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Perception of Parents to Childhood Psychiatric Disorders in Nigeria

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Abstract

Background: Many community and hospital based studies have found high prevalence of psychiatric morbidity in the community and hospital. However, it has been noticed that few children are presented to hospital by parents with complaints related to psychological or emotional disturbances. **Aim**: This study set out and identified perception of parents in a paediatric out-patient setting as to what they considered to be symptoms suggestive of psychiatric disorders in children and what they considered to be contributory factors to the causation of these disorders. **Methodology**: A cross-sectional study was carried out where parents' were interviewed and the sociodemographic features of the child, parents and family were elicited. The child was assessed for psychological disorder with the Reporting Questionnaire for children. **Result**: Majority (90%) of the parents had poor perception about childhood psychiatric disorders. Most of the symptoms parents identified as being suggestive of disorders were those of overt, externalizing abnormal behaviours. Inheritance, head injury, epilepsy, and lack of consistent discipline were the factors identified by parents as being contributory to the development of psychiatric disorders in children. **Conclusion**: Most parents had poor perception. The study advocated health education and enlightenment programmes to enhance mental health literacy for parents so that they could identify and present their children for assessment of symptoms which appear to be those of a psychological nature.

Keywords

Perception, Knowledge, Childhood Psychiatric Disorders, Nigeria

1. Introduction

The United Nations Convention on the Rights of the Child defines a child as "a

human being below the age of 18 years unless under the law applicable to the child" [1]. The World Health Organization has defined a child as any person from delivery till the age of nineteen years [2] and this period is termed the childhood period.

A child can be said to have a psychiatric disorder "when behaviour or emotion in a child interferes with the child's educational or social opportunities or when they cause the child sustained or repeated distress". It also deals with developmental problems in a child that may be maturational, psychological or organic [3]. The following factors need to be considered before a diagnosis of psychiatric disorder in a child can be made: this include, whether what is observed constitutes a disorder or is merely a symptom, the age of the child, the quality, quantity and persistence of the symptoms and the setting in which symptoms occur [4]. Mental disorders among children are described as serious changes in the way children typically learn, behave, or handle their emotions, which cause distress and problems getting through the day [5]. Symptoms of mental disorders change over time as a child grows, and may include difficulties with how a child plays, learns, speaks, and acts or how the child handles their emotions. Symptoms often start in early childhood, although some disorders may develop during the teenage years. The diagnosis is often made in the school years and sometimes earlier. However, some children with a mental disorder may not be recognized or diagnosed as having one [5].

Multiple studies in Nigeria have found prevalence of childhood psychiatric disorders to be between 10% - 21.1% [6] [7] [8] in community studies. However, hospital based studies have found that most of the children brought to hospital for treatment consist of those with brain damage, severe mental retardation, epilepsy, psychosis and conduct disorder [9] [10]. More recent studies in Nigeria have found a high percentage of psychiatric disorders in children [11] [12]. In a recent study conducted in Nigeria, a prevalence of 37% of psychiatric morbidity in primary school pupils and 57.7% in those undergoing Islamic education away from their parents was found [13].

It has become clear therefore that even though evidence exists of childhood psychiatric disorders in the community, presentation of children by parents because of these disorders is negligible. A study by Abiodun *et al.* (2011) [14] supported this with the following conclusions "that in Nigeria, child psychiatric disorders are common in hospital patients, although differences may exist in pattern and types". The study emphasized the need to screen hospital patients for morbidity to ensure early detection and treatment of psychiatric disorders in childhood. This is to limit the period of illness and avoid its adverse effects on growth and development of the children and to reduce the risk of carrying over remediable problems in childhood into adulthood.

Objective: The study was carried out with assessing the knowledge and attitude of parents to childhood psychiatric disorders. This article reports on the knowledge aspect. The attitude aspect is reported elsewhere.

2. Aims of the Study

1) Assess parents knowledge and perception on childhood psychiatric disorders

2) Determine the types of symptoms that are considered by parents to be suggestive of psychiatric disorders in children.

3) Determine the contributory factors that are considered by parents to be contributory to the development of childhood psychiatric disorders.

4) Determine the predictors of knowledge of parents to childhood psychiatric disorders.

3. Methodology

The study was a cross sectional descriptive study conducted in Kano city, northern Nigeria, the study was carried out within a three months period between February to April. Kano had a population of 2,958,000 based on 2006 census while it has an estimated population of 3,906,000 in 2019 [15] [16]. It is a major cosmopolitan city in West Africa and a major centre of commerce. A large part of its population consists of the Hausa ethnic group with a significant population of other ethnic groups. The study was carried out at the Murtala Muhammad Specialist hospital which is a tertiary hospital owned by the state government and has been in existence for about a hundred years. It has a fully functional paediatrics department and the paediatrics clinic where the study was carried holds daily. Average attendance was 200 - 250 patients per day. Ethical approval for the study was issued by the management of the hospital.

Sample Size:

Sample size required was calculated using the formula; [17] [18]

$$S = Z^2 P(1-P)\big/D^2$$

S = Sample size required at 95% confidence level

P = Prevalence of factor

(Self-referrals to institution, in this case 5%); [19]

D = Allowable error (3%)

$$S = 1.96^2 \times 0.05(1-0.05)\big/0.03^2$$

$$S = 203$$

A set of criteria's were set for the study as follows;

Inclusion Criteria:

All children brought by their parents to the paediatric outpatient department.

Exclusion Criteria:

1) All those children whom were too ill to participate in the study

2) Those whose parents refused consent.

3) Those children accompanied by a caregiver not a parent who does not know the required information.

4) Those whom were accompanied by a care giver whom is also young.

Instruments/Questionnaire used in the study:

1) Author designed questionnaire to gather information on reason for consultation and socio demographic features of the index child, his parents and his family.

2) Reporting questionnaire for children (RQC): It is a ten item questionnaire developed by the World Health Organization (WHO) where it identifies children with probable psychiatric morbidity. The response to each question is a "Yes" or "No". A minimum score of one identifies those with probable psychiatric disorder. The RQC has been found to have a sensitivity of between 73% - 97% and a specificity of between 61% - 81% [7] [8] [20].

3) Parents' assessment of diagnostic statistical manual (DSM V) symptoms as being suggestive of childhood psychiatric disorders: Thirty six unambiguous phrases and sentences as presented in DSM V as symptoms and signs of childhood psychiatric disorders [21] were presented for the parents to agree, disagree or indicate a not sure response to the phrase. A score of above two (*i.e.* agreeing) with symptom was recorded as positive perception and a score less than two a negative perception. A score of two a 'not sure' perception.

4) Parents' assessment of contributory factors to the development of childhood psychiatric disorders. Eleven factors identified in the literatures [22] [23] [24] as being contributors to the development of childhood psychiatric disorders were presented to the parents to comment as to whether they consider them contributory to the development of psychiatric disorders in children. They were also scored on a three point scale. A score of two a 'not sure' perception.

Scoring: Overall knowledge and perception of parents was arrived at by computing the mean score of the respondents on the DSM V and contributory items. A score of more than two was good perception and a score of less than two a poor perception. A score of two a "not sure" perception.

Data collection: The Research questionnaires were translated into Hausa language which is the local language. The Hausa questionnaire was back translated to English and a consensus of translation arrived at. The questionnaire was administered in Hausa to those parents whom could not understand English. Three other trained assistants were used in data collection. Statistical analysis was done using the statistical product and service solutions (IBM SPSS version 25) [25].

Pilot study: A pilot study was carried out to determine the validity and reliability of the English and Hausa translated questionnaire. It involved two groups with 30 respondents in each group; Psychiatric Nurses fluent in Hausa and English and parents matched for years of education with the nurses whom were also bilingual who have presented their children to the clinic. A test retest, Inter-rater and split-half reliabilities were variously found to be 0.88, 0.97 and 0.71.

The Psychiatric nurses had a knowledge score of 2.8 while the non-nurses had a score of 1.4. A statistical test of significance between the two scores found a p = 0.0001. The questionnaire was thus found to be valid in assessing knowledge.

4. Results

Socio-demographic features of index children: There were two hundred and three children aged between 5 - 12 years. Mean 7.1 ± S.D 1.8 yrs. About 108 (53.2%) were in orthodox education, mean years of education 2.6 ± 1.5 yrs. 79 (38.9%) were in Islamic schools and 16 (7.9%) were not in any form of education. This is as reflected in Table 1.

Socio-demographic features of families: Many (55.7%) of the fathers were monogamous. The mean age of parents' eldest living child which was equated to be mean years of parenting experience was 9.3 ± 5.5 years. Only 6% had a family history of mental illness.

Characteristics of illness and hospital consultation: Most (85.7%) of the children were accompanied by their mothers. Only 2 (1%) of the children were perceived as having a psychological problem by the parent, 5 (2.4%) were perceived as having a combination of physical and psychological illness. The rest were perceived as having only physical illness as reflected in Table 2.

The number of those probable psychiatric cases were 39 (19.2%) based on their RQC score of one and above while the rest were non probable psychiatric cases. This is presented in Table 3.

Table 1. Socio-demographic features of index case.

Total N = 203	
Variables	n (%)
Age (years)	
5 - 8	148 (72.9)
9 - 12	55 (27.1)
Educational level (years of Schooling)	
0	16 (7.9)
1 - 2	65 (32.0)
3 - 4	29 (14.3)
5 - 6	12 (5.9)
7 - 8	2 (1.0)
Islamic Only	79 (38.9)
Siblings	
Full 0 - 4	123 (60.6)
5 - 8	63 (31.0)
9 - 12	11 (5.4)
12+	6 (3.0)
Half 0 - 4	141 (69.5)
5 -8	42 (20.7)
9 - 12	16 (7.9)
12+	4 (1.9)

Table 2. Characteristics of illness and hospital consultation.

Total N = 203	
Variables	n (%)
Gender of Accompanying Parent	
Mother	174 (85.7)
Father	29 (14.3)
Reason for Hospital Consultation	
Fever	63 (31.0)
Diarrhoea/vomiting/Stomach ache/Poor appetite	30 (14.8)
Malnutrition	16 (7.9)
Cough/Catarrh/respiratory problems	49 (24.1)
Rashes	15 (7.4)
Combination/other Complaints	30 (14.8)
Parent's Classification of Child's Illness.	
Psychological Only	2 (1.0)
Psychological and Physical	5 (2.4)
Physical Only	196 (96.6)

Table 3. Index children scores on the reporting questionnaire for children.

N = 203	
Variable	n (%)
RQC Scores:	
Non Probable Cases	164 (80.8)
Probable Cases	39 (19.2)
TOTAL	203

Parents' knowledge of symptoms suggestive of psychiatric disorders in children:

Parents' knowledge of DSM V symptoms suggestive of psychiatric disorders is as highlighted in Table 4 where only 5% of parents had good knowledge of symptoms as being suggestive of childhood psychiatric disorders as they had a score of more than two. More than 90% had poor knowledge. The symptoms that most parents had good knowledge about were; a child preferring to be on his own, having repetitive behaviour and ritualistic way of doing things, eating of non-nutritive items, having twitches of face or body and difficulties in taking care of self in activities of daily living.

Parents' knowledge of contributory factors to the development of childhood psychiatric disorders: Also only about 6% of the parents had good knowledge about contributory factors to the development of childhood psychiatric disorders while about 86% had poor knowledge. This is reflected in Table 5. A lot of

Table 4. Parents knowledge of DSM V symptoms suggestive of childhood psychiatric disorders.

N = 203	
Variable	n (%)
Knowledge of Symptoms	
Poor Knowledge	184 (90.6)
Good Knowledge	10 (5.0)
Not Sure Knowledge	9 (4.4)

Table 5. Parents' knowledge of contributory factors to the development of childhood psychiatric disorders.

N = 203	
Variable	n (%)
Knowledge Factors	
Poor knowledge	175 (86.2)
Good Knowledge	13 (6.4)
Not Sure Knowledge	15 (7.4)

the parents also identified convulsions, head injury, hereditary factors and lack of discipline in a child as contributing to development of childhood psychiatric disorders.

The four factors parents identified as being contributory to the development of psychiatric disorders in children were inheritance, epilepsy, head Injury and lack of consistent constructive discipline by parental figure towards a child. This is as depicted in Figure 1 where it shows the percentage of parents with a score of more than two (*i.e.* expressing) a good knowledge for each of the items presented.

On merging the two themes of identifying symptoms and contributory factors to give an overall knowledge, as reflected in Table 6; only 6% of parents had good knowledge about childhood psychiatric disorders. The overall knowledge is also depicted as Figure 2.

Further bivariate analysis between knowledge of parents and other variables in Table 7 revealed; parents who classified their child as having a psychological component to their illness were more likely to have good than poor knowledge (66.7% vs. 33.3%, $X^2 = 39.25$, df = 1, p = 0.0001). Gender of accompanying parent and family history of psychiatric illness were unlikely to affect knowledge.

Another finding indicated that a family history of psychiatric illness was unlikely to affect the parents' classification of their child's illness. Also children with a positive family history of psychiatric illness were more likely to be identified by the RQC as probable psychiatric cases. (66.7% vs. 33.3%, $X^2 = 18.50$, df = 1, p = 0.0002).

Logistic regression analysis (Table 8) revealed that a parent classifying the child as having only a physical illness predicted poor knowledge (r = 0.587, p = 0.003).
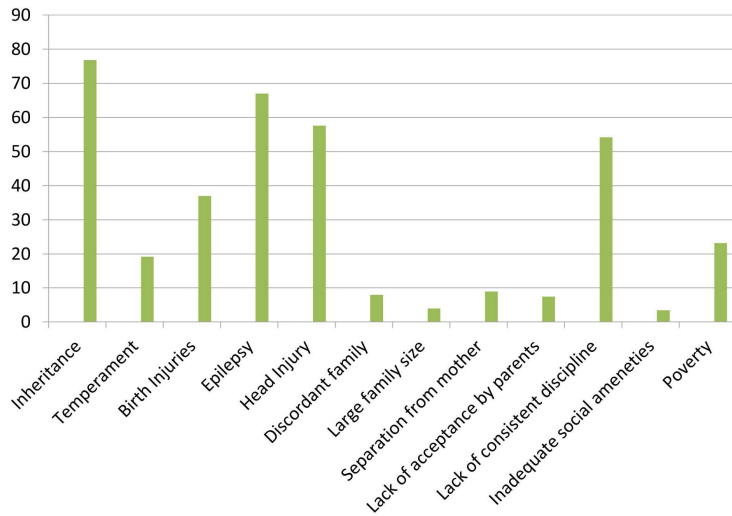
Figure 1. A histogram depicting parents' knowledge about contributory factors to the development of childhood psychiatric disorders. Legend: The horizontal axis depicts the factors while on the vertical axis is the percentage of parents whom positively identified the factors as been contributory.

Table 6. Parents overall knowledge of childhood psychiatric disorders.

N = 203	
Variable	n (%)
Poor knowledge	183 (90.1)
Good Knowledge	12 (6.0)
Not Sure Knowledge	8 (3.9)

Table 7. Knowledge of childhood psychiatric disorders versus some variables.

| Variable	Knowledge		X^2	P value	FET
	Poor	Good			
Parents' classification of child's illness.					
Physical only	181(98.9) (95.8)	8 (66.7) (4.2)	39.25	0.000000	0.0001187
Psychological	2(1.1) (33.3)	4 (33.3) (66.7)			
Gender of accompanying parent					
Mother	159 (86.9) (95.7)	7(58.3) (4.3)	6.78	0.0417593	0.1586739
Father	24 (13.1) (82.80)	5(41.7) (17.2)			N/S
Family history of psychiatric illness.					
None	174 (95.1) (94.6)	10 (83.3) (5.4)	2.92	0.0874702	0.1400130
Yes	9 (4.9) (81.8)	2(16.7) (18.2)		N/S	N/S
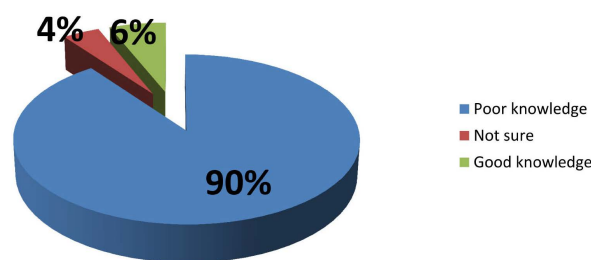
Figure 2. A pie chart depicting knowledge of parents to childhood psychiatric disorders.

Table 8. Logistic regression analysis on variables that predicted poor knowledge to childhood psychiatric disorders.

Variable	coefficient	std error	T-ratio	p value
Poor Knowledge (constant)	1.12603	3.87784	0.29038	0.00001
Parents classification Of child's Illness (Physical only)	−2.63468	0.91090	−2.8923	0.00384

X^2 = 24.80856. df = 1.

5. Discussion

Socio demographic Characteristics of families and index child: All the children were in middle childhood and the orthodox primary school enrolment was 53.2% which compared favourably with the National enrolment average of 51.9% [26]. Most of the children were brought to the hospital by their mothers as similar in other studies [6] [27]; this is probably due to the nurturing and protective role played by most mothers. Many mothers assume the care of their sick children which includes presenting children for hospital consultation. Most of the families belonged to the lower social class.

Characteristics of illness and hospital consultation: Only 3.4% of the parents were willing to classify their children as having a psychological illness or having a psychological component to their illness. This may be due to parents' poor knowledge of what constitutes psychological symptomatology in children or may be due to denial to avoid labelling the child as having a psychiatric disorder due to the social stigma attached to psychiatric illness in the society. This is despite the RQC identifying 19.2% of the children as having probable psychiatric disorders. The level of morbidity elicited by the RQC is comparable to what has been found in other community studies with rates between 10% - 22% [6] [7] [8] [27] [28]. A review article by Corina *et al.* in 2012 concerning sub-Saharan Africa found rates of childhood psychiatric disorders using screening questionnaires to be between 10.8% - 20.7% [19].

Parents' knowledge about childhood psychiatric disorders and predictor variables:

Knowledge of symptoms suggestive of childhood psychiatric disorders was poor as only 5% of parents had good knowledge while 90.6% had poor knowledge. The poor knowledge may be due to the perception of the parents that the

symptoms presented do not conform to the cultures concept of psychiatric disorders of children. This was highlighted by Hackett and Hackett [29] who showed that culture affects the presentation of emotional disorders in children, and may also influence the way parents' interpret their children's behaviour and the actions they take. Hackett and Hackett [29] also opined that unlike physical disorders which may be identified using measurement parameters, child psychiatric disorders use social constructs whose definition depends not only on the manifestation of abnormal behaviour but also on cultural values. It was obvious that in this study the findings suggest that the community has its own ideas of abnormal behaviour as the symptom identified as suggestive of psychiatric disorders were generally those of overt gross abnormal behaviour. Hackett and Hackett also found that a qualitative difference between ethnic groups in ideas of normal and deviant behaviour exists. In a comparative study of English and Indian parents living in England. Fears (responding to a specific stimulus with severe anxiety) were far commoner in the Indian children; it aroused much less concern in their parents compared to the English parents.

The symptoms that were identified in the present study are found mostly in those with mental retardation, brain damage and epilepsy. These are the disorders found mostly in children in psychiatric hospital populations in Nigeria [9] [10]. A study near where this study was carried out found a very high proportion of children and adolescents suffering from mental and neurological disorders not receiving any treatment at all for many years. Those who eventually receive treatment, four out of ten times would have presented to the traditional/religious healers prior to presenting at the mental health facility [30]. The study also found the most common disorders to be epilepsy, mental retardation and Attention deficit hyperactivity disorder. Wolff *et al.* [31] in his study found that 78% of his respondents thought they would know if somebody was mentally ill by observing strange or odd behaviour, odd speech, the way they dress, facial appearance and aggression which are all overt behaviours. The present study also found that most (86.2%) of parents had poor knowledge about contributory factors to the development of childhood psychiatric disorders. Factors identified by parents as contributory were inheritance, epilepsy, head injury and lack of consistent constructive discipline by parental figures towards a child. The identification of inheritance was similar to the finding by Wolff [31] and Rutter *et al.* [32] who in their studies found 73% of their respondents believed that mental illness could be passed down in families, this belief also seemed to be held by parents in this study. Epilepsy and head injury were possibly identified as they are viewed as affecting the brain directly. Lack of consistent discipline was identified because undisciplined children are susceptible to abuse drugs including cannabis which is viewed as causing mental illness as found in other studies [33]. An almost similar study in Ethiopia found 60.9% of parents perceived more of Externalizing behavioural symptoms like "stealing from home, school or elsewhere" as signs of mental illness while only 38.2% viewed internalizing symptoms like "being nervous in new situations and easily loses confidence" as being features of

mental illness in children. Even at this the majority of parents in Ethiopia (92.7%) agreed that they would seek treatment either from religious or spiritual healers if their children developed mental illness [34].

Classification of a child's illness as only physical predicted poor knowledge possibly failing to entertain psychological component to their child's illness because of poor knowledge. It was found that patients with positive family history of psychiatric illness were more likely to be identified as having a probable psychiatric illness by the RQC, highlighting that genetic factors predispose to psychiatric illness [35] [36] [37].

Limitations

The respondents were skewed with people from more of the lower social classes, this limits generalisation of the study.

6. Conclusion

Poor knowledge about childhood psychiatric illness regarding symptoms of presentation and causative factors was highly prevalent. The statement by Ebrahimi *et al.* is apt and appropriate to this context where he stated "Cultural and social growth and development of human resources depend on the health of society, and mental health is a key element of communities' health. Since children are the future builders of every society, the health of human societies is dependent on children's health. Mental disorders are among the most important risks threatening health of children; hence, on time recognition and appropriate actions by families to remedy the harmful effects of these disorders can decrease the harms" [38].

7. Recommendations

The study found that people with good knowledge were more likely to identify their children as having a psychological component to their illness. Therefore, it is important to enhance knowledge of parents at the study area through health education. The health education should aim to enlighten parents about the broadness of psychiatric symptoms in children; this should be the focus as the parents were only able to identify few overt symptoms of abnormal behaviour as being suggestive of childhood psychiatric disorders. The health education can be administered through the electronic media, special health talk, at special gatherings such as parent teachers' association meetings.

There is need to fully integrate mental health services for children at primary care. Initiatives should be undertaken to enhance the ability of primary health care workers to diagnose childhood psychiatric disorders. Mental health services for children should be prioritised based on the prevalence of the disorders, perceived community needs, available resources and expected out-come of intervention. Also general preventive measures to prevent head injuries and brain infections through enhancing obstetric care, improving immunisation care and nutrition should be enhanced. Further studies that further explore childhood

psychiatric disorder perception and knowledge by children, parents, teachers and community should be carried out so as to provide a basis on best measures to employ towards prevention and management.

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Conflicts of Interest

None.

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