

PSYCHIATRIC MORBIDITY IN CHILDREN REPORTING AT A TERTIARY CARE HOSPITAL

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Objective: The study is designed to assess the psychiatric morbidity in children reporting at psychiatry OPD, of National Institute of Child Health (NICH), Karachi

Study Design: Simple descriptive study

Place and Duration of study: This study was conducted during the period of two years from January 2005 to January 2007 at National Institute of Child Health (NICH) Karachi.

Patients and methodology: All consecutive patients who reported in child psychiatry clinic were enrolled in this study if they fulfilled the inclusion criteria having age of 3 years to 15 years of either sex. Cases excluded in the study were psychiatric presentation associated with physical illness and symptoms related to drug side effects. The facility received direct referrals from other professional colleagues, and from parents, school teachers who have been sensitized to child psychiatric issues. Semi-structured interview based on DSM- IV along with an open ended slot of question were used for evaluation. Data regarding demographic characteristics, referral source, reasons for referral and diagnostics based on clinical judgment were collected.

Results: Five hundred and seventy new cases were inducted in this study over a period of two years. Males outnumbered females with the ratio of 1.7:1. Majority (42.28%) of children were in the age range from 11-15 years. Standard deviation of age was 6.8 years for male and 3.5 years for female children. Most (69.6%) of the referrals were made from professionals working in pediatric medicine. The most common reason for referral was disruptive behaviour (26.32%), followed by behavioural problem with fits (15.79%) and physical over activity (7.89%). Other presenting complaints (reasons for referral) included slow learner, self injurious behaviour, aggression, speech delay, unexplained physical symptoms, bed wetting, emotional problems poor attention and tics etc.

Mental retardation with behavioural problem was the most frequent (36.14%) provisional diagnosis. About 16.14% of cases related to seizure disorder with behavioural problem while 10.53% were attention deficit hyperactivity disorder (ADHD). Other diagnoses made were depressive illness, conversion disorder, functional enuresis and autism.

Conclusions: After mental retardation, one third of cases comprised of seizure disorder with behavioral problem, attention deficit hyperactivity disorder (ADHD), and depressive illness. It is therefore recommended that professionals at primary health care level should be trained to identify psychiatric illness in children so that early intervention, proper referral and effective management may be possible.

Keywords : Child psychiatry, Mental health, Disruptive behaviour

INTRODUCTION

In Pakistan, like many other countries the current scarcity of child mental health services is reflected in non-availability of epidemiological evidence. Lately both community and clinical researches in

child mental health have shown that emotional and behavioral problems are on rise in our country.¹⁻² It is worth mentioning that Mental Health Ordinance 2001 stressed to provide separate psychiatric facility for children and adolescents. This clearly reflects the need for child mental health care services in Pakistan.³

Worldwide literature review shows that mental health problems among children in the age range of 3-15 years are 5-15%.⁴ In the past year the studies have

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been carried out in developing countries exploring the prevalence of child psychiatric disorders. In a study from Bangladesh, with a sample size of 922, in 5 to 10 years old children, a 15% prevalence for any ICD-10 diagnosis was found.⁵ Another study carried out in India indicated a prevalence rate of 12.5% among children aged 0-16 years.⁶ Epilepsy, speech and other behavioral problems constitute substantial proportion in child psychiatric disorders in Pakistan.⁷

Mental illness is considered a major social stigma. It might be due to misconception, illiteracy, and indifference, which may complicate with social customs of the society. Many people consult faith healers before visiting mental health professionals. Under these circumstances, professionals faced with the task of developing mental health services for children in Pakistan are confronted with a number of challenging issues.

All over the world, child psychiatric illnesses are regarded as serious but treatable conditions, however if left unattended, most of these result in poor parenting, disintegration of family life and deteriorating moral values and are considered as precursors of adult psycho-pathology.⁸⁻⁹ The importance of early detection of emotional and behavioral problems is being increasingly recognized worldwide. However, until now there has been little systematic research into childhood psychiatric disorders in the developing countries.¹⁰ This paper is an attempt to highlight the different psychiatric presentations in children. It would in turn enable us to recognize and deal effectively with children who have psychiatric disorders.

PATIENTS AND METHODOLOGY

This study was conducted during the period of two years from January 2005 to January 2007 at National Institute of Child Health (NICH), Karachi which is the largest tertiary care children hospital in the country. This hospital caters services not only for Karachi where it is located but also to neighboring provinces. An informed consent was obtained from guardian, explaining them purpose and nature of

study. Reassurance was also given regarding the confidentiality of information.

Sample consisted of all new patients aged 3-15 year attending the clinic in the two year period. Patients excluded from the study included; psychiatric presentation associated physical illness, behavior related to drug side effects, age less than three years and older than fifteen years. Demographic data included age, sex, source of referral and relationship with the accompanying person. Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) based semi-structured interview was used for evaluation. For suggestive mentally retarded children informal clinical assessment was carried out. Presenting complaints and/or reasons for referral were recorded and provisional diagnoses were made. Statistical analysis was done through SPSS computer software (version 10.0) and presented as percentage.

RESULTS

Five hundred and seventy patients were enrolled in psychiatry OPD. Of them 63.3% (n=361) were males and 36.6% (n=209) were females. Male female ratio was 1.7:1. Most of children reported (42.2% n =241) fell in age group ranges between 11-15 years. Mean age of male and female children were 9.2 years \pm 6.8 and 3.6 \pm 3.5 years respectively.

Majority (69.6% n=397) of referrals were from medical professionals. Self-referrals constituted 18.9% (n=108) of the total sample. Other referrals included schools (6.1% n=35), siblings and relatives (5.2% n=30) and miscellaneous sources (5.44%) (Table I).

Most of children (65.94%) visited psychiatry OPD with their mothers and 22.71% came with their fathers. A very small proportion of children visited the clinic with both the parents (8.47%) and relatives (2.5%). Majority (94.7% n=540) children belonged to Karachi and a small number were from adjoining areas (5.6% n=30) in this sample.

The reasons that most commonly led to the referral were Disruptive behavior (26.32% n=150) while epileptic fits with behavioral problems (16.6% n=95)

and physical over activity (7.89% n=45) were also referred to psychiatry OPD. Other presenting complaints included slow learner, self injurious behavior, aggression, speech delay, unexplained somatic symptoms, bed wetting, and emotional problem etc. (Table 2)

Mental retardation with behavioral problem was the most frequent (36.14% n=206) provisional diagnosis made. About (16.6% n=95) of cases were related to behavioral problems with seizure disorders, while (10.5% n=60) were diagnosed as attention deficit hyperactivity disorders (ADHD). Other diagnoses included depressive illness, conversion disorder, functional enuresis, tic disorder, and conduct disorder. While in 7.04% (n=40) cases no diagnosis (where diagnosis could not be possible due to variable complaints) was made. (Table 3).

Table 1: Gender vs Age

Age in year	Male		Female		Total	
	N	%	N	%	N	%
3-5	61	10.70%	43	7.54%	104	18.25
6-10	167	29.30%	58	10.18%	225	39.47
11-15	132	23.16%	109	19.12%	241	42.28
Total	360	63.16%	210	36.84	570	100.00

Table 2: Reasons for referral (Top ten)

Age in year	Gender					
	Male n	%	Female n	%	Total n	%
Disruptive behavior	105	18.42	45	7.89	150	26.32
Behavioral problems with fits	56	9.82	34	5.96	90	15.79
Physical over activity	36	6.32	9	1.58	45	7.89
Slow learner	19	3.33	16	2.81	35	6.14
Self injurious behavior	20	3.51	10	1.75	30	5.26
Aggressive behavior	20	3.51	16	2.81	36	6.32
Speech delay	15	2.63	10	1.75	25	4.39
Unexplained Physical symptoms	13	2.28	10	1.75	23	4.04
Bed Wetting	15	2.63	13	2.28	28	4.91
Emotional Problem	10	1.75	15	2.63	25	4.39

Table 3: Provisional (probable) diagnosis (Top ten)

Age in year	Gender					
	Male n	%	Female n	%	Total n	%
Mental retardation with behavioral problem	116	20.35	90	15.79	206	36.14
Seizure disorder with behavioral problem	78	13.68	17	2.98	95	16.67
ADHD	42	7.37	18	3.16	60	10.53
Depressive illness	22	3.86	16	2.81	38	6.67
Conversion disorder	20	3.51	4	0.70	24	4.21
Functional enuresis	11	1.93	13	2.28	24	4.21
Emotional disorder	10	1.75	7	1.23	17	2.98
Psychogenic vomiting	9	1.58	7	1.23	16	2.81
Autism	6	1.05	3	0.53	9	1.58
Organic psychosis	5	0.88	4	0.70	9	1.58

DISCUSSION

This descriptive study represents the profile of attendee at the child psychiatric clinic of a major tertiary care center over a period of two years precisely reflecting the source of referral and pattern of psychiatric presentation observed at the outpatient clinic in a tertiary care children hospital during January 2005 to January 2007.

The findings suggest that majority of children were referred with varied complaints suggestive of disruptive behavior, and mental retardation with behavioral difficulties. A study conducted at a private university hospital in Karachi has also shown similar results with aggressive behavior being the most common reason for referral. However in contrast to our study, attention deficit hyperactivity disorder (ADHD) was most frequent diagnosis made. Another study carried out at child guidance clinic Delhi, (India) revealed that mental retardation was on top (20.61%) among 300 children which is inconsistent with our study.¹² Regarding gender, findings of the present study manifest a large proportion of male children (63.16, n=210) reported in our OPD which is in accordance with study carried out in other countries.^{13,14} In relation to age, it was noted that more than 80 percent reported psychiatric problems were school age children (6-15 year). Another study revealed that higher prevalence of psychopathology

has been reported in a school based study of emotional and behavioral problem amongst 5-11 year school children in Karachi.² This finding is similar to that of other studies.¹⁵⁻¹⁷ This might be due to the fact that in older children, psychiatric illness may be recognizable by parents or family physician. Also probably a wrong perception that small children do not suffer from mental illness or possibly denial attitude by parent contribute to delayed consultation. All that may attribute to under reported cases in early childhood period.

The limitations of study should be borne in mind which includes relatively small sample size, single centre study and data based on clinical diagnosis. It is recommended that further studies should be carried out on risk factors in causation of childhood psychiatric illness.

CONCLUSIONS

A variety of psychiatric problems were observed in children population. After mental retardation, one third of cases comprised of seizure disorder with behavioral problem, attention deficit hyperactivity disorder (ADHD), and depressive illness. A sizable number of children were referred to the clinic by non-psychiatry professionals including pediatricians and teachers which points the need to train our colleagues involved in primary health care as well as teachers and parents to be able to at least identify those children in need of mental health attention, and to be able to make appropriate and timely referrals.

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