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Influence of anxiety and depression on quality of life among prison inmates in Ilorin, Nigeria

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Abstract

This study investigated the influence of anxiety and depression on quality of life among prison inmates in Nigeria. The independent variables are depression and anxiety while the dependent variable is quality of life. The expost facto research design was utilized. Three hundred and nine (309) inmates were randomly selected for the study, males constituting 307(98.4%) and 2(0.6%) females. Two hundred and thirty-four (75.7%) were married, forty (12.9%) were single and thirty-five (11.3%) were divorced. Self-Rating Depression Scale developed by Zung, Richards, and Short (1965) and Hamilton (1959)'s Anxiety Rating Scale were used to assess the level of depression and anxiety respectively while the Quality of life Scale of Burckhardt & Anderson (2003), was employed to assess participants' quality of life. From the results, participants with high socioeconomic status scored significantly higher on quality of life than those with low socioeconomic status among prison inmates (t (307) = 5.687; $p < .01$). Inmates with low depression scored significantly higher on quality of life than those with high level of depression (t (307) = -9.931; $p < .01$). Individuals with high anxiety scored significantly lower on quality of life than those with low anxiety (t (307) =-10.336; $p < .01$). Also, marital status, socio-economic status, duration of incarceration and depression jointly predicted quality of life of inmates (R = .433; R2 =.187; F (4,304) = 17.537; $p < .01$). In conclusion, prison authorities should create a policy where intermittent assessment is conducted on individual inmates and those who exhibit symptoms be referred for intervention.

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Introduction

This study was carried out to assess whether demographic factors, anxiety and depression have a significant influence on the quality of life among prison inmates in Ilorin, Nigeria.

In some developing countries, prisons are inherently stressful and have a non-therapeutic environment for inmates, which exacerbate prisoners' existing health problems and cause them to experience a low quality of life (Abdulrehman, 2012). Opportunities for people to protect and elevate their own quality of life in prisons are limited; this results in prisoners' low medical and mental health as well as quality of life, which has now become a concern for our society. This, in turn, has led to the need to explore how anxiety and depression influence the quality of life of inmates (Wright, 2008).

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Literature Review

Literature has it that there is a positive relationship between confinement and psychological distress (Kadiri, 2014; Moraes & Dalgalarrondo, 2006; Nwaopara & Princewill, 2015). It is no secret that depression is prevalent in society. It is one of the most common mental illnesses, with 6.7 percent of adults in the United States experiencing it (National Institute of Mental Health [NIMH], n.d.). Depression, in general, is more common in females, and incarcerated women were 50 percent more likely to suffer depression than women not imprisoned. After further exploration, a case in which jailed mothers were separated from their children proved to be a major link (Morakinyo, 2015). Another study opined that an unconducive prison environment is an ongoing climate of trauma which can create anxiety, depression, and PTSD in inmates who previously had no serious mental health issues (Ohaeri & Jegede, 1991).

Prisoners are, by definition, individuals cut off from the rest of society, and their access to supportive friends and family are limited. Many jails have instituted mail policies prohibiting letters and magazine subscriptions, and these policies can eliminate prisoners' ability to communicate with and receive support from loved ones (Kadiri, 2014). He further explained that, inmates are restrained from phone calls or face imposed high costs on any request for cell phone calls; as a result, prisoners from impoverished backgrounds may have families who can't afford to cover the costs of collect calls, however infrequent. There is little hope of getting any support in prison, and prisoners are concerned more with gaining respect and avoiding fights in an endless pursuit of safety. Support from loved ones can play a role in helping people overcome mental challenges, and solitary living condition of prison can increase a person's risk of anxiety and depression (Kadiri, 2014).

A study found that prison incarceration can negatively affect the quality of life of inmates, and therefore bring about symptoms of depression, boredom and alienation, though all do depend on the unique traits of the inmates (Toch, 1977). Quality of Life (IQoL) as pattern of life includes variables such as well–being, life satisfaction, having joyful feeling, meaning of life for individuals, knowing life's potential, fulfillment of needs and other objective factors (Cella, Wiklund, Shumaker, & Aaronson, 1993). It further opines that quality of life (QoL) is all about living a good and the highest level of a healthy life. It is in this way that an individual's quality of life can be assessed (Clear, 2007).

Satisfaction with life is another dimension of QoL. People can be asked if they are pleased with their state of life, and the response may be explanations about one issue or another that is going on regarding the person in question Individuals are normally less pleased with their life compared with their state of general health and wellbeing; when an individual's expected satisfaction, needs and wants in life are being met by worldly expectations, he can be assumed to be satisfied (Cella et al., 1993).

Happiness is mostly used with caution because it has special significance. Being happy is far more than being joyful and contented. Rather, it is a unique manner of feelings that is admirable and desirable, though hard to achieve. In particular, happiness is linked to non-rational domains including, likeness, love, companionship and admiration of nature among others, but not related to cash, level of health and other objective variables (Klocek & Kawecka-Jaszcz, 2003).

Searching for meaning in life involves an acceptance of the non-meaningful and meaningful parts of life and also, a task towards an individual's way of amendment for those things that are referred to as meaningless (Klocek & Kawecka-Jaszcz, 2003). Quality of life among prisoners is described as "the reflection of individual (inmate) views of unsafe life, stress, mood disorder, aggression, low self-esteem, boredom felt and their general health" (Cavadino, James, & Michael, 2006). Life in Prison, particularly in the developing world, can cause psychological distress and trigger stressful conditions which can lead to poor quality of life (Morgan, 1997). According to a study, mental illness is increasing every day in correctional homes (Treatment Advocacy Center, 2016). In addition, 31 percent were evaluated as having depression related symptoms but which did not meet DSM iv criteria to justify the diagnosis (American Psychiatric Association, 2013). According to their findings, the groups of inmates under study were reported as having poor quality of life.

Depression is mostly said to lead to suicidal ideations, self-harm actions and poor quality of life. It is not surprising to learn that despite the high level of this mood disorder, some victims do rigidly deny it, and deteriorating mental health condition occurs as a result (Gussak, 2004; Hanes, 2005; Kornfeld, 1997; Ursprung, 1997). Nigerian prisons have some negative features in common such as; overcrowding, dirty interior and inadequate medical and rehabilitation facilities. As a result, a significant number of inmates are sick and in danger of losing their life to ill health either before they are tried or during their jail term (Amnesty International, 2008; Okunola, 2002).However, it has been claimed that there is a decline in the number of deaths of inmates from 1,500 to 89 per year due to the efforts of some non-governmental organizations (Okunola, 2002). Also, a report from Amnesty International (2008), reveals that the majority of inmates develop serious anxiety and depression condition when counting their care as below expectations, which can predispose them to low quality of life.

The government also contributes to the lackadaisical attitudes of Nigerian prisons staff when they are being highly underpaid, understaffed and under-trained with no reasonable staff emoluments and benefits put in place for training and staff development as well as poor working conditions and longer hours on duty (Amnesty International, 2008). All these shortcomings have both direct and indirect significant impacts on prison inmates which compounds the high level of anxiety and depression that by implication lead to poor quality of life (Amnesty International, 2008). Added to that, most Nigerian prisons have poor or basic clinic facilities, and in some situations, some prison inmates have to pay for their own medicines and treatment (Tanimu, 2012). These hardships automatically cause inmates to be susceptible to serious high level of anxiety (Okunola, 2002).

Anxiety could be described as "a serious chronically high level of mental state and physiological tension and apprehension that is more than the person's ability to build resilience, which

results in distress, sickness, or a decreased capacity to cope" (Neidhardt, Weinstein, & Conry, 1990, pp. 33). On the other hand, depression, one of the most well-known mental disorders in prison settings, could be defined as "persistent distortive mood, which brings about low interest, fatigue, sadness and low strength, which lead to inclined low mood and diminished interest in activity" (World Health Organization [WHO], 2010). According to some researches, individuals with depression alone or an anxiety disorder alone were compared with the results showing that those with both a depressive disorder and an anxiety disorder have the highest risk of abnormal functioning during a period of sickness and poor QOL (Roy-Byrne et al., 2012; WHO, 2010).However, little is revealed about the impact of initial depression as a whole, and that of its comorbidity with anxiety on QOL among prison inmates (Roy-Byrne et al., 2012). Anxiety and depression in prisons could mostly be related to the risk of self-destruction or harming and suicidal ideation in prison (Ireland & York, 2012). Inmates from poor background are prone to distress (King, Mauer, & Huling, 2004). Most prisoners from low socioeconomic status neighborhoods have difficulty in maintaining healthy familial relationships and support as the family is likely to find it very difficult and expensive to come from distant rural areas to visit their imprisoned relative (Wakefield & Uggen, 2010).

Hypotheses

1. Participants who are low in class of economic status will significantly report lower quality of life than participants who are high in economic status.
2. Participants with high level of depression will score significantly low on the quality of life than individuals with low level of depression among inmates
3. individuals with high level of anxiety will score significantly low on the measures of quality of life than participants with low level of anxiety among prison inmates
4. Marital status, socio-economic status, duration of incarceration and depression will predict significant joint and independent influence on social relationship domain of quality of life among prison inmates

Methodology

Research Design

The study adopted a survey research design method. It used a self-report questionnaire in collecting data from the participants. The independent variables are demographics, anxiety and depression, while the dependent variable is quality of life of the inmates.

Setting

The study was conducted among prison inmates at Oke-kura prison in Ilorin, Nigeria. The choice of the sampled participants was based on its peculiarity of being one of the largest and oldest prisons in the country, and that the inmates cut across all ethnicities in Nigeria.

Sampling Method

Purposive sampling method was used for this study. Participants are the inmates of Oke-kura prison in Ilorin, Nigeria, purposively chosen for the study.

Research Participants

Three hundred and nine (309) inmates participated in the study. They constitute 307 (98.4%) and 2 (0.6%) females. 234 (75.7%) were married, 40 (12.9%) were single and thirty-five (11.3%) were divorced. Also 139 (45.0%) of the inmates were from low socio-economic class, 166 (53.7%) were from middle class, while 4 (1.3%) were from upper class. Ninety-two (29.8%) of them had primary school certificate, 100 (32.4%) had SSCE, 70 (22.7%) had Diploma, 34 (11.0%) had First degree, while 13 (4.2%) had postgraduate qualifications. Also, 204 (66%) were Christians, 103 (33.3%) were Muslims, while only 2 (0.6%) were traditionalists. Their age ranged between 19 to 39 years.

Instruments

The instrument used in this study was a close-ended questionnaire which comprised four (4) parts or sections; Section A describes the demographic characteristics thus; age, sex, tribe, parental status, marital status, educational qualification, duration and religion. Section B, C and D were as follows; section B is of Self-Rating Depression Scale of Zung et al. (1965) designed to assess depression. It is a 20-item scale with ten positively worded and ten negatively worded questions. Each of the questions is scored on the scale of 1 to 4 thus: "a little of the time," "some of the time," "good part of the time," and "most of the time". The scores range from 20 through 80. The higher the scores the higher the level of depression. A reliability coefficient of 0.52 was obtained by the researcher. Section C consists of Hamilton (1959)'s Anxiety Rating Scale (HARS) used to measure anxiety. The scale is comprised of 6 items, measuring tension, capacity to relax, startling responses, worrying, apprehension and restlessness; higher scores indicate high anxiety. Section D is comprised of Quality of life Scale (QOLS) developed by Burckhardt and Anderson (2003). It contains 26 items. The first study showed an internal consistency of .82 and with test-retest reliability of .78. The scale is a Likert type scale structured with 5-point rating scale. A higher score indicates better quality of life.

Data Collection

This research was conducted between February 2018 to July 2018. Permission was sought from the authority of Nigeria Prison Service, in Oke-kura, Ilorin, Nigeria by the researcher before the administration of the questionnaires. The purpose of the research work was explained and the request was approved. The researchers gave instructions on how to fill in the questionnaire and confidential treatment of information was assured after which they administered the questionnaire and collected it after 1 hour.

Data Analysis

Descriptive statistics of frequency and percentages were used to analyze the demographic characteristics of the questionnaire, while independent sample t-test and regression were used to test the stated hypotheses with SPSS version 20.

Results and Discussion

Results indicated that participants with low level of economic status scored significantly lower on quality of life than respondents with high rate of socio-economic status among prison inmates (t(307) = 5.687; $p < .01$). However, respondents with low socio-economic status recorded a mean of (71.76) while participants with higher level of socio-economic status recorded a mean score of (63.33). This result implies that there is significant difference in level of socio-economic status on quality of life among study sample in Ilorin. Hence, the result confirmed the stated hypothesis and it is accepted in this study. Lower socio-economic status and greater stress such as living condition, financial status, job status did reduce quality of life (Weissman & Schneider, 2005). This implies that inmates who experience low socioeconomic status could probably see life or prison environment more distressing compared to those with higher socioeconomic status, which ends up affecting negatively their quality of life. This could be as a result of poor basic health, food and other facilities in Prison.

The results in table 2 below indicate that participants with high level of depression scored significantly lower on quality of life than participants with higher level of depression among prison inmates (t(307) = -9.931; $p < .01$). However, participants with low level of depression recorded a mean of (14.55) and participants with high level of depression recorded a mean score of (17.75). This result implies that there is significant difference in the level of depression among study sample. Hence, the result confirmed the stated hypothesis and it is accepted in this study. This finding is supported by Morgan (1997), that prison life can cause depression and trigger low quality of life. Some other findings supported that depression is one of the most prevalent mental illnesses in prison which invariably leads to low quality of life (Burgoyne & Renwick, 2004). The prisoners in Nigeria are denied access to supportive friends, family, magazine reading or subscriptions, and these policies can mar social relationship of inmates which can lead to depressive mood, which reduces quality of life; this further explained impacts of restrictions imposed on inmates which negatively affected their quality of life.

Results in table 3 below indicate that participants with low level of anxiety scored significantly higher on quality of life than individuals with high rate of anxiety among prison inmates (t(307) = -10.336; $p < .01$). However, participants with high level of anxiety recorded a mean of (18.92) and participants with low level of anxiety recorded a mean score of (15.34). This result implies that there is significant difference in the level of anxiety on inmate quality of life among the study of the sampled inmates. Hence, the result confirmed the stated hypothesis and it is accepted in this study. Other studies supported this result (Bromberger et al., 2005). This implies that signs and symptoms of anxiety such as; fear, uneasiness, fatigue, restlessness, disrupted concentration, feeling of impending doom, low sleep hygiene etc. witnessed by inmates can highly ameliorate their quality of life. Therefore, anxiety is a factor to be considered in ensuring quality of life among prisoners.

The results in table 4 showed that marital status, socio-economic status duration of incarceration and depression jointly predicted quality of life among prison inmates (R = .433; R^2 =.187; F(4,304) = 17.537; $p < .01$). This implies that marital status, socio-economic status duration of incarceration and depression jointly accounted for about 19.0 percent variance in quality of life while the remaining 81.0 percent could be attributed to other variables not considered in this study. However, the analysis of the independent predictions indicated that marital status, socio-economic status, duration of incarceration and depression predicted significant independent influence quality of life (β = -.139; t = -2.492; $p < .05$); (β = -.181; t = -3.358; $p < .05$); (β = .167; t = 3.147; $p < .05$); (β = .190; t =3.338; $p < .05$) among the study sample. Therefore, the stated hypothesis is supported by the result obtained and it is accepted in this study. The result is in line with the studies of Villines (2013), which showed that psychosocial factors such as; depression, anxiety, low socio-economic status represented by income, education, and job status negatively affect quality of life. In Nigeria prison, the longer inmates stay in the facility the more they are vulnerable to distressing life because the environment is mostly crowded, lacking basic facilities like power supplies, ventilation, quality nutrition, water and conduciveness, which cause distressing lifestyles that impaired functioning quality of life. This implies that psychosocial factors, if not managed well, can affect the quality of life generally in prison environment.

Table 1 Summary of t-test for the independent samples showing the influence level of socio-economic status on quality of life

Dependent Variable	socio-economic status	*N*	*M*	*SD*	df	*t*	*p*
Quality of life	Low	143	71.76	10.40	307	5.684	< .01
	High	166	63.33	14.89			

Table 2 showing Summary of t-test for the independent samples showing the influence level of depression on quality of life

Dependent	Variable Depression	*N*	*M*	*SD*	df	*t*	*p*
Quality of life	Low	121	14.55	2.89	307	-9.931	< .01
	High	188	17.75	2.67			

Table 3 Showing Summary of t-test for the independent samples showing the influence level of anxiety on quality of life

Dependent Variable	Anxiety	*N*	*M*	*SD*	df	*t*	*p*
Quality of life	Low	99	15.34	3.00	307	-10.336	< .01
	High	210	18.92	2.75			

Table 4 Summary of multiple regressions showing the Influence of marital status, socio-economic status, duration of incarceration and depression on quality of life

Variable	*R*	R^2	F	*p*	β	*t*	Sig
Marital status					-.139	-2.492	<.05
Socio-economic status				-.181	-3.358	<.05	
Duration of incarceration	.433	.187	17.537	< .01	.167	3.147	<.05
Depression					.190	3.338	<.05

Dependent variable: social relationship domain of quality of life.

Conclusion and Recommendations

Considering the findings of this study, the following conclusions are made:

Individual inmates who are of low socioeconomic status significantly reported lower quality of life than participants who are high on socioeconomic status among prison inmates in the sampled area.

Also, individuals with high level of depression scored significantly lower on the measures of quality of life than participants with low rate of depression among prison inmates. Participants with high level of anxiety scored significantly lower on the measures of quality of life than participants with low level of anxiety among prison inmates. Marital status, socio-economic status, duration of incarceration and depression as a whole significantly predicted low quality of life among prison inmates. The results in this study summarily revealed that demographics, anxiety and depressive signs are common among prison inmates. Untreated anxiety and depression have substantial effects on inmates' quality of life. Therefore, the following recommendations were made:

1. Routine screening for symptoms of anxiety and depression should be conducted on individual inmates at least once in three months.
2. Those inmates identified with elevated clinical symptoms should be referred to psychologists or experts to receive appropriate treatment.
3. Team work should be encouraged in prison setting to foster effective rehabilitations.
4. Government should provide basic social amenities and better welfare packages for the prison inmates.

Conflicts of Interest

There is no conflict of interest.

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