

# Emotional and Behavioral Problems Among Male Saudi Schoolchildren and Adolescents

## Prevalence and Risk Factors

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### Abstract

**Background:** Young people can have mental, emotional, and behavioral problems that are real, painful, and costly.

**Objectives:** determination of the prevalence rate of emotional and/or behavioral problems among male Saudi schoolchildren and identifying their possible risk factors.

**Method:** All male schoolchildren of Al-Abnae schools specialized for the sons of the employees of the Saudi Ministry of Defense (military and civilians) in Taif Governorate, Saudi Arabia were included. This study was conducted through two phases: A screening phase for all schoolchildren and adolescents included in the study through a cross sectional approach to assess their emotional and behavioral problems. A case-control phase to study risk factors. The screening phase was conducted using the Child Behavior Checklist "Parents' form".

**Results:** Among 1313 participated in the study, 109 (8.3%) were emotionally and/or behaviorally disturbed students (according to cut-off score for boys estimated at the 90<sup>th</sup> percentiles). Among studied socio-demographic variables, educational level (intermediate versus primary) and mother occupation (working versus non-working) were associated with a higher risk higher risk of developing emotional and/or behavioral disturbance. Unwanted pregnancy (OR=4.77, CI: 3.68-5.86), history of meningitis (OR=7.50, CI: 5.12-9.88), accidents (OR=4.07, CI: 2.87-5.26) and bronchial asthma (OR=2.96, CI: 2.16-3.76) had an increased risk of emotional and/or behavioral disturbance (German J Psychiatry 2004; 1:1-9)

**Keywords:** behavioral, emotional, schoolchildren, adolescents, Child Behavior Checklist (CBCL)

Received: 5.11.2003

Published: 19.1.2004

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## Introduction

Young people can have mental, emotional, and behavioral problems that are real, painful, and costly (National Institute of Health, 2001). These problems, often called "disorders", are sources of stress for children and their families, schools, and communities (WHO, 1977; Cummins Mental Health Center, 2003). Although it is difficult to get accurate estimates of child mental disorders, the few available epidemiological data indicate that 12-51%; with

the average around 29% of the world's children suffer from emotional and other mental problems that warrant mental health treatment (Tuma, 1989). Out of this group, 6-19% is seriously emotionally disturbed children who need intensive psychiatric care (Davis et al., 1998). In addition, there are untold numbers of at-risk children who need attention and secondary preventive service (National Mental Health Association, 2003). Recent evidence indicates that emotional and behavioral disorders frequently lead to poor school performance and to dropping-out of school. This wastes educational resources and seriously impairs the economic and social potential of such children (Nikapota et al., 1991). Some

disorders are more common than others, and conditions range from mild to severe. Often, a child has more than one disorder (SAMHSA's National Mental Health Information Center, 2003).

There is an ample weight of evidence suggesting that, several risk factors including child, familial, and environmental risk factors play an important role in the genesis of emotional and behavioral problems in schoolchildren (Cummins Mental Health Center, 2003; American Psychiatric Association, 1994). Many environmental factors can affect mental health, including exposure to violence, extreme stress, and the loss of an important person (SAMHSA's National Mental Health Information Center, 2003).

The current study aimed at the determination of the prevalence rate of emotional and behavioral problems among male Saudi schoolchildren and at identifying the possible risk factors behind these problems.

## Material and Methods

### Target Population

All male schoolchildren and adolescents (primary and intermediate) of Al-Abnae schools specialized for the sons of the employees of the Saudi Ministry of Defense (military and civilians) in Taif Governorate, Saudi Arabia (total number 1416 students). These schools are King Fahd Primary School (267 students), King Fahd Intermediate School (412 students), Amir Abdul Rahman Primary School (537 students), and Al Abnae Primary and Intermediate school (200 students). Twenty non-Saudi students (1.4%) were excluded from the study and 83 (5.9%) parents refused to fill in CBCL sheets for their children.

### Study design

This study was conducted through two phases: A screening phase for all schoolchildren and adolescents included in the study through a cross sectional approach was carried out to assess their emotional and behavioral problems (Phase I).

A case-control study (phase II) followed the first phase aimed at comparing schoolchildren emotionally and/or behaviorally disturbed with a randomly chosen sample of their age and school matched controls (three controls for each case were chosen) to study risk factors. All cases and their controls were recruited in the screening phase.

### Data collection

The screening phase was conducted using the Child Behavior Checklist (CBCL) "Parents' form" as a self-administered tool. It is one of the most frequently used measures to assess emotional and behavioral problems of children aged 4-16

years (Kazdin, 1989). It assesses two broad dimensions of dysfunction: internalization problems and externalization problems. Internalization problems include anxiety, depression, obsession and somatic complaints. While, externalization problems include hyperactivity, aggression, and delinquency. In addition, CBCL assesses group of "other problems" that include enuresis, nail pitting, anorexia, bronchial asthma, cruelty to animals, eating non-nutrient materials (pica) and thumb suckling (Achenbach, 1994). The first section of this questionnaire consists of 20 competence items (participation in sports, non sports activities, organizations, jobs, friendships, and relationships with other individuals). The second section consists of 120 items on behavioral or emotional problems during the past 6 months. Each CBCL item assesses one symptom by presenting three scales (0= Not true, 1= somewhat or sometimes true, 2=Very true or often true). Parents are asked to circle the number of items their child has exhibited the behavior listed during the past 6 months. Parents with difficulty in reading were administered the forms orally. The Arabic version previously validated by (Koura, 1991) was applied. Emotionally and/or behaviorally disturbed children were identified according to cut-off score for boys estimated at the 90<sup>th</sup> percentiles. It was 61. Accordingly, emotionally and/or behaviorally disturbed children were those whose CBCL total scores were equal or above the cut-off score. Similarly, the internalization and externalization problems were identified at cut-off scores higher than that of any individual subscale problem.

### Statistical analysis

Analysis was initially carried out based on a series of univariate comparisons. In order to control simultaneously for the possible confounding effects of the different variables, a multiple logistic regression analysis with stepwise variable selection was utilized to evaluate factors related to emotional and/or behavioral disturbance among schoolchildren (Hosmer et al., 1989).

The variables included in each analysis were the following: (rc=reference category): age ( $\leq 15$  (rc),  $>15$ ); educational level (primary (rc), intermediate); paternal occupation (military (rc), civil, retired); maternal occupation (house wife (rc), working); paternal and maternal education (low (rc), intermediate, high); number of siblings ( $\leq 3$  (rc), 4-7,  $>7$ ); birth order (1<sup>st</sup> (rc), 2-4,  $>4$ ); wanted pregnancy (wanted (rc), unwanted); history of maternal diseases during pregnancy (No (rc), yes); history of maternal medications during pregnancy (No(rc), yes); mode of delivery (normal (rc), abnormal); history of accidents (No (rc), yes); history of meningitis (No (rc), Yes); history of chronic diseases (No (rc), yes).

The significance level for covariates entering and staying in the logistic model was 0.1. Both in univariate and multivariate analyses, the association between exposures and outcomes are thus expressed in terms of odds ratios (OR) together with their 95% confidence intervals (95% CI). Statistical analysis was performed using SPSS version 10 for windows statistical package.

**Table 1: Baseline Characteristics of Students Included in the First Phase of the Study**

Baseline Characteristics	Students (1313)	
	N	%
Age in years		
<12	790	60.2
12-15	449	34.2
>15	74	5.6
Mean age	11.2 years (SD 2.5, range 6-18)	
Educational level		
Primary	856	65.2
Intermediate	457	34.8
Paternal occupation		
Military	1122	85.5
Civil	127	9.6
Retired	64	4.9
Maternal occupation		
House wife	1112	84.7
Working	201	15.3
Paternal education		
Low	72	6.2
Intermediate	819	62.4
High	412	31.4
Maternal education		
Low	524	39.9
Intermediate	546	41.6
High	243	18.5

## Results

The first phase of the study includes 1313 male Saudi schoolchildren. Their age ranged from 6 to 18 years with a mean of  $11.2 \pm 2.5$  years. As regards, educational level children attending primary schools were nearly two-fold those attending intermediate schools represented by 65.2% and 34.8% respectively. The majority of them have non working mothers (84.7%) and military father (85.5%). The great majority of them have either intermediate (62.4%) or high (31.4%) educated fathers and either intermediate (41.6%) or low (39.9%) educated mothers (Table 1).

Among 1239 investigated schoolchildren, the most common emotional and/or behavioral problems were anxiety (13.5%), Schizophrenia (11.9%) and depression (8.6%), followed by somatic disorders (7.0%), obsession (6.9%), hyperactivity (6.1%), aggression (4.0%) and finally delinquency (3.6%). While among adolescents, the most common encountered emotional and/or behavioral problems were anxiety (13.5%), somatic disorders (12.2%), obsession (10.8%), followed by aggression (8.1%), schizophrenia (6.8%), delinquency and depression (4.1% for each)(Table 2).

The second phase includes 109 emotionally and/or behaviorally disturbed students, representing 8.3% of all students included in the first phase of the study. Their age ranged from 6.5 to 15 years with a mean of  $10.84 \pm 2.56$ . A control group consists of 327 emotionally and/or behaviorally not disturbed students were randomly selected through the computer. Their age ranged from 6.5 to 15 years with a mean of  $10.65 \pm 2.21$ . The socio-demographic and medical related characteristics, together with the results of the univariate analyses are reported in Tables 3 and 4.

## Risk factors

All variables were significant in logistic regression analyses are summarized in Table 5 and described below.

*Socio-demographic Characteristics:* Students of intermediate level of education had a higher risk of developing emotional and/or behavioral disturbance as opposed to students of primary level of education (OR=2.34, CI 1.80-2.88). Regarding maternal occupation, students with working mothers were more liable to develop emotional and /or behavioral disturbance than those with non working mothers (OR=1.66, CI 1.06-3.227). No significant association could be detected between development of emotional and/or behavioral disturbance and age, paternal occupation, paternal or maternal education, number of brothers or birth order.

*Medical variables:* History of meningitis was strongly and positively related to emotional and/or behavioral disturbance (OR=7.50, CI 5.12-9.88). Unwanted pregnancy was significantly associated with an increased emotional and/or behavioral disturbance risk (OR=4.77, CI 3.68-5.86). Students with

**Table 2. Prevalence of Emotional and Behavioral Problems Among Schoolchildren and Adolescents (n=1313)**

Emotional and Behavioral problems	Schoolchildren (6-15 years) N=1239		Adolescents (>15 years) N=74		Total N=1313		p
	No.	%	No.	%	No.	%	
<b>Internalization problems</b>	93	7.5	9	12.2	102	7.8	0.1
Depression	107	8.6	3	4.1	110	8.4	0.2
Somatic disorders	87	7	9	12.2	96	7.3	0.1
Obsession	86	6.9	8	10.8	94	7.2	0.2
Anxiety	167	13.5	10	13.5	177	13.5	0.9
<b>Externalization problems</b>	53	4.3	4	5.4	57	4.3	0.6
Delinquency	45	3.6	3	4.1	48	3.7	0.9
Aggression	49	4	6	8.1	55	4.2	0.1
Hyperactivity	75	6.1	3	4.1	78	5.9	0.5
<b>Others</b>							
Schizophrenia	147	11.9	5	6.8	152	11.6	0.2

**Table 3. Sociodemographic Risk Factors for Behaviorally and/or Emotionally Disturbed Children (6.5-15 years). Results of Univariate Analysis**

Risk Factors	Non-Disturbed (N=327)		Disturbed (N=109)		OR*	95% CI*
	N	%	N	%		
Age in years						
≤15 ®	317	96.9	103	94.5	1.00	
> 15	10	3.1	6	5.5	1.85	0.58-5.69
Educational level						
primary ®	275	84.1	73	67	1.00	
intermediate	52	15.9	36	33	2.61	1.54-4.42†
Paternal occupation						
Military ®	278	85	94	86.2	1.00	
civil	37	11.3	11	10.1	0.88	0.40-1.88
retired	12	3.7	4	3.7	0.99	0.26-3.40
Maternal occupation						
House wife ®	284	86.9	84	77.1	1.00	
working	43	13.1	25	22.9	1.97	1.09-3.52†
Paternal education						
low ®	15	4.6	1	0.9	1.00	
intermediate	202	61.8	67	61.5	4.98	0.67-102.86
high	110	33.6	41	37.6	5.59	0.73-117.01
Maternal education						
low ®	128	39.1	44	40.4	1.00	
intermediate	141	43.1	43	39.4	0.89	0.53-1.48
high	58	17.8	22	20.2	1.10	0.58-2.09
Number of siblings						
≤3 ®	63	19.3	26	23.9	1.00	
4-7	211	64.5	62	56.9	0.71	0.40-1.26
>7	53	16.2	21	19.2	0.96	0.46-2.00
Birth order						
first	71	21.7	32	29.4	1.00	
2-4	155	47.4	38	34.8	0.54	0.30-0.98
>4	101	30.9	39	35.8	0.86	0.47-1.55

\*OR indicates odds ratio, CI confidence intervals, ® reference category, † p>0.05

history of accidents (OR= 4.07, CI 2.87-5.26) and those with history of bronchial asthma (OR=2.96, CI 2.16-3.76) had an increased risk of emotional and/or behavioral disturbance as compared to students without history. History of diseases or drug intake during pregnancy and mode of delivery were not independently associated with the outcome.

## Discussion

The identification of children with emotional and behavioral problems in the community has important implications for children, families and for the community at large, both in terms of current disability and future disorder.

Perhaps, one of the advances in psychiatric epidemiology is the development of the dimensional approach in case definition based on symptoms count, and sometimes combined with symptom severity. The Child Behavior Check-List (CBCL) is one of the most widely used screening tools for quantitative assessment of emotional and behavioral disorders among children. However, it is not a diagnostic test (Achenbach et al., 1981).

The advantages of this study included the following: (1) using standardized instrument that assesses a broad range of child problems; (2) using samples large enough to test differences. In addition (3) to our knowledge, this study is the first

in Saudi Arabia to assess emotional and/or behavioral problems among schoolchildren and adolescents on a standardized measure of child psychopathology and to compare them with matched children. (4) It is also among the first to include schoolchildren through adolescent children.

Results of the present work revealed that only 8.3% of the surveyed children and adolescents (6-18 years) were emotionally and/or behaviorally disturbed according to parent's reports. This figure was lower than that reported in United Arab Emirates (23.9%) in a work conducted on schoolchildren aged 6 to 15 years (Eapen et al., 1989). This could be attributed to the fact that in our work the reporting was based on the parents' scale only while in the Emirate's work the reporting was based on either parent' scale or school health physician. It is also lower than that reported by others in developed countries (Costello et al., 1996; Verhulst et al., 1997; Steinhausen et al., 1998; and Breton et al., 1999) (Table 6). However, it is comparable with others (Fergusson et al., 1993; Lewinsohn et al., 1993; Fombonne et al., 1994; Simonoff et al., 1997; Meltzer et al., 2000; and Liu et al., 1999). This finding enforces the concept that the behavioral and emotional problems children develop may differ from one cultural context to another (Weisz et al., 1993). In addition, different tools have been utilized in different studies to recognize emotional and/or behavioral problems.

**Table 4. Medical Risk Factors for Emotionally and/or Behaviorally Disturbed Children (6.5-15 Years). Results of Univariate Analysis**

Risk factors	Non disturbed (N=327)		Disturbed (N=109)		OR*	95% CI*
	No.	%	No.	%		
Diseases during pregnancy						
No ®	318	97.2	105	96.3	1.00	
Yes	9	2.8	4	3.7	1.35	0.34-4.91
Drugs during pregnancy						
No ®	301	92	95	87.2	1.00	
Yes	26	8	3614	12.8	1.71	0.81-3.57
Mode of delivery						
normal ®	297	90.8	101	92.7	1.00	
abnormal	30	9.2	8	7.3	0.78	0.32-1.86
Wanted pregnancy						
wanted®	320	97.9	100	91.7	1.00	
unwanted	7	2.1	9	8.3	4.11	1.36-12.62?
History of meningitis						
No ®	326	99.7	105	96.3	1.00	
Yes	1	0.3	4	3.7	12.42	1.29-295.0?
History of accidents						
No ®	322	98.5	100	91.7	1.00	
Yes	5	1.5	9	8.3	5.8	1.73-20.40?
History of chronic diseases‡						
No ®	313	95.7	92	84.4	1.00	
Yes	14	4.3	17	15.6	4.13	1.85-9.26?

\*OR indicates odds ratio, CI confidence intervals, ® reference category, † p>0.05, ‡ all were bronchial asthma

In the current study, generally the prevalence of internalizing problems among children and adolescents were higher than externalizing problems. This finding could be explained by the fact that in Saudi community externalizing problems such as hyperactivity, aggression and cruelty are suggested to be socially accepted behavior among boys.

**Table 5. Risk Factors for Emotionally and/or Behaviorally Disturbed Children and Adolescents. Results of Logistic Regression Analysis. All Terms entered in the Logistic Regression Analysis Were Included in the Final Model**

Risk factors	Adjusted OR*	95% CI*
Socio-demographic variables		
Educational level		
Primary ®	1.00	
Intermediate	2.34	1.80-2.88
Maternal occupation		
House wife ®	1.00	
Working	1.66	1.06-2.27
Medical variables		
History of meningitis		
No ®	1.00	
Yes	7.50	5.12-9.88
Wanted pregnancy		
Wanted ®	1.00	
Unwanted	4.77	3.68-5.86
History of accidents		
No ®	1.00	
Yes	4.07	2.87-5.26
History of bronchial asthma		
No ®	1.00	
Yes	2.96	2.16-3.76

\*OR indicates odds ratio, CI confidence intervals, ® reference category, † p>0.05

## Risk factors

In child psychopathology, risk factors seem to exert their influences in a cumulative fashion, with the number of risk factors present being more important than the specific nature or type of each individual variable. Furthermore, a risk factor does not necessarily imply a direct causal relationship; it may simply identify an early marker for a disorder (Anderson et al., 1994). It has been reported that, emotional and behavioral problems among preadolescent children are most likely to be due to a complex interaction between biological risk factors and environmental risk factors (Jensen et al., 1990). Documented risk factors include mainly low socio-economic status, negative family events and maternal psychopathology (Jensen et al., 1990; Williams et al., 1990). After adjustment using multiple logistic regression, findings of the present work revealed that, only two sociodemographic factors were proved to increase the risk of emotional and/or behavioral problems; these are Student's level of education and maternal occupation. Regarding Students, educational level, intermediate level of education (mostly from 6-12 years old) as opposed to primary level (mostly from 12-15 years Old). Age was not proved to be a significant predictor. It seems that the educational level independently reflects more the emotional and/or behavioral disturbance than the age in our culture. This discrepancy between the educational level and the student's age in our study is due to the fact that the age of 224 (17.1%) of the total screened students is higher than expected for their educational level (i.e. either greater than 12 and still in the primary level or grater than 15 and still in the intermediate level). In china, Liu X et al., 2000 found that younger boys exhibited more externalization problems. In Washington state, 1 in 18 young

**Table 6. Prevalence of Emotional and Behavioral Problems Among Children and Adolescents From Recent Epidemiological Surveys (Fombonne, 2002)**

Reference	Site	Age	Number	Prevalence		
				AED*	ABD†	AD‡
Fergusson et al. (1993)	Christchurch, New Zealand	15	986	-	-	13
Lewinsohn et al. (1993)	Oregon, USA	16-18	1710	-	1.8	9.6
Fombonne. (1994)	Chartres, France	6-11	2441	5.9	6.5	12.4
Costello et al. (1996)	North Carolina, USA	9,11,13	4500	6.8	6.6	20.3
Verhulst et al. (1997)	Nationwide, the Netherlands	13-18	780	-	7.9	35.5
Simonoff et al. (1997)	Virginia, USA	8-16	2762	8.9	7.1	14.2
Steinhausen et al. (1998)	Zurich, Switzerland	7-16	1964	-	6.5	22.5
Breton et al. (1999)	Quebec, Canada	6-14	2400	-	-	19.9
Meltzer et al. (2000)	Nationwide, England and Wales	5-15	10438	4.3	5.8	9.5

\*Any emotional disorder, †any behavioral disorder, ‡any disorder

children (6 to 11-year-olds) and 1 in 15 adolescent children (12 to 17-year-olds) are reported by their parents to show signs of behavioral and/or emotional problems (Brandon, 2000). Crijnen et al. (1997) reported that the total score declined with age. As regards maternal working, our finding was exactly opposite to what have been documented among Washington's children. Where it was found that children whose mothers are employed are more likely to exhibit emotional and/or behavioral problems than children with unemployed mothers (Brandon, 2000). This contradiction simply reflects the difference in the cultural context between the two communities (third world living conditions as well as the difference in the effects of parent sensitivities. There are several explanations for the higher rate of emotional and behavioral problems among children with working mothers in our work. One explanation is that in households with working mothers there are decreased resources for parental monitoring of children, which is associated with subsequent problem behavior (Ary DV et al., 1999). Another reason is that children in many households with working mothers may receive less time and support than those with non working mothers. The critical factor for emotional stability of children is the involvement of both parents in their lives (McLambahan et al., 1999; Amato et al., 1999)

The level of central nervous system functioning has long been related to child psychopathology (Jensen et al., 1990). Because of their potential impact on brain development and functioning, perinatal complications have been among the commonly investigated risk factors for child psychopathology (Rutter, 1981). Sprich-Buckminster et al. (1993) and Matsuishi et al. (1998) reported that there is a strong association between prematurity and instrumental delivery from one side and the development of emotional and language problems from the other side. We failed to demonstrate a significant association between mode of delivery, history of diseases or drug intake during pregnancy and emotional and/or behavioral problems among schoolchildren. Probably, perinatal factors affect more the behavioral and emotional development of preschool children than schoolchildren and adolescents as in our work.

Behavioral problems in children are understandable efforts to cope with their environment. Particular behavioral disorders relate themselves statistically to particular kinds of envi-

ronment, especially to the family milieu of developing children (Richardson et al., 1975). The present results revealed a significant association between being an unwanted child and occurrence of emotional and/or behavioral problems among children. Moreover, an evidence of physical, verbal as well as emotional abuse was significantly more encountered among those children. This can be explained by many speculations. Firstly, being an unwanted child as a result of unwanted pregnancy, parents may react by anxiety, uncertain handling and thus exacerbating the difficulties. Secondly, parents of unaccepted child may perceive normal child's behavior as problematic. Thirdly, as the majority of unwanted pregnancies are the result of poverty, illiteracy, social disadvantages, single parent and marital difficulties. So, its effect on the child's psychopathology may be mediated through these risk factors.

Child's physical illness whether acute or chronic has been identified as one of the important determinants of child's behavioral and emotional symptomatology. Physical illness may be either a cause or an effect of child's maladjustment. The present work revealed that history of chronic diseases (bronchial asthma) was a significant predictor of children's emotional and/or behavioral disturbance. It is natural for a child to be angry when he is ill and it is healthy to express his anger. The impact of hospitalization on the child should always be remembered, as the child is separated from home, family and normal life style. Also, he is subjected to treatment regimens (Egdell et al., 2001).

Accidental injury in a child is sudden, often violent, and emotionally stressful, particularly when hospitalization and rehabilitation accompany it. In a review study of post-traumatic stress disorder in children Martini et al. (1990) listed psychological symptoms such as generalized fearfulness, separation anxiety, sleep disturbance, phobias and enuresis. Moreover children who were left with scars, disfiguring lesions, or having limitation on activities were more socially isolated and depressed. The present work revealed a significant difference between disturbed and non-disturbed children as regards history of accidents. Accidents might be contributing factors in development of child psychopathology. Also, it could be a consequence of the conduct of a disturbed child, as they are known to be accident-prone.

Severe neurodevelopmental sequelae occur in 10-20% of patients recovering from bacterial meningitis and as many as 50% may have some neurobehavioral morbidity (Prober, 1996). In agreement with this and with other studies conducting in developing countries to analyze the sequelae of bacterial meningitis in children (Salih et al., 1991; Carrol et al., 1994; Fombonne, 2002), our results demonstrated that history of meningitis is a significant risk factor for emotional and/or behavioral problems among schoolchildren.

## Study limitations

This study has some possible limitations that need to be discussed. (1) Including males only in our study has a cultural background so; we had a great difficulty in including schools for girls to our research. (2) Parents were the only informants about their children's problems. They might underestimate or overestimate their children's problems or their responses might be less accurate, making it important to compare our findings with findings from other informants (e.g., teachers). However, all were informed that all information about their children will be confidential and would not be released to anyone without their express written consent. (3) Some important risk factors were not included in our study because of cultural background of our study group (e.g. maternal smoking, history of drug intake among parents, low income, single parent families, inter-parental relationship...). And (4) we did not discriminate between schoolchildren and adolescents as regards risk factors because in our study all those reported as having emotional and/or behavioral problems were under 15 years and accordingly their matched control group (since adolescents represent only 5.6% of our studied sample and we could not depend).

## Conclusion

Every child's mental health is important, many children have mental health problems, and these problems are real and painful and can be severe.

The present study highlights one of the sizable mental health problems among Saudi male schoolchildren. Nearly 8.3% of surveyed children and adolescents were behaviorally and emotionally disturbed according to parent's report which is lower than that reported in other countries. The more we understand the challenges of the young people we serve, the more effective and life-changing our services become.

Several risk factors including child, familial, and environmental risk factors play an important role in the genesis of emotional and behavioral problems in schoolchildren. Mental health problems can be recognized and treated, caring families and communities working together can help.

## Acknowledgements

Al-Hada and Taif Armed Forces Hospitals Program, Saudi Arabia supported this study. The authors would sincerely like to thank Mr. Abdul-Rahman Boshnak, culture & education administrator of Taif leadership military zone, for his assistance in data collection. We are most grateful to all headmasters of the participating schools for their cooperation and friendly attitude. Finally, we would like to thank Mr. Harold Trupos for revision of the English text.

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