

Psychological Problems of Children in General Paediatric Settings

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Introduction: Chronic physical illnesses appear to be a significant risk factor for emotional and behavioral difficulties. The aim of present study was to determine the frequency of emotional and behavioral problems in children in general pediatric setting and to try to identify any risk factors which can predispose a child to develop psychological problems. **Method:** This was a pilot study conducted in the Pediatric unit of a tertiary teaching hospital in Lahore during March –May 2006. Following parental consent, hundred children consecutively admitted in the unit, who were between the ages of four to twelve and not critically ill, were included in the study. Demographic details and information about risk factors were collected. Strengths and Difficulties Questionnaire was also administered. **Results:** Among our sample, SDQ scores of 40% children were in abnormal range. Children with physical illnesses of more than one month were at higher risk of emotional and behavioral problems. (P value less than 0.05). Among risk factors, family history of psychiatric illness, and epilepsy, history of epilepsy in the child as well as presence of learning disability reached statistical significant results. None of these children were identified or referred for psychological assessment. **Conclusion:** Emotional and behavioral difficulties commonly first present in Pediatric medical settings but often are not detected and therefore not treated. Pediatricians need to acquire skills in assessing and treating primary developmental and behavioral disorders, and in preventing and managing secondary emotional difficulties, which can arise because of major physical illness. Better liaison is also required between pediatricians and psychiatrists to improve early detection and treatment of psychiatric problems in children.

Key words: Psychological Problems, children, Paediatrics, Child Psychiatry.

Child and adolescent mental health is a subspecialty of both mental health and pediatrics and therefore these children presentation and management poses a challenge to specialists in both fields. Emotional and behavioral difficulties commonly first present in Pediatric medical settings, often with medically unexplained symptoms¹ and affected children may be particularly high users of pediatric health services². Chronic physical illnesses appears to be a significant risk factor for emotional and behavioral difficulties^{3,4} and emotional, behavioral and family difficulties can negatively affect the course of physical diseases either as a consequence of negatively influencing health maintenance and compliance behaviors or by a direct physiologic effect on the disease process itself^{5,6}.

Although numerous studies have shown high prevalence of comorbid psychological problems especially depression and anxiety in adults with physical illnesses, research in this area has not received much attention in general pediatric settings. We hypothesized that a significant proportion of children presenting to pediatricians will also have comorbid psychological problems, which if identified and dealt with can significantly improve the quality of care these children receive. The aim of our study was to determine the frequency of emotional and behavioral problems in children in general pediatric setting by using a validated screening instrument and to try to identify any risk factors which can predispose a child to develop psychological problems.

Methods

This was a pilot study conducted in the Pediatric unit of a tertiary teaching hospital in Lahore during March –May 2006. Following parental consent, hundred children consecutively admitted in the unit, who were between the ages of four to twelve and not critically ill were included in the study. Data was collected from parents by using a form specifically designed for this study. Demographic details, information about duration of physical illness, family structure and family history, as well as details about risk factors for development of psychological problems (based on previous research in this area) were collected. Parents also completed Strengths and Difficulties Questionnaires (SDQ) version for 4-16 year old children⁷.

Strengths and difficulties questionnaire: SDQ is a standardized and widely used measure of behavioral and emotional problems in children. Out of 25 items, 14 describe perceived difficulties, 10 perceived strengths and one is neutral. Each perceived difficulties item is scored on a 0-2 scale (0, not true; 1, somewhat true; 2, certainly true). Each perceived strengths item is reversely scored (i.e. 2, not true; 1, somewhat true; 0, certainly true). The 25 SDQ items are grouped into five subscales: hyperactivity, conduct, emotional, peer problems and prosocial behaviors (five items per scale). A score is estimated for each scale (range 0-10) and total difficulties score for the four scales (excluding prosocial behaviors scale which is considered different from mental health difficulties) range between 0-40. The scale has been validated in various languages including Urdu.

Children can score in three categories; normal, borderline and abnormal. For data analysis, we considered two categories normal SDQ score and abnormal SDQ score (those in borderline range were included in abnormal score category).

Data was analyzed with SPSS statistical package. Descriptive analysis was done and chi-square was used to compare groups with normal and abnormal SDQ scores.

Results

The sample consisted of 100 children (56 boys and 44 girls) with a mean age of 7.41 (Range between 3-12 years). Half of children belonged to rural areas and 62 % of them were attending school. Regarding parents, mean age of mother was 32.19 (range 20-45 years) and majority of them (86%) were illiterate with only 16% mothers who had attended college. Only 14% mothers were working at the time of study. Father's mean age was 36.84 (age range 22-50 years) with 39% being completely illiterate, 30% fathers had done matriculation and 31% had attended college. Three quarters (n=71) of families had monthly income of 10,000 or less. 80% of children had fewer than four siblings. Majority of children were first born (38%) followed by those of third birth order (24%).

Among our sample, SDQ scores of forty children were in abnormal range. Details of various subscale scores are given in Table-I. Children with physical illnesses of more than one month were at higher risk of emotional and behavioral problems. (P value less than 0.05).

Table-II shows comparison of two groups with normal and abnormal scores with regards to various risk factors studied. Among them, family history of psychiatric illness, and epilepsy, history of epilepsy in the child as well as presence of learning disability reached statistical significant results.

Table I: Strengths and Difficulties Questionnaire (SDQ) total and different subscale scores (n =100)

SCALES	=n
Total SDQ score	
Normal	40
Abnormal	60
Conduct subscale score	
Normal	61
Abnormal	39
Emotional subscale score	
Normal	56
Abnormal	44
Hyperactivity subscale score	
Normal	63
Abnormal	37
Peer Problem subscale score	
Normal	43
Abnormal	57
Prosocial subscale score	
Normal	51
Abnormal	49

Table II: Shows comparison of two groups with positive risk factors

Risk factors	Normal SDQ Score (n =60)	Abnormal SDQ Score (n =40)	Total
Family history of Psychiatric illness	9	13*	22
Family history of Mental Retardation	4	5	9
Family history of Epilepsy	9	17*	26
History of Perinatal complications	3	3	6
History of family conflicts	12	11	23
Birth Asphyxia	15	12	27
Epilepsy	8	15*	23
Developmental delays	9	11	20
Head injury	12	11	23
Learning disability	5	9*	14
Stress in early childhood	18	17	35
Chronic physical illness	16	18	34

* P value is < 0.05 (Analysis done by chi2 test between two groups)

Discussion

Children and adolescents with comorbid psychological problems although do present in general Pediatric settings but unfortunately these difficulties often go undetected and therefore untreated in most of the children. In present study, a very high proportion of children i.e., 40% appeared to have emotional and behavioral difficulties by use of a simple, validated screening tool. This pattern can be related to a previous study, in which 80%of children with chronic medical problems received a diagnosis of major mood disorder, dysthymic disorder, and/or generalized anxiety disorder in comparison to only 6% in control group⁸.

Duration of physical illness in previous research is considered to be an important factor in causation of psychological difficulties as was also the finding in our study. In the families of these children, there is evidence of increased rates, of marital difficulties, behavioral and emotional disturbances in siblings and general family dysfunction⁹.

With regards to family factors, which predispose a child to develop behavioral and emotional problems, we found family history of mental illness and epilepsy to reach statistically significant results in our sample. Many studies have shown strong links between parental psychiatric illnesses and child psychiatric disorder^{10,11}. The key factor seems to be the general level of functioning of the parents, and therefore it is with longstanding and recurrent conditions such as chronic depression, alcoholism, personality disorder, and other chronic emotional difficulties that the risk to children is greatest.¹⁰ Risk is heightened if the parental illness leads to discord in

the parental relationships and hostility towards the child. Most of the evidence concerns psychiatric morbidity in mothers which has been related to child psychiatric disorder generally, conduct disorder in older children, and general competence and performance. Richman et al found that having a depressed mother doubled the likelihood of psychiatric disorder in three year old children¹². Discord has been shown to be an important mechanism linking maternal depression and conduct problems in children, but depressed mothers are also likely to be inconsistent, less stimulating and more irritable with their children.

History of epilepsy and Learning disability in the child were also significant risk factors for development of emotional and behavioral problems in our sample. There is an inverse relationship between IQ and the prevalence of psychiatric disorder¹³. There is no link with particular types of psychiatric disorder-rather there is an increase in all types. The siblings of children with such generalized difficulties are also at greater risk of psychiatric disorders¹⁴. Previous research has shown that children with specific learning difficulties, for example specific reading retardation, show higher rates of conduct disorder and antisocial behavior¹⁵. In the same study, 5.7% of 10-12 years old children were identified as having a chronic physical illness (2.3% asthma, 0.9% epilepsy, 0.3% cerebral palsy). Idiopathic epilepsy was associated with triple the base rate, but where epilepsy and other unambiguous evidence of brain damage were present together, the rates of psychiatric disorder in 10-11 years old rose to nearly 40%.

Another interesting finding of the study was that none of these 39 children with abnormal SDQ scores (except one who was already known to child psychiatry department) were identified in general pediatric setting to be having any psychological difficulties and therefore were not assessed further, neither referred. On one hand it is because the training of pediatric staff in this area is clearly limited, but at the same time unfortunately despite great need, child psychiatry in Pakistan is a subspecialty still in its infancy with limited number of trained child psychiatrists and only two dedicated departments. Liaison between psychiatry department and pediatrics is also poorly coordinated and monitored. The need for robust model of liaison is recognized, but collaborative working between professionals is not always evident¹⁵.

Conclusion

A significant proportion of children consulting for physical problems may have co morbid psychological problems which often go undetected and therefore untreated. In the absence of much needed child psychiatry expertise in Pakistan at the moment, pediatricians will continue to be expected to have expertise in all aspects of pediatric health care, including emotional and behavioral health. Pediatricians need to acquire skills in assessing and

treating primary developmental and behavioral disorders, and in preventing and managing secondary emotional difficulties, which can arise because of major physical illness. A psychologically minded pediatrician needs to understand these symptoms and the child within the context of his/her family. Such an understanding will enable pediatrician to treat the child themselves or alternatively prepare child and family for a psychiatric referral, if appropriate. Better liaison is required between physicians and psychiatrists to improve early detection and treatment of psychiatric problems in children. A robust multidisciplinary framework will help but commitment from professionals in pediatric, psychiatric, and psychological disciplines are essential to success of it.

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