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BRIEF COMMUNICATION

# Behavioral Problems in School-going Children: Implications for Medical Teachers in Developing Countries

MANORAMA VERMA, TEJINDER SINGH, INDIRA GUPTA & VINAY GUPTA

*Departments of Pediatrics and Psychiatry, Christian Medical College, Ludhiana, India*

*A large number of children suffer from behavioral problems during their development. Many of these problems are transient and may not even be noticed. At times, however, the extent of these problems and their overall effects on a child's development can be serious (Morita et al., 1993). Further, children may exhibit these behaviors in one setting and not in others (e.g. at home or in school, but not both). In developed countries, parents tend to seek advice for even minor problems, such as persistent thumb sucking, while in developing countries, major problems, even childhood schizophrenia, may go unattended. An awareness of the prevalence of these problems is important so that appropriate mental health services can be planned and provided for affected children, to improve their prospects for leading healthy, productive lives. Such awareness can help enhance the teaching of graduate doctors, equipping them to deal with these problems effectively.*

## One Community's Problem Prevalence

Here we report a small study conducted at Ludhiana, India to determine the prevalence of behavioral problems in school-going children and its implications for teaching undergraduate medical students. The study was conducted in two stages. In stage one we used the Rutter B scale (Rutter, 1967) as a screening instrument. This scale was distributed to, and all items were explained to, teachers of the classes being studied. The teachers had known and been teaching the students for the previous nine months. Out of 1000 scales handed out, 957 were completed, returned and included in the analysis.

Address for correspondence: Dr Tejinder Singh, Professor of Pediatrics, Christian Medical College, Ludhiana, India. Fax: +91 161 310829. E-mail: drtejinder@123india.com

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The Rutter B scale consists of 26 brief statements concerning a child's behavior at school. The items are designed to detect common emotional, conduct and behavioral problems in a child, requiring minimal inference from the teacher. Children with a score of 9 or more are considered as showing difficulties. In the second stage of the study children scoring 9 or more and an equal number of sex-matched children selected by simple random sampling from those scoring less than 9 were invited, along with their parents, for an interview with a child psychiatrist. The parents and psychiatrist were both blind to the child's score. The psychiatric interview was included to provide a diagnosis of the problem as well as to treat the child, if needed.

Out of 957 responses received, 141 (14.63%) children scored 9 or more and were included in the second part of the study. The proportions of such children increased with age (9 years 2.6%; 10 years 12.1%; 11 years 23.0%, chi-square 202.2, $p$=0.0). In this group, males outnumbered females by 3:1 ($p$=0.0). Eighty-four (59.6%) of this subgroup were classified as antisocial, 38 (27.0%) as neurotic, and another 19 (13.5%) as mixed ($p$=0.0). There was no correlation of the type of the problem with age, sex, socioeconomic status or type of family.

In the second stage, of the 141 children called for interviews, 117 responded. From the control group, 124 responded. The presence of a problem as identified by the interview is presented in Table 1. Although 117 children were assigned a score of 9 or more on the Rutter scale, only 63.2% were considered to be problematic during the interview. This may indicate a better ability of the psychiatrist to differentiate between normal variants and worrisome behavior. Based on these data, the prevalence in the study population was estimated to be 45.6% (Table 2). When minor problems were excluded, the prevalence rate dropped to36.5%. Lack of interest shown by fathers was significantly associated with prevalence of the problems. In those children showing problems, only 31.5% were getting enough attention from the fathers as compared to 46.8% of the "normal" (non-problem) group ($p$=0.017).

Children with scholastic underachievement showed maximum association with other problems, especially hyperkinetic behavior and speech disturbances. Recognizing scholastic underachievement is part of the normal school routine and within a teacher's domain. The teacher's potential role, therefore, in early identification of problems is especially important. To be maximally effective in this role, teachers should be helped to understand the important contribution they can make and sensitized to the behavioral signs that they should watch for.

## Implications for Medical Education

What are the implications of these findings for medical teachers? As we observed above, in many countries the mental health of children is not adequately recognized or accorded its due importance. This situation perpetuates the unhealthy development of many children, who otherwise could

**Table 1.** Prevalence of behavioral problems identified in psychiatric interview

| Rutter score | Number interviewed | Number with a problem | Prevalence |
|---|---|---|---|
| >9 | 117 | 74 | 63.2 |
| <9 | 124 | 53 | 42.7 |
| | 241 | 127 | 52.6 |

$p = 0.0014$.

**Table 2.** Estimated population prevalence of behavioral problems

| | Number in total population ($a$) | Percentage of sample with problem ($b$) | Estimated number in the population ($c = a \times b$) |
|---|---|---|---|
| Not detected by screening | 816 | 42.7 (53/124) | 346 |
| Detected by screening | 141 | 63.2 (74/117) | 89 |
| Total | 957 | | 435 |

Prevalence $435/957 \times 100 = 45.5\%$.

become useful, productive members of society. Scholastic underachievement can become a starting point in problem identification and physicians should pay special attention to any child seen who is having school difficulties. A careful interview with the parents can often help uncover many hidden problems, and a physical examination can help identify possible medical difficulties—such as anemia—which can have a bearing on learning (Wig *et al.*, 1981).

During their education, medical students should be exposed to child guidance clinics so that they can learn to suspect the presence of a problem and refer children for timely intervention when indicated. Health education and counseling of parents, especially fathers, to pay closer attention to their children should also become a routine part of education. Involving medical students in school health programs can provide another useful opportunity to acquaint them with the importance of addressing behavioral problems early so children can be helped to reach their full potential.

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