Estimating the prevalence of school refusal and associated psychopathology in an Arab community sample of children in the United Arab Emirates

Harith S. Swadi, MRCPsych.

ABSTRACT

Objective: To study the prevalence of ‘school refusal’ in the United Arab Emirates.

Methods: A community survey of a stratified sample (N=1100) of 6-12 year old primary school children was carried out in Al Ain city, United Arab Emirates using the Parents’ and Teachers’ versions of the Rutter Questionnaire for children’s psychological health.

Results: Completed reports about 911 children were obtained. Of them, 4.1% had school refusal (refusal to go to, or getting distressed when they arrive at school). The prevalence rate was higher in boys than girls. Those with school refusal were compared to non-refusers matched for school, age and gender. The results showed that refusers showed higher rates of psychopathology (46% vs. 20% according to teachers’ reports and 27% vs. 3% according to parents’ reports). However, contrary to expectations, refusers were mostly showing behavior problems (14%-35%) rather than emotional problems (8%-14%), particularly in older children.

Conclusion: School refusal is infrequent in Arab children in the United Arab Emirates, but is more likely to be associated with symptoms of behavioral disorders. Possible explanations for these findings are discussed.

Keywords: Children, school refusal, psychopathology, epidemiology, Arab.


Most, if not all, clinicians in child mental health have come across situations whereby parents ask for help to deal with a child who refuses to go into school, or gets very distressed upon arrival there. Although many cases are dealt with effectively by parents with or without the help of the family physician,1 some do find their way to specialised child mental health clinics. The rates among clinic attendees vary, but usually make between 5% and 10%.2-4 School refusal is usually seen as a behavior that may indicate the presence of psychopathology and not as a psychiatric disorder as such. In fact neither the DSM-IV5 nor the ICD-106 refer to it as a psychiatric diagnosis. Both refer to it as a possible feature of some emotional disorder, usually of the anxiety type. Despite the purely descriptive nature of the term, there were some attempts to classify ‘school-refusers’, usually on phenomenological grounds. Such attempts have come to conflicting conclusions. For example Atkinson et al7 carried out a cluster analysis of the files of 100 refusers to find that they could be grouped into three clusters: those

From the Department of Child Psychiatry, Faculty of Medicine.

Received April 1998. Accepted for publication in final form July 1998.

Address correspondence and reprint request to: Harith Swadi, Associate Professor in Child Psychiatry, Faculty of Medicine, PO Box 17666, Al Ain, United Arab Emirates. Tel. No. 9713 672000. Fax. No. 9713 672995. E-mail: samtara@emirates.netae
with separation anxiety, those who were perfectionistic and those who were extensively disturbed and depressed. Others examined the classification of “school anxiety” for those whose difficulty to attend is related to school factors and “school phobia” for those whose difficulty is unrelated to school. They concluded that there was no merit to such a distinction. This view was based on the finding that, in terms of outcome two and a half years later, there was no distinction between the two groups. However, the condition of school refusal remains a term of convenience for a heterogeneous group of children who refuse to go to, or get distressed when they arrive at school, for a variety of possible reasons.

There is much interest in the type of psychopathology that is expected to accompany or is behind school refusal, because of its relevance to the intervention approach taken to deal with it. This is usually the perspective of the mental health professional. There is an added point of interest. The evidence suggests that most school refusers do not show significant psychopathology. This holds true for community samples, clinic populations and special populations. But, those who do show psychopathology tend, according to the evidence, to also show residual psychopathology in later years.

This paper reports the findings of a screening exercise conducted in Al Ain city in the United Arab Emirates, a very fast developing country in the Middle East. It has its own culture and traditions which are partly shared by the huge Arab expatriate community that inhabits the country. Young people under the age of 18 form the largest group in the population of the UAE, according to the most recent official census statistics released to the press, but not yet officially published. Al Ain is a particularly affluent, quiet city which has undergone very rapid growth and development. Its population is about 300,000 with Emarati nationals forming about 30%-40% of the local population. Expatriate workers come from all over the Arab World and the Asian sub-continent. Most come from social classes which would correspond to middle-to-working social classes in Western countries. Most nationals would fall into a higher economic class.

A MEDLINE search showed that no other studies of a similar nature in the region have been published. The purpose of this study is to establish a baseline estimate of the prevalence of the condition and an inquiry into the possible associated psychopathology.

**Methods.** Population. The study population comprised a multiple stratification sampling design. Of about 22 public primary schools in Al Ain city, UAE, six (three boys' and three girls') were randomly chosen to represent their geographical locations. They did not include, private schools. Three classes of each year were identified in an alternate fashion (classes A, C, E) and the first ten names on each class list were then identified. Teachers were asked to fill out a questionnaire (see below) about their observations of those ten students. Each student was given a sealed envelope which contained the parent's version of the same questionnaire. All questionnaires were completed and returned within a week.

**Instruments.** Arabic translations of the Teacher's and the Parent's versions of the Rutter questionnaire were used. The questionnaires detect behavioral disturbances among large groups of children from the general population, and are well established tools which have been widely used world-wide. The parents' scale consists of 31 statements about children's behaviour to which respondents answer 'does not apply', 'applies somewhat' or 'certainly applies'. Each is assigned a score of 0,1,2 respectively. It takes a few minutes to complete. Scoring is done by adding across all of the items to give a total score. Usually, a score of 13 or above indicates some psychiatric disturbance. Subscores of five items for behaviour disorder and four items for emotional disorder give a broad indication of the type of disorder according to which score is higher. Hyperactivity is scored separately on 3 items. The teachers' scale is shorter with 26 items and a cut-off score of 9 points. It more or less covers the same behaviours as those covered by the parents' questionnaire with some modifications. Similarly, it gives an indication as to the type of disorder according to subscores on behavioral and emotional items.

The Arabic version of the Teachers’ questionnaire used in this study, has been used successfully in another study among primary school children in Al Ain and was subjected to the due process of back-translation, piloting and validation. To our knowledge, this is the first time an Arabic version of the parents’ questionnaire is used. We used the same terminology for the parents’ version as that of the teachers'. The Arabic version was piloted in a small number of children attending a child psychiatry clinic in Al Ain, and non-referred children. We found that it did discriminate between the two groups, but we did not carry out a full validation study as it did not seem necessary given that the objective of the study was to investigate psychiatric symptoms not full blown clinical syndromes.

**Procedure.** The study was carried out in December 1995 (more than 3 months after the start of school) in order to make sure that teachers' have had a good opportunity to make statements on the individual child's observed behavior with reasonable validity. This time period was determined after consultation with teachers participating in the study. They felt that 3 months was adequate time for them to know their pupils. The head teacher of each
school took responsibility for informing teachers’ of their role in carrying out the data collection. Specifically, teachers were told that they should not respond to an item unless they were certain of their response.

Out of the total population, records of those who were reported by their parents to “have tears on arrival at school or refused to go into the building” occasionally or at least once a week were identified to make the index group of ‘school refusers’. A control group of non-refusers matched for age, gender and school was then selected from the total population. Comparisons were then made between the two groups in relation to the presence and type of psychopathology on the basis of the reports from parents and teachers. No clinical interviews were carried out given the screening nature of the study.

The type of psychopathology was determined by comparing the sub-scores of behavioral and emotional items in those who scored above the cut-off score. A child would then be said to be emotionally disturbed if the emotional sub-score is higher than the behavioral one, and vice versa.

To investigate the possibility that there may be an age factor in accounting for the differences between refusers and non-refusers, a further analysis was carried out by dividing the index and the control populations into two groups; 6-9 and 10-13 years.

Results. A total of 911 pairs of responses were obtained. This represents 82.8% of the total targeted population of 1100 students. Those responses were obtained from 445 boys (48.8%) and 466 (51.2%) girls. Regarding nationality, 353 (38.7%) were UAE nationals and 558 (61.3%) were other Arabs. There were 37 children aged 6-13 who were reported by their parents to have been showing distress when going to, or refusing to go to school, giving a prevalence rate of 4.1% in the study population. Twenty two were boys giving a prevalence rate of 4.9% among boys and 15 were girls giving a prevalence rate of 3.2% among girls.

<table>
<thead>
<tr>
<th>Mean score (Parents)</th>
<th>Mean score (Teachers)</th>
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<tr>
<td>Non-refusers</td>
<td>4.35</td>
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<td></td>
<td>SD 3.2</td>
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<tr>
<td>Refusers</td>
<td>7.8</td>
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<td></td>
<td>SD 5.0</td>
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<tr>
<td>t-value</td>
<td>3.3</td>
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<td>Significance</td>
<td>0.002</td>
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Eighteen were UAE nationals (giving a prevalence rate of 5.1% among UAE nationals) and 19 were other Arabs (giving a prevalence rate of 3.4%). Among 6-9 year olds (N=249), there were 16 refusers giving a prevalence rate of 6.4% and among 10-13 year olds (N=562) there were 21 refusers giving a prevalence rate of 3.7%.

Associated psychopathology. According to parents’ reports 10 (27%) of school refusers as opposed to one (2.7%) of the non-refusers controls scored 13 or above on the Rutter Parents’ Scale, a statistically significant difference (Chi Sq. 8.65, df=1, p=.003). Similarly, 17 (46%) of refusers and 7 (20%) of controls scored 9 or more on the Rutter Teachers’ Scale (Chi Sq. 6.17, df=1, p=.013).

As a group, school refusers showed significantly higher total scores than non-refusers according to both parents’ and teachers’ versions of the Rutter questionnaire as shown in Table 1.

The age differences in the mean scores are graphically represented in Figures 1 & 2. Essentially, both parents’ and teachers’ reports showed similar trends with small differences. According to parents’ reports, non-refusers did not show marked variations in their scores in relation to age. However, refusers showed higher scores particularly at the age of 10 years. The scores,
however, showed a rapid decline after that age. This is in contrast to teachers’ reports that also showed a sharp increase at the age of 10 for refusers which remained relatively high in 11 and 12 year olds but declined in 13 year olds.

With regard to gender differences, school refusing boys and girls showed no significant differences between them in the mean scores on both versions of the Rutter scales. However, school refusing boys and girls showed much higher rates of psychopathology than non-refusers. The level of difference in mean scores was higher for boys than that for girls.

Regarding the type of psychopathology associated with school refusal, most of the school refusers were behaviourally disturbed as reported by teachers and parents. According to teachers’ reports, 35% of refusers showed behavioural problems and 14% showed emotional problems. Parents reported 14% of refusers with behaviour problems and 8% with emotional problems. Both reported the same proportion of children with mixed disorders (8%).

According to parents’ reports, there were no significant differences in the mean scores of younger (6-9 years old) refusers and older (10-13 years old) refusers (mean score 8.07, SD 5.6 for younger group, and 7.56, SD 4.7 for older group). However, teachers reported significant differences between the two groups with older refusers showing high scores of psychopathology (mean score 5.8, SD 5.8 for younger group, and 13.7, SD 6.8 for older group, p value .002).

**Discussion.** A strength of this study lies in that it utilised teachers’ reports as well as parents’ reports in screening for psychopathology. The measure of agreement between parents’ reports and teachers’ reports can be inadequate. However, this largely related to differences in behavior at home and at school. Using both scales is ideal in that teachers’ reports and parents’ reports complement each other and provide a wider view of any given child’s behaviour. This may also partly overcome the disadvantage that we have not used (as would be preferable) a formal structured or semi-structured interview to assess psychopathology.

The Rutter scales is one of the most widely used instruments in screening for general psychopathology and compares very well with more detailed interviews. It is acknowledged that using a Western instrument in an Arab culture may not be ideal, but the criticism in the case of the Rutter scales can be tempered by the fact that the instrument inquires about observable behaviors, rather than internal or external sophisticated concepts and that it is largely culture free. They have been used in many other countries and across cultures with very little modifications such as in France, New Zealand, China, and Hong Kong. They have been used among Aboriginals in Australia, and children of Asian and West Indian parents living in Britain.

Of course, an important factor in screening exercises of a similar nature is whether or not the cut-off points suggested by Rutter et al are applicable in this culture. Berg et al argued for the careful selection of the appropriate cut-off point for the sample under scrutiny. However, there is some evidence that the cut-off points recommended by Rutter may not be totally inappropriate in non-Western cultures particularly when both scales are used at the same time. There is also some evidence that screening for psychiatric morbidity by using parents’ and teachers’ reports is almost as effective as a formal psychiatric interview.

The prevalence rate of school refusal in the community and as defined in this study is 4.1%, with girls showing lower rates than boys. It proved difficult to find comparable data in the region or abroad, where the vast majority of studies were carried out on clinic populations. There are however, a few exceptions such as a rate of 4% among a community sample of school children in Venezuela and a rate of 7% among a community sample of Japanese children. The general impression, though, is that the prevalence of school refusal in this sample is as low as it is in Western countries.

As in this study, others found that most children who regularly stay at home when they should be at school, do not have any evidence of psychopathology. Rutter et al found that only about 3% of 10-11 year olds in the Isle of Wight showed school refusal and psychiatric disturbance. Our study shows that the corresponding rates are 2.9% according to parents’ reports and 1.6% according to teachers’ reports. However, one study found that half of school refusers had an ICD-9 psychiatric diagnosis. This may well be a function of the fact that their sample consisted of non-attenders who were appearing before a disciplinary committee for severe and persistent non-attendance, while the present study and Rutter et al’s samples were true community samples.

Emotional symptoms including anxiety, phobic anxiety, overanxious disorder, avoidant disorder and depression have often been reported in school refusers. Separation anxiety is a symptom that is particularly reported. Other diagnostic categories have also been reported, but to a lesser degree.

It is conventional wisdom that school refusers are highly unlikely to show anti-social behavior although mixed disorders are not unlikely having been reported in 6 out of 21 refusers in one series. However, this does not mean that anti-social behaviour is uncommon. In a large Japanese study, 25% of school refusers showed anti-social behavior while 35% showed emotional problems as measured.
by the parents' version of the Rutter scale.24 Our findings seem to show a different picture in that parents and teachers reported higher rates of behaviour disorder than emotional disorder among refusers. Comparing our results to the available literature may be difficult since the vast majority of other studies were among special populations mostly drawn from child mental health clinics, or among those who showed severe problems with attendance. Notwithstanding that possibility, one other possible reason for the excess representation of behavior problems in our sample of refusers, is that we failed to register emotional disturbance because of the fact that teachers and parents were not sensitive enough to emotional symptoms, or that the instrument used was not suitable. This is unlikely, since as expected, teachers were less likely to report emotional disorder than parents in the population as a whole, and that the rates of emotional and behavioral problems in this population are largely consistent with reports from other parts of the world in relation to the general epidemiology of psychiatric disorder36 and in special conditions in this community such as enuresis.36 This leaves two other closely related possibilities: first, that we are dealing with children whose cultural means of showing distress is through behavior which often tends to cross the boundaries of social acceptability, and secondly, that school refusal in this culture is more likely to be a manifestation of behavior disturbance.

In conclusion, school refusal in Arab children in the UAE is as infrequent as it is in other parts of the world. It is, however, more likely to be accompanied by psychopathology which tends to be of the behavioral type. An interesting hypothesis which emerges out of this report is that distress in children in this (Arab) culture tends to be acted out or 'behavioralized'. Our clinical experience suggests that very few children with school refusal have been referred to the clinical service in this city, despite the findings of this study. This means that many distressed children have not been taken seriously. The fact that this sample is drawn from the community reinforces the need to seriously consider the possible presence of significant, distressing psychopathology in any child with school refusal particularly in a similar culture.

References

24. Cochrane R. Psychological and behavioural disturbance in West Indians, Indians and Pakistanis in Britain: a comparison