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Original Research Article

Pattern of psychiatric disorders among young persons attending psychiatric clinics in Benin city: implications for health

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ABSTRACT

Background: Psychiatric disorders are one of the leading causes of disability worldwide. From a lifespan perspective, youth is the peak period for the onset of mental illness and it is the young who carry the burden of mental ill-health. This study was carried out to assess the pattern and determinants of psychiatric disorders among young persons attending psychiatric clinics in Benin City, Edo State.
Methods: A descriptive cross-sectional study was carried out among young persons attending psychiatric clinics in Benin City using a multi-stage sampling technique for selection. Pretested interviewer-administered questionnaire was used for data collection. Data were analyzed with IBM SPSS version 21.0 software. Bivariate analysis between socio-demographic variables/risk factors and the psychiatric disorders of the respondents was done. The level of significance was set at $p<0.05$.
Results: A total of 427 young persons with mean age (SD) of 20.3±4.0 years participated in the study. One hundred and six (24.8%) of the respondents suffered schizophrenia while depression, mania and unspecified psychosis accounted for 74 (17.3%), 49 (11.5%) and 36 (8.4%) respectively. One hundred and thirty eight (32.3%) of the respondents had a history of substance abuse and over three quarters 376 (88.1%) had family support. Majority of the respondents 412 (96.5%) were currently on psychotropic medications.
Conclusions: This study showed that schizophrenia was the commonest psychiatric disorder followed by depression, mania and unspecified psychosis. Efforts should be made by relevant stakeholders to educate the public about mental health disorders and its predisposing risk factors.

Keywords: Mental illness, Psychiatric disorders, Schizophrenia, Young persons

INTRODUCTION

Psychiatric disorder, also called mental illness, is a mental or behavioural pattern that causes either suffering or a poor ability to function in ordinary life.[1,2] Psychiatric disorders are the leading cause of disability among young people globally, accounting for 11.5% of the global disease burden and 45% of years lost to disability.[2] With adolescence and emerging adulthood considered to be the most productive years of life, these figures raise significant concerns about the impact of psychiatric disorders, not only on young persons themselves, but also on their families, communities and the wider society.[3] About half of mental disorders begin before the age of 14 and similar types of disorders are reported across cultures.[4] Both retrospective and prospective research has shown that most adulthood mental disorders begin in childhood and adolescence.[5,6] From a lifespan perspective, youth is the peak period for the onset of mental illness and it is the young who carry the burden of mental ill-health.[7]

Using the disability-adjusted life years (DALY) measure, unipolar depressive disorders, schizophrenia, bipolar disability, alcohol use and self-inflicted harm are ranked as five of the top causes of DALY among young persons.[8] Not only are there high rates of mental ill-health among young persons but for 75% of adults with a mental disorder, the onset of that disorder will have occurred by the age of 25 years suggesting high rates of continuity in psychopathology overtime.[9] Thus, the onset of mental ill-health in youths places individuals at high risk of developing enduring and potentially intractable mental health difficulties, which carry with them additional risks including social and vocational exclusion, stigma and discrimination, restricted access to health and social services and higher rates of disability and premature deaths.[10] Commonly found psychiatric disorders in young persons include anxiety, attention-deficit/hyperactive disorder, conduct disorder, depression, psychosis, bipolar disorder, eating disorder schizophrenia and suicide.[11]

All forms of mental health problems have been associated with an increased risk of disruption to education and school absence among young persons. This culminates in poor educational attainment and poor employment prospect which will further worsen their health status.[12] As a response to the general challenges of mental health and development in Nigeria, the Mental Health Policy document in Nigeria was formulated in 1991. It was the first policy addressing mental health issues. Since its formulation, no revision has taken place and no formal assessment of how much it has been implemented has been conducted.[13] Other policies whose scope encompasses the mental health of young persons include the National Adolescent Health Policy (NAHP), the National Adolescent Reproductive Health Strategic Framework (NARHSF), the National Youth Policy (NYP) and the National policy on health and development of adolescents and young people in Nigeria.[14-17] However, these policies do no critically address the mental health issues of adolescents and young persons. In addition, there is no database on prevalence, pattern or risk factors of psychiatric disorders among young persons and paucity of statistics on mental health burden in Nigeria. It is therefore difficult to identify areas of need, to make informed decisions about policy direction, and to monitor progress. A consequence of this information gap is the continued neglect of mental health issues and the large unmet need for preventive services that exists for mental health problems.[13] To improve the health outcomes of people with psychiatric disorders, it is important to understand the number and distribution of these disorders among the population. It is hoped that the study findings would help identify the pattern of psychiatric disorders and risk factors among young persons attending psychiatric clinics in Benin City and provide reliable statistics upon which policy makers can rely on to plan and implement effective strategies for the prevention and control of psychiatric disorders.

METHODS

The study was a descriptive cross-sectional study, carried out in Federal Neuro-Psychiatric Hospital, Uselu (FNPHU) Benin City and the Mental Health Department of the University of Benin Teaching Hospital (UBTH), Benin City between August 2015 and August 2016. The FNPHU and UBTH are specialized health facilities that offer both in- and out-patient psychiatric services. The study population consisted of young persons aged between 10 and 24 years attending psychiatric clinics on out and in-patient. A minimum sample size of 427 was calculated using the appropriate formulae for a descriptive study and assuming a 48.0% prevalence of mental disorders among high school students in National Guard Rayadh, Saudi Arabia.[18,19] Multistage sampling technique comprising 2 stages was used to select respondents. Stage one comprised selection of hospital. Using simple random sampling technique by balloting, two of the three hospitals in Benin City (Federal Neuro-Psychiatric Hospital, Benin City and University of Benin Teaching Hospital, Benin City) that manage psychiatric disorders were selected. In stage 2, systematic sampling technique was used to select respondents from the two psychiatric clinics. The patients' change books and attendance registers was used as the sampling frames for in- and out- patients respectively. Using an appropriate sampling interval for each hospital, the first respondent was selected using simple random sampling method after which every nth respondent was selected until the minimum sample size was achieved.

Data was collected using a pre-tested structured interviewer-administered questionnaire comprising open and closed ended questions. The study tool was peer reviewed and adjudged to be internally valid. In addition, a review of record was done to ascertain the diagnosis of the respondent. Four research assistants weretrained for 2 days on interviewing techniques and standardization of the study tool was carried out. A pre-test of the study instrument was conducted in Central hospital, Benin City, and corrections were effected prior to the commencement of the study. The study interviews were conducted in private rooms in the clinic or wards to help ensure discretion. Immense care was taken to establish rapport with the study participants before questionnaire administration. The study was described to the respondents, and the research staff explained to participants the value of honest answers to potentially sensitive questions to achieve accurate insights concerning their mental health and well-being. Ethical clearance to conduct this research was obtained from ethical committee of the Federal Neuro-Psychiatric Hospital, Benin City. Written informed consent was obtained from respondents who were 18 years and above in the presence of their parents/wards. For those <18 years, their parents/wards gave written informed consent and assent was also obtained from them. In order to ensure confidentiality, serial numbers rather than names were used to identify the respondents. Respondents were

informed that they had the right to decline participation or to withdraw from the study at any time they wished. Respondents were also informed that there were no penalties or loss of benefits for refusal to participate in the study or withdrawal from it. All data was kept secure and made available to only members of the research team

The questionnaires were screened for completeness by the researcher after which they were coded, entered into the IBM SPSS version 21.0 software and analysed.Psychiatric disorders were grouped using the ICD-10 Classification into Mood disorders (Mania, depression, bipolar disorders, anxiety disorder, mood and behavioural disorders), psychosis (schizophrenia, psychosis, puerperal psychosis), Substance use disorder, Disorders arising from childhood (autism, mental retardation, eating disorder) and seizures (epilepsy, simple seizure disorder).[20] Test of association were carried out using Chi squared tests or the Fisher's exact test where appropriate. The level of significance was set at $p<0.05$. Frequency tables were used to present the results.

RESULTS

Table 1: Socio-demographic characteristics of respondents.

Variables	Frequency (n = 427)	Percent (%)
Age group (years)*		
10-14	62	14.5
15-19	59	13.8
20-24	306	71.7
Sex		
Male	225	52.7
Female	202	47.3
Religion		
Christianity	379	88.8
Islam	47	11.0
Atr**	1	0.2
Marital status		
Single	382	90.5
Married	41	9.6
Co-habiting	4	0.9
Level of education		
No formal	44	10.3
Primary	55	12.9
Secondary	218	51.0
Tertiary	110	25.8
Schooling status (n=383)		
In school	157	41.0
Out of school	226	59.0

*Mean age (standard deviation) = 20.3±4.0years;**ATR = Africa Traditional Religion.

A total of 427 questionnaires were filled and analyzed for this study. The mean age of the respondents was 20.3 ± 4.0 years. A higher proportion of the respondents 306 (71.1%) were in the age group 20 -24 years. More of the respondents were males, 225 (52.7%), majority of them were Christians 379 (88.8%) and single 382 (90.5%). Two hundred and eighteen (51.0%) of the respondents had secondary level of education while 110 (25.8%), 55 (12.9%) and 44 (10.3%) had tertiary, primary and no formal education, respectively. Of those who had received formal education, 226 (59.0%) of them were currently out of school (Table 1).

Table 2: Patternand duration of psychiatric disordersof respondents.

Variables	Frequency (n = 427)	Percent (%)
Diagnosis		
Schizophrenia	106	24.8
Depression	74	17.3
Mania	49	11.5
Unspecified psychosis	36	8.5
Mental retardation	29	6.8
Bipolar disorders	27	6.3
Substance use disorders	24	5.6
Autism	22	5.2
Simple seizure disorder	21	4.9
Mood and behavioural disorders	13	3.3
Eating disorder	10	2.3
Anxiety disorders	9	2.1
Epilepsy	7	1.6
Icd-10 classification		
Mood disorders	173	40.5
Psychosis	142	33.3
Disorder arising from childhood	60	14.1
Seizure disorder	28	6.6
Substance use disorder	24	5.6
Duration of diagnosis		
<6 months	298	69.8
≥6 months	129	30.2

About a quarter 106 (24.8%), of the respondents had schizophrenia, while 74 (17.3%), 49 (11.5%) and 36 (8.5%) were diagnosed of depression, mania and unspecified psychosis, respectively. Using the ICD 10 classification, 173 (40.4%) of the respondents suffered mood disorders, while 142 (33.3%) and 60 (14.1%) suffered psychosis and disorders arising from childhood. The least suffered psychiatric disorders were seizure disorder 28 (6.6%) and substance use disorder 24 (5.6%) (Table 2). A higher proportion of the respondents 412 (96.5%) were currently on psychotropic medications.

Seventy one (17.3%) and 138 (32.3%) had a family history of psychiatric disorders and history of substance abuse respectively. Marijuana was the most common substance abused among those who had a history of

substance abuse 101 (73.2%). Less than a fifth of the respondents 57 (13.4%) had a history of head injury and 69 (16.2%) of the respondents resided alone. Over three quarters of the respondents 376 (88.1%) had their family's support (Table 3).

Table 3: Risk factors for psychiatric disorders among respondents.

Variables	Frequency (n=427)	Percent (%)
Family history		
Yes	71	17.3
No	356	81.7
History of substance abuse		
Yes	138	32.3
No	289	67.7
Type of substance (n=138)		
Marijuana (cannabis)	101	73.2
Nicotine	32	23.2
Others*	5	3.6
History of head injury		
Yes	57	13.4
No	370	86.6
Income of respondent/care giver		
≤18,000	113	26.5
>18,000	314	73.5
Resides alone		
Yes	69	16.2
No	358	83.8
Family type		
Monogamous	35	8.2
Polygamous	392	91.8
Family support		
Yes	376	88.1
No	51	11.9

DISCUSSION

The role of gender in psychiatry disorders is becoming increasingly important. More than half of the respondents were males. This is similar to studies conducted in Makurdi in 2008, Calabar in 2015, Mumbai in 2017, in the United Kingdom in 2014 and Ontario in 2012.[21-25] A gender approach to mental health provides guidance to the identification of appropriate responses from the mental healthcare system, as well as from public policy. Gender analysis improves understanding of the epidemiology of mental health problems, decisions and treatment of these problems in under-reported groups, and also increases potential for greater public participation in health. However, gender, like other stratifiers, does not operate in isolation but interacts in an additive or multiplicative way with other social markers like class and race.[26]

Schizophrenia was the predominant psychiatric disorder in this study followed by depression, mania and psychosis. This is in consonance with findings from studies carried out in Ilorin, Enugu and Osun states in 2008, 2010 and 2014 respectively.[27-29] where schizophrenia was the commonest psychiatric disorder. This may be because caregivers tend to easily notice and be more worried about elevated mood of schizophrenia compared to the low mood of depression. In addition, schizotypal conditions are linked to violent tendencies of individuals affected and may be seen as threat to their environment making caregivers to present them in health facilities.

Majority of the respondents had had formal education with over half attaining secondary education. This is in keeping with the studies done in Borstal institution, Nigeria in 2009 and Osun 2014 where the highest proportion of the respondents had secondary level of education.[29,30] A higher proportion of respondents were out of school. Mental disorders have been found to be significantly associated with termination of schooling.[31] All forms of mental health problems especially the schizotypal types with high episodes of loss of touch with reality, have been associated with an increased risk of disruption in education among young persons but less so in depression which does not present with such affectation. Most psychiatric disorders present symptom patterns that cause severe impairment on the emotional, cognitive and social level. Thus, young persons suffering from a mental disorder risk finding themselves in a downward spiral caused by the reciprocal association of psychological symptoms and negative school experiences that may culminate in early school leaving.[32]

Close to a fifth of the respondents who had psychiatric disorders had a positive family history. This agrees with a finding from a study carried out in Ilorin where family history was present among about a fifth of the respondents.[27] Mental illnesses are multifactorial illnesses. Research has shown that genetic factors could underpin both the impaired cognitive ability and the increased risk of mental disorders.[33] Thus, the need to take a detailed family history cannot be over emphasized. Substance abuse was reported in about a third of the respondents and most of them took marijuana. This is in keeping with findings from Benin 2011, Enugu 2010 and Ilorin 2008 studies which revealed that about a fifth to a quarter of the respondents abused substances and that marijuana was the most commonly abused drug among the young persons.[27,28,34] Marijuana, also known as cannabis or Indian hem is notoriously implicated more than other substances in the burden of psychiatric disorders globally because of its stronger deleterious effect on health generally and mental health particularly. It causes brain insult resulting in altered senses, changed mood, difficulty with thinking and solving problems, impaired memory and body movements which are symptoms found in different psychiatric disorders. Cannabis dependence also accounts for 2 million DALYs globally. Public health action should therefore focus on prevention and elimination of substance dependence such

as provision of an economically favourable environment for young persons and strict sanctions on drug dealers. Also, rehabilitative services for substance dependent persons will go a long way in curtailing the menace of substance abuse and its disorders.

Majority of the respondents said they received family support. Although poor family function is not required to experience mental health problems, it is robustly linked to poor health outcomes among psychiatric patients. Many preventive and treatment approaches that have demonstrated effectiveness in promoting mental health are family-centered. Family members and friends should therefore empathize with psychiatric patients and give them necessary support. This will significantly contribute to achieving the 4th target of the 3rd sustainable development goal which aims at promotion of mental well-being of all people globally by the end of 2030.

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