## A New Perspective on Mental Illness Prevention Strategy: Utilizing the Socio-Ecological Model Prevention Approach with Nigerian University Students

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Abstract:- Generally, being a student in Nigeria comes with everyday stressors and harsh realities. For instance, the high frequency at which lecturers go on strikes has sometimes made some students stay in school more than designed. However, Nigerian students also experience other determinants that affect their mental well-being besides these everyday stressors. These determinants include inconsistency of the academic calendar, the harshness of their new environment (particularly new entry students), social problems, gender inequality, poverty, insecurity, and academic calendar instability. This study aimed to present the prevalence and causes of mental disorders among Nigerian university students and thus, propose a new perspective toward preventing mental illness disorders among Nigerian students using a socio-economic model.

### I. INTRODUCTION

There is a growing interest in the study of mental health; this has garnered varying responses, theories, and hypotheses over the years. Mental health is an individual's cognitive, behavioral, and emotional well-being, which denotes an absence of mental illness [Felman,2020]. The World Health Organization (WHO) defines health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" [WHO,2001, p.3]. Mental illness prevention is a growing field in mental health studies that emphasizes identifying mental illness risk factors to decrease symptoms, incidences, prevalence, and gravity [Le et al., 2021].

WHO defines mental illness prevention as any preemptive action or technique to decrease mental illness risk and symptoms while encouraging aspects that enhance the individual's mental well-being [WHO, 2004]. Another definition of mental illness prevention describes it as any action geared at "reducing the incidence, prevalence, recurrence of mental disorders, the time spent with symptoms, or the risk condition for a mental illness, preventing or delaying recurrences and also decreasing the impact of illness in the affected person, their families and the society" [Mrazek & Haggerty,1994,p.32]. Mental illness is not limited to any distinct group, demography, ethnic region, religion, country, or continent. WHO reports about 450 million people with mental

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illness globally and that one in every four people will eventually have a mental illness [WHO, 2004]. Mental illness is like any other medical or physical illness with a biological basis; however, the focus of mental health interventions is the promotion of positive well-being, self-esteem, mood, perceptions, thoughts, and actions [Malla, Joober & Garcia, 2015].

The mental health sector in Nigeria has experienced gross neglect and attention, with an attendant lack of data and statistics on mental health illness and services, thereby making it difficult to identify strategies for prevention [WHO, 2006].

Nigeria has about a paltry 300 Psychiatrists for the 200 million population it has [Ugochukwu et al., 2021], out of which 64 million are estimated to be suffering from different mental illnesses [Richard, Gauvin & Raine, 2011]. With outdated mental health legislation that lacks adequate support from relevant authorities, the care of mentally ill individuals is often left to their family members, who often do not have the financial resources to cater to their mental health needs [Ugochukwu et al., 2021]. Mental health is an enormous public health problem in Nigeria, with little attention given to it by the government [Adewuya, 2005]. Nigeria has been purported to have the highest caseload of depression incidence in Africa [Aljazeera, 2021], with a landmass of about 924,000 square kilometers and most of its population below 25 years of age [WHO,2006]; Nigeria has been described as a lower income group country. The total expenditure on health is pegged at 3.7% of gross domestic product, and just a meager 3.3% of this figure goes to mental health [WHO, 2006]. Prevention of diseases has been highlighted as a crucial factor in decreasing the severity of any illness [Colizzi, Lasalvia & Ruggeri, 2020]. Most mental health illnesses occur during the transition from infancy to young adulthood [Kessler et al., 2005]. Studies have shown a high incidence of mental illness among university students [ACH,2016]. Attempts and incidences of suicide among Nigerian undergraduates have become a cause for concern [Kio, Omeonu, & Agbede, 2015].

Most mental illnesses develop before the individual is 18 years or 25 years [Kessler et al., 2007]. The transitional phase of exit from secondary school features the start of university education and adulthood. The change in environment and

academic routine have often been considered one of the most stressful periods of an evolving young adult's life [Auerbach et al., 2016]. Research has suggested that University students are more susceptible to different health problems, such as stress, anxiety, and depression [Oyewunmi et al., 2015]. This susceptibility may result from the stressors in the learning environment, such as lack of constant power, continuous water supply, an unconducive learning environment, and limited financial resources [Amawulu & Kurokeyi, 2018].

The social, economic, and psychological cost of mental health illness is enormous because an individual's social and physical functioning depends on their mental well-being [WHO, 2001]. Approaches geared at mental illness prevention rather than treatments have been surmised to save cost when such strategies are targeted at a specific population [WHO, 2006]. Against this backdrop, this paper wishes to explore new approaches to aid the prevention of mental illness among a significant chunk of the Nigerian population- the youths.

# II. PREVALENCE OF MENTAL ILLNESS AMONG NIGERIAN UNIVERSITY STUDENTS (STATUS, ATTITUDES, STIGMA, KNOWLEDGE, PERCEPTION)

A study conducted by Amawulu & Kurokeyi (2018) to examine the mental health status of undergraduate students in four tertiary institutions in Bayelsa state observed that 65.6% of the studied student population had mental health disorders. Similarly, symptoms of mental health illness were observed to be higher in females (66.53%) than in males (60.14%). The study further showed that mental health symptoms reduce as the age of the student increases. Also, health symptoms were noted to have developed after the students (60.1%) gained admission into the university. In another study, Kio et al. [2015] examined the stress level among undergraduate students of a private university in Nigeria. The study observed that 78% of the respondents were less than 20 years of age. The top ten factors that cause significant stress to the studied undergraduate students were internal and academic-oriented.

Similarly, results from a study by Okunaiya and Omovre [2021], which explored mental health status and the usage of counseling services in a sample of undergraduate students in Obafemi Awolowo University (a Federal university) in Nigeria; showed that a significant number of the studied population demonstrated hopelessness (60.7%) and depression (62.1%) symptoms. On the other hand, mental health awareness was high (89.6%), but university students tend to downplay mental illness indicators (71.9%), such as a prolonged feeling of sadness.

In addition, Ugwueze and colleagues [2021] investigated the associations between physical activity and psychological well-being among male undergraduate students in a public university. The respondents were between 18 to 30 years of age.

Their study revealed a significant positive relationship between the psychological well-being of male undergraduate students and their level of physical activity. Furthermore, the study suggests that the higher the level of physical activity of a male undergraduate student, the higher the level of psychological well-being.

In another study by Aluh, Abba, & Afosi [2020], they investigated the incidences of depression, anxiety, and stress among undergraduate pharmacy students in Nigeria. The study showed that there is a significant incidence of depression (44.6 %), anxiety (63.5%), and stress (35%). However, students had severe depression (4.9%), extremely severe anxiety (14.0%), and severe stress (6.1%). The study also revealed a significant difference in depression, anxiety, and stress scores across years of study. Students in the final year had lower levels of depression than those in the lower year classes. Another study by Nkomo [2020], among undergraduate students in a state university in Cross River State, showed a marked increase in psychological disorders. For instance, the studied university undergraduate students revealed attention disorder, bipolar disorder, generalized anxiety, depressing anxiety, and an autism spectrum disorder. However, the study showed that there was no significant difference between male and female respondents on psychosocial disorders.

Also, in another study that explored mental illness and attitude of undergraduate students in a university in southern Nigeria, Chukwujekwu (2018) found that a significant number of the sample (59.6%) agree that it is normal to call mentally ill people derogatory names, such as 'kolo' or 'psycho .' Also, 73.7% of the population believes that mentally ill individuals are aggressive and dangerous. Furthermore, most students were unsure about the symptoms of mental illnesses like schizophrenia (48.4%) and bipolar disorder (40%). The study also observed that the respondents exhibited a negative attitude toward mental illness and mentally ill persons. A substantial number of the population expressed reluctance to meet a mentally ill person (38.6%) or make friends with one (33.0%). The study concluded that students' knowledge and attitude about mental illness are defective.

In a cross-sectional study on undergraduate students' mental health literacy level in a Federal university in Nigeria [Aluh, Okonta & Odil, 2019], 11.1% of the study sample associated the label 'crazy' and 'mad' with persons who have a mental illness. In addition, the survey observed a significant strong association between study level and the ability to correctly identify and label the schizophrenia vignette (X2=33.175, p<0.001). Also, the age of the subjects did not show any significant correlation to mental health literacy.

## III. DETERMINANTS OF MENTAL ILLNESS AMONG NIGERIAN TERTIARY INSTITUTION STUDENTS

Youths and tertiary institution students represent many of the Nigerians population [WHO, 2006] and are the most affected by mental illness symptoms. Studies have revealed that this population appears to experience mild, moderate, and severe mental illness disorders while in college. Some other studies identified and categorized the causes of these disorders to include academic, social, psychological, lifestyle, and physiological determinants (Limone & Toto, 2022). These determinants could also be recategorized under systematic and behavioral determinants. In terms of systematic determinants, these factors cause mental illness over which students have little or no control, such as academic structure and requirements, genetic predisposition, etc. For instance, in their study, Nwachukwu et al., 2021 reveal that academic pressure triggers the development of comorbid anxiety and depression symptoms. Thus, academic pressure has been identified as one of the significant determinants of mental illness among Nigerian university students (Dachew, Bifftu, Tiruneh et al., 2019; Sydney-Agbor, Ebeh, and Onyeanu, 2018).

In another study, results reveal that academic pressure, such as high intensity of difficulty in studying, has been linked to mental illness, especially anxiety disorders (Osasona, Morakinyo, & Akhibe, 2021). Thus, students are expected to perfect their academic performances. -the feeling of the need to excel in academic performance without any sense of limitations. In other words, students are not allowed or permitted to struggle or work their way through academic success. Instead, Nigerian college students are consistently expected to perform excellently by their lecturers and parents/guardians. Thus, with such expectations, Nigerian students manifest a high level of study difficulty such as anxiety and depression due to their inability to meet these expectations (Osasona, Morakinyo, & Akhibe, 2011).

Other systematic factors that could trigger the development of mental illness symptoms include students' change of environment, the pressure to live with new people(roommates), lack of traditional role models, financial stressors, and the pressure to live within new cultural expectations in a university environment. (Dachew et al., 2019).

On the other hand, behavioral determinants are causes that students have some form of control over, for instance, the student's lifestyle, such as substance use. For example, addiction disorders (chemical or behavioral) have been identified as one of the significant risk factors for mental illness symptoms among Nigerian college students. Thus, in their study, (Sydney-Agbor, Ebeh, and Onyeanu (2018) suggested that a higher level of substance use tends to reduce the protective factors of mental well-being of Nigerian college

students and thus, increase their risk of developing mental illness symptoms.

In summary, studies have shown two significant sectors of determinants of mental illness among university students in Nigeria, namely, systematic and behavioral determinants. Systematic determinants have been identified as those variables that predispose students to mental illness over which they have little or no control. These determinants include but are not limited to unrealistic expectations from the school authorities, parents, and guardians, living in a new environment, and the pressure of academic responsibilities placed on them by society. On the other hand, behavioral determinants are the risk factors under the control of individual students. Such determinants include:

- Lifestyle.
- Use of substances.
- Types of friends students associate with.
- Lack of education commitment.

However, these systematic and behavioral determinants tend to interact with each other in a very complex manner. Thus, we will need a complex multidimensional model to prevent their negative impact on Nigerian college students. Therefore, scholars have suggested the Socio-Ecological Framework as the most effective prevention model.

### IV. SOCIO-ECOLOGICAL FRAMEWORK FOR MENTAL ILLNESS PREVENTION

The socio-ecological model (SEM), as a conceptual framework propounded by Urie Bronfenbrenner, is used for understanding the dynamic relationship that occurs between personal (behavioral determinants) and environmental factors (systematic determinants) as they relate to human development and behavior. It has also been used in previous research to examine social, environmental, and personal factors that influence mental health outcomes and mental health behaviors [Reupert, 2017]. This model will explore the interplay of factors that exist in mental illness prevention among youths in Nigeria. The socio-ecological model (SEM) postulates that these personal and environmental factors, such as work, school, church, community, and policies, are evolving, influencing health behavior [Golden & Earp, 2012]. Furthermore, these socio-ecological factors are hierarchical in their influences on an individual's health choices and behavior; they exert an interactive and reinforcing effect on the individual at the system's center [Garney et al., 2021]. Succinctly put,' the interaction between the characteristics of the individual, the community, and the environment, has physical, social, and political components' [Kilanowski, 2017].

Kilanowski [2017] describes these socio-ecological factors as a microsystem, mesosystem, exosystem, and macrosystem based on the degree of their influence on the health choice of the individual, who is the central factor in the

model. The microsystem, which is the immediate family and surroundings of the individual, exerts the most substantial influence on the individual's health behavior. Regarding this study, the decision by a youth or adolescent to be proactive in healthcare choices, as it relates to mental health, is primarily influenced by his immediate surrounding-the, family, and peers (systematic determinants). For example, if he comes from an illness-prevention-oriented family, he is likely to adopt strategies that facilitate the prevention of illnesses. The second level is the mesosystem- this describes the individual's interaction with others he is frequently in contact with. This can include school, work colleagues, workplace, and church (systematic determinants).

In the instance of a Nigerian youth or undergraduate, the mesosystem plays a crucial role in adopting appropriate health behavior, such as mental illness prevention strategies. This is because the school is the second home of these young adults-who are transitioning from a dependent lifestyle and exploring their independence. Friends, peers, and school are directly significant in adopting health choices. The exosystem emphasizes the influence of the community, mass media, and social policies (systematic determinants) on health outcomes. The effects are not directly exerted but manifest through social networks and systems [Limone & Toto, 202021]. The macrosystems are cultural, societal, and religious attitudes, values, and ideologies that interact with the individual's characteristics (behavioral determinants), to influence their health decisions and outcomes [Kilanowski,2017].

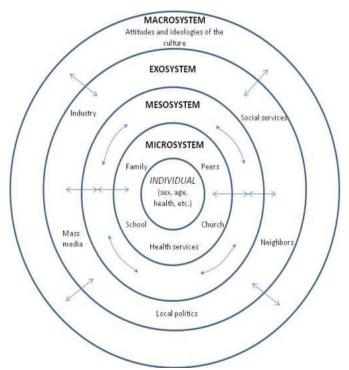


Fig1: A diagrammatic model for the Socio-ecological framework

Furthermore, mental illness prevention has also been classified into universal, selective, and indicated preventive interventions. This categorization refers to the time intervention was sought during the progression of the illness and the individual that receives the intervention [Campton & Shim, 2020]. According to Mrazek and Haggerty [1994], the universal mental illness prevention framework utilizes approaches targeting the general population. In contrast, the selective prevention framework is directed toward the high-risk group. However, the indicated prevention model targets high-risk persons with mental illness symptoms but may not meet the full diagnostic criteria.

Summarily, preventing mental disorders and maintaining optimum health and wellbeing depends on these socio-ecological factors' seamless and simultaneous interaction [Golden & Earp, 2012]. To this effect, when and if the socio-ecological model is applied appropriately in Nigerian universities, there will be the possibility of reducing the rate of mental illness among Nigerian university students.

### V. CONCLUSION

The crux of this paper is examining innovative viewpoints on the prevention of mental illness among Nigerian university students using a socio-ecological model.

Despite the heightened awareness in the field and study of mental health in Nigeria, the sector is still plagued with negligence, scarcity of trained and experienced human resources, shortage of infrastructure, and lack of data and statistics on mental health illness. Therefore, mental illness prevention includes any action intended for identification and reducing mental illness and risks, thereby encouraging mental wellbeing.

Several studies have shown that most mental illnesses start before adulthood (earlier than 25). This is the transitional phase, where most young adults advance from secondary school to tertiary institutions. This phase is marked by an upheaval of everyday routine, stress, anxiety, and depression. In addition, the Nigerian educational clime's peculiarities are permeated by its unique stressors, instabilities, and harsh daily realities, such as an unconducive learning environment, epileptic power supply, and lack of running water supply.

The cost of mental illness to the individual and the society is enormous, ranging from social, economic, and psychological costs. Systematic determinants (predisposing variables) and behavioral determinants (controllable risk factors) have been highlighted as significant predictors of mental illness. These determinants include lifestyle, use of a substance, types of friends, and a lack of educational commitment. The socioecological theoretical model explored the interplay between behavioral determinants (personal factors) and the systematic determinants (environmental factors) in understanding possible

cause and effect factors in mental health outcomes and behaviors. The socio-ecological model's microsystem, mesosystem, exosystem, and macrosystem describe the simultaneous interactions and the degree to which these determinants influence the health choice of an individual. The universal, selective, and indicated preventive interventions were used to explain mental illness preventive strategies.

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