akpor Local Government Area based on marital status?
5. What is the prevalence of depression among patients attending psychiatric Hospital in Rumuigbo, Obio/Akpor Local Government Area based on occupation?
6. What is the relationship between educational level and prevalence of depression among patients attending Psychiatric Hospital, Rumuigbo, Obio/Akpor Local Government Area?

This study was guided by the following hypotheses:

1. There is no significant relationship between age and the prevalence of depression among patients attending Psychiatric Hospital in Rumuigbo, Obio/Akpor Local Government Area.
2. There is no significant relationship between gender and the prevalence of depression among patients attending Psychiatric Hospital in Rumuigbo, Obio/Akpor Local Government Area.
3. There is no significant relationship between marital status and the prevalence of depression among patients attending Psychiatric Hospital in Rumuigbo, Obio/Akpor Local Government Area.
4. There is no significant relationship between occupation and the prevalence of depression among patients attending Psychiatric Hospital in Rumuigbo, Obio/Akpor Local Government Area.
5. There is no significant relationship between educational level and the prevalence of depression among patients attending the Psychiatric Hospital in Rumuigbo, Obio/Akpor Local Government Area.

## Methodology

The study was carried out at the neuropsychiatric hospital in Rumuigbo along Rumuokoro Road Port-Harcourt. a unit of the Neuropsychiatric Hospital, Rivers State. The Centre was established in May 1999 to cater for people with various neuropsychiatric disorders. Patients are seen from within and outside Rivers State. The study adopted a descriptive retrospective review of records of all patients recorded in a neuropsychiatric hospital in Rumuigbo registered for a three (3) year period from January 2018 to December 2021. The record is kept in the neuropsychiatric hospital in Rumuigbo within the consultation-liaison psychiatric unit. The population for this study comprised all depression cases in the psychiatric hospital in Rumuigbo. The population of depression cases from 2018 to 2021 from the record was 141 (Record Department of Psychiatric Hospital, Rumuigbo, 2022). The instrument for data collection was a proforma - retrospective review of records of all patients in the neuropsychiatric hospital in Rumuigbo registered for the three years from 2018 to 2021. The data analysis was done with the aid of the Statistical Product for Service Solution (SPSS) version 23.0 using percentage and Chi-square at 0.05 alpha level.

## Results

The results of the study are shown below:

**Table 1: Prevalence of depression among patients attending psychiatric hospital**

Prevalence of depression	Frequency	Percentage
Yes	138	97.9
No	3	2.1
Total	141	100.0

Table 1 reveals the prevalence of depression among patients attending Psychiatric Hospital. The result showed that the majority 138(97.9%) of the participants had depression. Thus, the prevalence of depression among patients attending psychiatric hospitals in Rumuigbo, was high (97.9%).

**Table 2: Chi-square test showing relationship between age and prevalence of depression among patients attending psychiatric hospital**

Age	Depression		Total	df	$\chi^2$ -value	p-value	Decision
	Yes F(%)	No F(%)					
15-24 yrs	29(100)	0(0.00)	29(100)	3	3.78	0.22	H <sub>0</sub> Not Rejected
25-34 yrs	39(97.5)	1(2.5)	40(100)				
35-44 yrs	38(100)	0(0.00)	38(100)				
≥45yrs	32(94.1)	2(5.9)	34(100)				
<b>Total</b>	<b>138(97.9)</b>	<b>3(2.1)</b>	<b>141(100)</b>				

Table 2 displays the Chi-square test of the relationship between age and prevalence of depression among patients attending psychiatric hospitals. The findings indicated that there was no significant relationship between age and the prevalence of depression among these patients ( $\chi^2$ -value = 3.78, df = 3, p>0.05). Consequently, the null hypothesis, positing no significant relationship between age and depression prevalence among patients attending the psychiatric hospital in Rumuigbo, Obio/Akpor Local Government Area, was not rejected.

**Table 3: Chi-square test showing relationship between gender and prevalence of depression among patients attending psychiatric hospital**

Gender	Depression		Total	df	$\chi^2$ -value	p-value	Decision
	Yes F(%)	No F(%)					
<b>Male</b>	57(96.6)	2(3.4)	59(100)	1	0.77	0.37	H <sub>0</sub> Not Rejected
<b>Female</b>	81(98.8)	1(1.2)	82(100)				
<b>Total</b>	<b>138(97.9)</b>	<b>3(2.1)</b>	<b>141(100)</b>				

Table 3 illustrates the Chi-square test of the relationship between gender and the prevalence of depression among patients visiting the psychiatric hospital. The findings indicated that there was no statistically significant relationship between gender and depression prevalence among these patients ( $\chi^2$ -value = 0.77, df = 1, p>0.05). Hence, the null hypothesis which stated that there is no significant relationship between gender and depression prevalence among patients attending the psychiatric hospital in Rumuigbo, Obio/Akpor Local Government Area, was not rejected.

**Table 4: Chi-square test showing relationship between marital status and prevalence of depression among patients attending psychiatric hospital**

Marital status	Depression		Total	df	$\chi^2$ -value	p-value	Decision
	Yes F(%)	No F(%)					
<b>Single</b>	70(98.6)	1(1.4)	71(100)	4	14.35	0.01	H <sub>0</sub> Not Rejected
<b>Married</b>	64(98.5)	1(1.5)	65(100)				
<b>Divorced</b>	1(100)	0(0.00)	1(100)				
<b>Widow</b>	2(66.7)	1(33.3)	3(100)				
<b>Separated</b>	1(100)	0(0.00)	1(100)				
<b>Total</b>	<b>138(97.9)</b>	<b>3(2.1)</b>	<b>141(100)</b>				

Table 4 revealed the Chi-square test of the relationship between marital status and the prevalence of depression among patients attending psychiatric hospitals. The result showed that there was a significant relationship between marital status and the prevalence of depression among patients ( $\chi^2$ -value = 14.35, df = 4, p<0.05). Thus, the null hypothesis which stated that there is no significant relationship between marital status and the prevalence of depression among patients attending psychiatric hospitals, Rumuigbo, Obio/Akpor Local Government Area was rejected.

**Table 5: Chi-square test showing relationship between occupation and prevalence of depression among patients attending psychiatric hospital**

Occupation	Depression		Total	df	X <sup>2</sup> -value	p-value	Decision
	Yes F(%)	No F(%)					
Student	44(100)	0(0.00)	44(100)	4	59.73	0.00	H <sub>0</sub> Rejected
Self-employed	48(98.0)	1(2.0)	48(100)				
Retired	11(84.5)	2(15.4)	13(100)				
Civil servant	33(100)	0(0.00)	33(100)				
Public serv.	5(100)	0(0.00)	5(100)				
<b>Total</b>	<b>138(97.9)</b>	<b>3(2.1)</b>	<b>141(100)</b>				

Table 5 revealed the Chi-square test of the relationship between occupation and prevalence of depression among patients attending psychiatric hospitals. The result showed that there was a significant relationship between occupation and the prevalence of depression among patients ( $\chi^2$ -value = 59.73, df = 4, p<0.05). Thus, the null hypothesis which stated that there is no significant relationship between occupation and prevalence of depression among patients attending psychiatric hospitals, Rumuigbo, Obio/Akpor Local Government Area was rejected.

**Table 6: Chi-square test showing the relationship between educational level and prevalence of depression among patients attending psychiatric hospital**

Educational level	Depression		Total	df	X <sup>2</sup> -value	p-value	Decision
	Yes F(%)	No F(%)					
Secondary	72(97.3)	2(2.7)	74(100)	2	15.53	0.00	H <sub>0</sub> Rejected
Tertiary	64(100)	0(0.00)	64(100)				
Drop out	2(66.7)	1(33.3)	3(100)				
<b>Total</b>	<b>138(97.9)</b>	<b>3(2.1)</b>	<b>141(100)</b>				

Table 6 revealed the Chi-square test of the relationship between educational level and prevalence of depression among patients attending psychiatric hospital. The result showed that there was a significant relationship between educational level and prevalence of depression among patients ( $\chi^2$ -value = 15.53, df = 2, p<0.05). Thus, the null hypothesis which stated that there is no significant relationship between educational level and prevalence of depression among patients attending psychiatric hospital, Rumuigbo, Obio/Akpor Local Government Area was rejected.

## Discussion

The prevalence of depression among patients attending psychiatric hospital, Rumuigbo, was high (97.9%). The findings of this study give credence to the report of WHO (2015) which showed that 15 to 57% of women in developing countries experience symptoms of depression. However, the finding of this study is at variance with findings from the study of Sulyman et al. (2016) which showed a lesser percentage. The variation found between the present study and the previous ones might be attributed to the variation in the location. The result showed that depression was more common among those aged 15-24 years 29(100) and 35-44 years 38(100). Thus, the prevalence of depression was more among younger patients. The tested hypothesis showed that there was no significant relationship between age and prevalence of depression among patients ( $\chi^2$ -value = 3.78, df = 3, p>0.05). This finding is not surprising because literature has shown that age is a strong epidemiological variable that is associated with several health conditions. The finding of this study is similar to that of Mazaheri et al. (2014) which showed that age had no significant relation with depression (p>0.05). The findings of this study are also similar to that of Mohammed et al. (2017) whose findings showed that there was no statistically significant difference between depression and age (p= 0.125). The similarity in the age bracket of the respondents in the present study and the previous ones might be implicated in the similarities found in the present study and the present one.

The result showed that depression was more common among females 81(98.8%). Thus, the prevalence of depression was higher among female patients. The tested hypotheses revealed that there was no significant relationship between

gender and the prevalence of depression among patients ( $\chi^2$ -value = 0.77, df = 1,  $p > 0.05$ ). The result showed that depression was more common among patients who had tertiary education 64(100) and secondary education 72(97.3). The tested hypothesis revealed that there was a significant relationship between educational level and the prevalence of depression among patients ( $\chi^2$ -value = 15.53, df = 2,  $p < 0.05$ ). The findings of this study give credence to Mazaher et al. (2014) where the result of the regression analysis showed that the educational status of mothers was significantly associated with postpartum depression ( $p = 0.015$ ). The findings of this study corroborate that of Muraca and Joseph (2014) which showed that having higher education decreased the odds of depression (OR 1.15; 95% CI 0.65 to 2.04). The findings of this study corroborate that of Muraca and Joseph (2014) which showed that (73.5%) of the respondents who experienced depression were post-primary school graduates. The fact that educational status is associated with the health of an individual might be implicated in the similarities found between the present study and the previous study.

The result showed that depression was more common among civil servants 33(100) and students 44(100). The tested hypothesis showed that there was a significant relationship between occupation and prevalence of depression among patients ( $\chi^2$ -value = 59.73, df = 4,  $p < 0.05$ ). The findings of this are similar to that of Mazaheri et al. (2014) where it was shown from the regression analysis that socio-economic status is significantly associated with depression with a  $p$ -value of 0.038. The finding of this study is also similar to that of Ajomar (2015) which showed that there was a significant association between financial status and depression ( $p < 0.05$ ). The findings of this study differ from that of Qobadi et al. (2016) where the prevalence of depression is significantly higher among those with lower income ( $p = 0.0001$ ). The result showed that depression was more common among those divorced 1(100) and separated 1(100). The result of the tested hypothesis revealed that there was a significant relationship between marital status and the prevalence of depression among patients ( $\chi^2$ -value = 14.35, df = 4,  $p < 0.05$ ). The findings of this study are in line with that of Muraca and Joseph (2014) which showed that being married decreased the odds of depression among married people (OR 3.59; 95% CI 2.15 to 6.01). The findings of this study give credence to Mohammed et al. (2017) where the tested hypothesis showed that there was a statistically significant difference between depression and marital status ( $p = 0.001$ ). The findings of this study showed that 235(61.2%) of the married had low depression.

### Conclusion

Based on the findings of the study, it was concluded that the prevalence of depression among patients attending Psychiatric Hospital in Rumuigbo, was high (97.9%) and the socio-demographic determinants were marital status, occupation, and educational level.

### Recommendations

Based on the findings of the study, the following recommendations were made:

1. Healthcare planners should pay attention to the socio-demographic factors of patients when planning and designing health programmes for them as this will enhance the better management of depression among patients.
2. There is a need for nurses and other health care professionals to make a collaborative effort for early detection and effective management of postpartum depression among patients.
3. Healthcare providers in charge of psychological health should make an effort to create more awareness and sensitize people and how to control their emotions.
4. Medical experts and the government should promote mental and psychological healthcare initiatives among females as they are more affected by depression.
5. The government should employ the services of psychiatrists/psychologists in all the health facilities who will attend to every depression case.

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