

## Prevalence Of Psychosocial Problems In Adolescents

Ibtisam Ibrahim Rajhi<sup>1</sup>, Fahd Muhammad Al-Duwayan<sup>2</sup>, Mutaib AbdulAziz Al-Fulaih<sup>3</sup>, Abdullah Saad Al-Naghaither<sup>3</sup>, Shuaa Fahd Al-Otaibi<sup>2</sup>, Ashraf Suleiman Al-Abdullatif<sup>2</sup>, Ibrahim Abdulaziz Al-Hussan<sup>3</sup>, Abdullah Awad Al-Otaibi<sup>3</sup>, Omar Saleh Al-Maqni<sup>2</sup>, Muhammad Khaled Al-Ruwais<sup>2</sup>, Nawaf Manahi Al-Otaibi<sup>2</sup>, Norah Dugellb Marzooq Alotaibi<sup>2</sup>

### Abstract

**Background:** Psychosocial problems refer to the difficulties faced by adolescents in different areas of personal and social functioning. Adolescents are vulnerable to psychosocial problems because of physical and physiological changes that occur in their body during this developmental stage. Therefore, the aim of this study was to study the prevalence of psychosocial problems among adolescents. **Methods:** A community based descriptive cross-sectional study was conducted among a sample of students aged 10–19 years attending intermediate and secondary schools in Saudi Arabia. The survey was conducted and face to face interview was taken among 330 adolescents out of which 214 (64.84%) were male and 116 (35.16%) were female. Pediatric Symptom Checklist Youth version (PSC-Y) was used as a tool to study the psychosocial problem. **Results:** In present study, overall prevalence of psychosocial problem was found to be 33.03%. Prevalence of psychosocial problem in male and female was 34.11% and 31.03% respectively. Psychosocial problems were more in age group of 14-16 years (39.69%) followed by 10-13 years 34 (31.48%) and 17-19 years age group 23 (25.27%). **Conclusions:** On basis of findings using PSC-Y, it is concluded that, a sizeable population (about one third of the adolescents) were suffered from psychosocial problem and the attention problem was most commonly found using PSC-Y subscales.

**Keywords:** Adolescent, Prevalence, Psychosocial problems, PSC-Y.

### Introduction

Adolescence is the period of age ranging from 10 to 19 years, is one of the critical transitions in the lifespan that occurs after childhood and before adulthood, and is characterized by a tremendous pace in growth and change that is second only to that of infancy <sup>(1)</sup>. Psychosocial problems, such as behavioral, emotional, and educational problems are highly prevalent among children and adolescents <sup>(2)</sup>. Adolescents are vulnerable to psychosocial dysfunction when they suffer from physical injuries, psychological trauma, or major changes in their environments especially in the absent of strong support system <sup>(3)</sup>. Adolescence period is critical times for developing good mental health <sup>(4, 5)</sup>. Mentally healthy adolescents enjoy a positive quality of life; are free of symptoms of psychopathology; and function well at home, in school, and in their communities <sup>(6)</sup>. Psychosocial problems have emerged as a threat in their overall development of adolescents <sup>(7)</sup>.

Adolescence is marked by significant changes in one's social environment, which are typically adaptive and cheerful but may also be aversive or overwhelming. It is also a crucial stage for developing and maintaining social patterns and mental well-being <sup>(8)</sup>.

<sup>1</sup>Senior Social Specialist, Irada Mental Health cluster, Saudi Arabia.

<sup>2</sup>Social Worker, Dawadmi General Hospital, Saudi Arabia.

<sup>3</sup>Social Specialist, Dawadmi General Hospital, Saudi Arabia.

Individuals' social networks evolve and become more complex during adolescence, and they experience frequent changes in identity and status and increased social appraisal issues. As a result, external influences, such as parents, friends, culture, religion, school, and the media begin to influence adolescents<sup>(9)</sup>. In terms of the community environment, community engagement, identified as the adolescent's inclusion and interest in his or her community, is a crucial factor in his or her transition and reinforcing support and friendship networks<sup>(10)</sup>.

Parents play an essential role in their children's behavioral, mental, and cognitive developments and changes. Children who receive enough care, attention, and support from their families are likely to enter social relationships with warmth and trust. Children, who have experienced emotional coldness and rejection from close individuals, such as parents and other significant family members, are likely to be emotionally cold and distraught in social settings<sup>(11)</sup>. Furthermore, adolescents feel tension and emotional arousal in social environments more than in others, so they start making more autonomous choices about navigating society based on a minimal experience base<sup>(8)</sup>.

Many problems related with behaviors and emotions begin or elevate during adolescence time. The biological, psychological and social changes that occur during adolescence can influence their behavioral and emotional development<sup>(12)</sup>. Adolescent's psychosocial disorders exhibit as iceberg phenomenon and are one of the hidden health problems in population. Adolescents suffer from psychosocial problems at one or the other time during their development to an adult. These problems are of transient nature and are often not easily noticed<sup>(13)</sup>. The term psychosocial reflects both the under-controlled, externalizing or behavioral problems such as conduct disorders, educational difficulties, hyperactivity, and the over-controlled, internalizing or emotional problems like, depression, anxiety<sup>(12-14)</sup>.

Now a day, because of rapid industrialization, majority of family or couple are employed and live in unitary setup, so unavoidably they get less time to look after their children. Under these circumstances, psychosocial (emotional and behavioral) problems and psychiatric problems are on the rise<sup>(15)</sup>. KSA, where a psychosocial problem and visit to the psychiatrist is considered a stigma, it becomes even more necessary to create awareness amongst parents and health care providers about the extent of these psychological problems as many common chronic and mental health conditions arise during childhood. These ensuing psychosocial problems are known to lead to various learning and emotional difficulties in adolescent which then have an impact on their psychological wellbeing<sup>(13)</sup>. Therefore, the aim of this study was to study the prevalence of psychosocial problems among adolescents.

## Methods

A community based descriptive cross-sectional study was conducted among a sample of students aged 10–19 years attending intermediate and secondary schools in Saudi Arabia. The survey was conducted and face to face interview was taken from February to April 2023. Study subjects consisted of adolescent girls and boys between 10-19 years of age. Study subject not present even after three consecutive visits, seriously ill and mentally retarded adolescents and study subjects/parents not willing to give consent for study were excluded from the study. Sample size estimated with reference to study done by Roy et al., (2018) on 420 adolescents in ward no 58, considering overall prevalence of psychosocial problems in adolescent as 30.95%<sup>(16)</sup>.

Assuming estimated proportion of 30.95%, absolute precision (%) of 5 with desired confidence interval  $(1-\alpha) \%=95$  produced minimum required sample size of 328. Sample size rounded to 330. Sample size required for the study was calculated by using following formula  $N = [Z^2 \cdot 1-\alpha/2 \cdot p \cdot (1-p)] / d^2$  Where P: Expected proportion; d: Absolute precision;  $1-\alpha/2$ : Desired Confidence level. A pilot study was conducted in 50 study subjects. The necessary corrections were done.

Study variables: Socio-demographic characteristics: This included age, gender,

religion, marital status, education and occupation of head of family, number of family members and total family income per month, type of family, etc. Psychosocial problems: Internalizing problem (depression/anxiety), attention problem (ADHD), externalizing problem (conduct disorder), and suicidality. The Pediatric Symptom Checklist (PSC-Y) is a brief questionnaire that helps identify and assess changes in emotional and behavioral problems in adolescents<sup>(17)</sup>. The PSC-Y covers a broad range of emotional and behavioral problems and is meant to provide an assessment of psychosocial functioning.

**Scoring PSC-Y:** The standard PSC form consists of 35 items and 2 separate questions on suicidality in Youth version. Each 35 item is rated as: "Never" (scored 0); "Sometimes" (scored 1); "Often" (scored 2). The total score is calculated by adding the 35 individual scores, so the total score will be 0 to 70. If one to three items are left blank, they are ignored (and given a score of 0). If four or more items are left blank, the questionnaire is considered invalid. If there is yes to any of the questions on suicidality, the study subjects is labeled as having some psychosocial problem. PSC subscales: Subscale scores for internalizing, externalizing and attention problems can be calculated from specific items. Factor analysis of the full set of 35 items has led to the validation of three subscales for use in the identification of attention, internalizing and externalizing problems.

## Results

**Table (1)** shows distribution of study subjects according to their age in years that majority 131 (39.70%) study subjects were from age group of 14-16 years followed by 10-13 years (32.73%) and 17-19 years (27.57%) of age group. The mean age in years of study participants was  $14.27 \pm 2.68$  years. Distribution of study subjects according to gender shows that majority 214 (64.84%) were male and 116 (35.16%) were female. In present study all study subjects were unmarried. Majority of study subjects belonged to nuclear family (89.93%) followed by three generations (10.32%) and rest were from joint family (05.75%). (Fig. 1)

**Table (2)** socioeconomic status was classified according to Modified socioeconomic status scale. In the present study, majority of the study subjects 208 (63.03%) belonged to socio-economic class III followed by, socio-economic class II, class IV and class I included 60 (18.19%), 54 (16.36%) and 8 (02.42%) respectively.

**Table (3)** psychosocial problems using pediatric symptom checklist youth version shows that, out of total 330 study subjects, 109 study subjects were having psychosocial problems. Overall prevalence of psychosocial problem was found to be 33.03%. Prevalence of psychosocial problem in male and female was 34.11% and 31.03% respectively.

**Table (4)** psychosocial problems were more in age group of 14-16 years (39.69%) followed by 10-13 years 34 (31.48%) and 17-19 years age group 23 (25.27%).

**Table (5)** distribution of study subjects according to categorization of psychosocial problems using pediatric symptom checklist subscales shows that most common psychosocial problem was attention problem in 93 (28.18%) study subjects followed by externalizing problem i.e. conduct disorder in 88 (26.67%) study subjects and internalizing problem i.e. depression and or anxiety in 14 (4.24%) study subjects. Prevalence of attention problem in male and female was 31.77% and 21.55% respectively. Prevalence of externalizing problem in male and female was 30.37% and 19.82% respectively. Prevalence of internalizing problem in male and female was 4.20% and 4.31% respectively.

**Table (6)** pediatric symptom checklist subscales depicts that, the internalizing problems are more in age group of 17-19 years age group. Out of 14 study subjects who had internalizing problem, 8 were from age group of 17-19 years of age group follow by 5 from age group of 14-16 years and 1 from 10-13 years of age group. Attention problem was more in age group of 14-16 years. Out of 93 study subjects who had attention problem, 47 were from age group of 14-16 years of age group followed by 10-13 years and 15 from 17-19 years of age group. Externalizing problem i.e. conduct disorder was found more in the age group of 10-13 years of age group. Out of 88 study subjects who had conduct disorder,

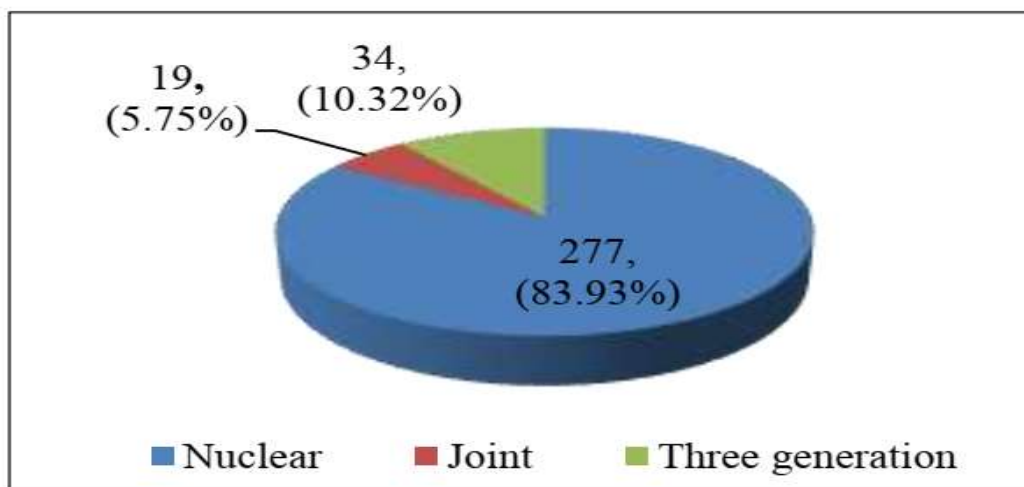
32 were from age group of 10-13 years of age group followed by 29 from 14-16 years and 17 from 17-19 years of age group.

**Table (1):** Distribution of study subjects according to age and gender (n=330)

Age in years	Male		Female		Total	
	N	%	N	%	N	%
<b>10-13 (early adolescents)</b>	57	26.63	51	43.96	108	32.73
<b>14-16( mid adolescents)</b>	92	43.01	39	33.63	131	39.70
<b>17-19 (late adolescents)</b>	65	30.36	26	22.41	91	27.57
<b>Total</b>	214	100	116	100	330	100

**Table (2):** Distribution of study subjects according to their socioeconomic status (n=330).

Socioeconomic status of study subject	N	%
<b>Upper(i)</b>	8	02.42
<b>Upper middle(ii)</b>	60	18.19
<b>Lower middle(iii)</b>	208	63.03
<b>Upper lower (iv)</b>	54	16.36
<b>Lower(v)</b>	00	00
<b>Total</b>	330	100



**Figure (1):** Distribution of study subjects according to type of family (n=330).

**Table (3):** Distribution of study subjects according to psychosocial problems (PSC-Y)

Psychosocial problems	Male		Female		Total	
	N	%	N	%	N	%
<b>Present</b>	73	34.11	36	31.03	109	33.03
<b>Absent</b>	141	65.89	80	69.97	221	66.9
<b>Total</b>	214	100	116	100	330	100

**Table (4):** Distribution of study subjects according to age and psychosocial problems (PSC-Y)

Psychosocial problems	10-13 years		14-16 years		17-19 years		Total	
	N	%	N	%	N	%	N	%
<b>Present</b>	34	31.48	52	39.69	23	25.27	109	33.03
<b>Absent</b>	74	68.52	79	60.31	68	74.73	221	66.97
<b>Total</b>	108	100	131	100	91	100	330	100

**Table (5):** Distribution of study subjects according to categorization of psychosocial problems (using PSC-Y subscales).

Categorization of *psychosocial problem	Male (214)		Female (116)		Total (330)	
	N	%	N	%	N	%
<b>Internalizing problem (depression and or anxiety)</b>	09	04.20	05	04.31	14	04.24
<b>Attention problem (ADHD)</b>	68	31.77	25	21.55	93	28.18
<b>Externalizing problem (conduct disorder)</b>	65	30.37	23	19.82	88	26.66

\* Multiple problems.

**Table 6: Distribution of study subjects according to age group categorization of psychosocial problems (PSC-Y using subscales)**

Category of *psychosocial problem (row total)	10-13 years		14-16 years		17-19 years		Total	
	N	%	N	%	N	%	N	%
<b>Internalizing problem depression/anxiety)</b>	01	07.14	05	35.71	08	57.15	14	100
<b>Attention problem (ADHD)</b>	31	33.33	47	50.53	15	16.14	93	100
<b>Externalizing problem (conduct disorder)</b>	32	36.36	29	32.95	17	30.69	88	100

\*Multiple problems.

### Discussion

In this study overall prevalence of psychosocial problem using pediatric symptom checklist was found 33.03%. Prevalence of psychosocial problem in male and female was 34.11% and 31.03% respectively. Almost similar findings was reported by Roy et al., (2018) <sup>(16)</sup> in their study 30.95%. The problems were more in males (34.76%) as compared to females (28.10%). In contrast to present study, Ashwini et al., (2020) <sup>(18)</sup> and Chaudary et al., (2020) <sup>(19)</sup> showed wide variation in prevalence of psychosocial problem using same scale 11.2% and 40.7% respectively. Also study conducted by Banstola et al., (2017) <sup>(20)</sup> revealed prevalence of psychosocial problem as 21.7% in their study.

In present study, psychosocial problems were more in age group of 14-16 years (39.69%) followed by 10-13 years 34 (31.48%) and 17-19 years age group 23 (25.27%). Similar finding was reported by Ahmad et al., (2007) <sup>(15)</sup> prevalence of the psychosocial problems was maximum (25.2%) in 14-15 years age group. Also, Devkota et al., (2020) <sup>(21)</sup> revealed psychosocial problems were more in age group of 15-19 years of age group; about 32.2% study subjects from age group of 15-19 years had psychosocial problems in their study. Findings are shown in a cross-sectional study by Timalsina et al., (2018) <sup>(22)</sup> revealed

that prevalence of overall psychosocial problems were more in age group of 17-19 years(24.3%) followed by 15.8% and 4.8% in 15-16 and 12-14 years of age group.

In present study, pediatric symptom checklist subscales shows that most common psychosocial problem was attention problem in 93 (28.18%) study subjects followed by externalizing problem i.e. conduct disorder in 88 (26.67%) study subjects and internalizing problem i.e. depression and or anxiety in 14 (04.24%) study subjects. In study conducted by Ahmad et al., (2007) <sup>(15)</sup> showed that internalizing problem i.e. depression and anxiety was present in 3.1% and 3.8% study subjects which is slightly similar to present study. Attention deficit hyperactive disorder (ADHD) in 25.8% study subjects was reported by Timalsina et al., (2018) <sup>(22)</sup> in their study which was almost similar to present study. Chaudary et al., (2020) <sup>(19)</sup> revealed 14.8% and 15.5% study subjects had attention and externalizing problems (conduct disorder) respectively in their study.

In present study, attention problem was more in age group of 14-16 years. Out of 93 study subjects who had attention problem, 47 were from age group of 14-16 years of age group (mid adolescent). Externalizing problem i.e. conduct disorder was found more in the age group of 10- 13 years of age group (early adolescent). Out of 88 study subjects who had conduct disorder, 32 were from age group of 10-13 years of age group. Internalizing problem are more in age group of 17-19 years age group (late adolescent).

Study by Roy et al., (2018) <sup>(16)</sup> found that conduct disorder was found to be maximum in late adolescent boys and mid adolescent girls. Ahmad A et al., (2007) <sup>(15)</sup> revealed in their study that internalizing problems and conduct disorder were more in age group of 14-15 years age group. Study has all the inherent limitations of a cross-sectional study. Generalizability of the study findings may be limited to the study area. PSC-Y is subjective scale and therefore response to each question may not reflect true feeling or response to question. During the COVID-19 pandemic and the consequent lockdown in India, adolescents experienced a various changes in their personal and social environment, which could have affected the study findings.

## Conclusion

On basis of findings using PSC-Y, it is concluded that, a sizeable population (about one third of adolescents) were suffered from psychosocial problem and the attention problem was most commonly found using PSC-Y subscales. It is recommended that those who have psychosocial problems on the PSC-Y should be sent for further evaluation and management to a qualified psychiatrist or mental health professional. The study suggests for the further more research on other aspects of psychosocial problems and associated risk factors which was not studied in present study.

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