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RESEARCH ARTICLE

EMOTIONAL AND BEHAVIORAL PROBLEMS AMONG ADOLESCENTS IN JODHPUR CITY

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Abstract

Adolescents are highly vulnerable to psychiatric disorders. This study aimed to explore the emotional and behavioral problems in adolescents. A community-based exploratory survey was conducted between November and December 2019. Cluster sampling was done. 300 adolescents in 12 to 18 years of age group from the different randomly related areas of Jodhpur city were involved in the study. Emotional and behavioral problems were assessed by using a self-structured Emotional and behavioral problem questionnaire. Informed consent and assent were taken before filling the questionnaire. Descriptive and inferential statistics were applied for analysis. SPSS version 16 was used for data analysis. Emotional problems are more prevalent in the population. Nearly 41% of participants fall under the borderline category and 1.33% i.e. 4 participants fall under the severe category. Comparatively, behavioral problems are less prevalent. 21.66% of participants have a borderline level of behavioral problem and only one participant was found to have a severe level of behavioral problem. The domains under emotional problems have a higher mean value than the domains under behavioral. A number of siblings are significantly associated with behavioral problems. Emotional problems are more prevalent than behavioral problems. These data suggest that there is a need for mental health services for adolescents.

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Introduction:-

According to the World Health Organization (WHO), 350 million adolescents contribute a total of 22% of the population of countries of the south-east Asia region (SEAR). Adolescents are a population of colors. They have different needs and they exist in a variety of circumstances (WHO, 2011). Adolescence is considered a period of rapid changes in physical, emotional, cognitive, and social domains so they need to adapt to the change, accept the change, and develop a healthy self-identity (Lui, 2007, p. 62). With all these changes in characteristics, there is the development of stress in adolescents and an increased risk to their health and well-being. Certain skills that affect the adaptation to the change by adolescents are stress coping, conflict resolution, anger management, problem-solving, and communication skill. If these skills are not used effectively by the individual or those skills are inadequate lead to emotional and behavioral problems in the individual (Donnelly, no date; Meyers et al, 2011, pp.380-388; Slemming et al, 2011, pp. 787-795; Tandon et al, 2013, pp. 627-633). During puberty, adolescents face challenges with hormonal changes and physical changes. Social support and proper knowledge regarding the changes help to cope with the situation.

Some studies show that the prevalence of behavioral and emotional problems in Asian countries among adolescents in community samples was between 8.7% and 18.7% (Cury, Gofito, Braz, 2003, pp. 139-145; KR, Biswas, Rao, 2011, pp. 35-40; Seyf, 2015, p. 175). Rahman et al. (2012) found a high prevalence of 40.35% of behavioral and emotional disorders among orphan children and adolescents in institutional care. In another study by El Koumi et al. (2012) in Cairo, the prevalence of behavioral disturbances was 64.53% among those in institutional homes. In many studies, it is found that the prevalence of mental disorders is high in the adolescent population and it varies between 8% and 25% (Erskine et al, 2015, pp. 1551-1563; Insel, 2014, pp. 1727-1728; Keane, Loades, 2017, pp. 4-15; Kessler et al, 2012, pp. 372-380; Polanczyk et al, 2015, pp. 345-365; Whiteford et al, 2013, pp. 1575-1586; Merikangas et al, 2010; Kathleen et al, 2010; Vincente et al, 2012, pp. 1026-1035). In adolescents, 60-70% of the burden adolescents is carried by mental disorders worldwide (Whiteford et al, 2013, pp. 1575-1586; Merikangas et al, 2010; Kathleen et al, 2010; Vincente et al., 2012, pp. 1026-1035; Merikangas et al, 2009, pp. 7-20; Patel et al, 2007, pp. 1302-1313).

Behavioral and emotional problems among adolescents are considered to be one of the most growing concerns in public health (Holling et al, 2008, pp. 34-41; Fatori et al, 2013). Overall adolescent functioning including school and academic development, social development, peer group functioning, and family relationship are negatively affected by emotional and behavioral problems and lead to an economic burden on families (Holling et al., 2008, pp. 34-41; Fatori et al., 2013; Mawafy et al, 2015, pp. 1-12; Wille et al, 2008, pp.133-147; Al-Jawadi, Rhman, 2007). Effective resolution of emotional and behavioral problems leads to healthy adulthood (NHR, 2020). Exploration of mental health problems among adolescents is not adequately done yet even though India has a larger population of youth (Nair et al., 2017). Many of the studies contribute and suggest the essentiality of the assessment of emotional and behavioral problems among adolescents in the Indian population. The lack of adequate data on emotional and behavioral problems among adolescents in the Indian population precludes an assessment of the magnitude of the problems which is essential for effective planning of health care services. This study contributes to the development of data regarding emotional and behavioral problems among adolescents.

Objectives of the study:-

1. To assess the emotional problems among adolescents in Jodhpur city.
2. To assess the behavioral problems among adolescents in Jodhpur city.
3. To associate the findings with selected demographic variables

Material And Method:-

Study type and setting

This study is a non-experimental, quantitative exploratory study. This study was conducted in selected areas of Jodhpur city, Rajasthan, India

Study sample

The sample of the study includes both male (190) and female (110) adolescents between having ages of 12-18 years. The total sample size involves 300 adolescents calculated by power analysis

Inclusion criteria

Adolescents aged between 12 to 18 years and available at the time of the study also who are willing to participate in the research study were involved in the study.

Exclusion criteria

Adolescents with any mental illness were excluded from the study.

Tool of the study

The self-structured questionnaire includes two sections, section 1 has the questions related to the demographic profile of the adolescents, and the second section has 96 questions based on the domains Anxious depression, Withdrawal depression, Somatic complaints, Rule-breaking behavior, Aggressive behavior, Social problems, Thought problem, Attention problem. The tool is validated by the experts of different institutes. The reliability of the tool was calculated by using Cronbach's alpha and found reliable (0.955) and valid

Procedure:-

For the collection of the data, cluster sampling was used. Jodhpur city area is divided into urban area planning zones which are a total of 9 zones among which 3 zones were selected by randomization. Each zone was further divided into four small subzones according to directions and from each zone, 25 samples were collected by using exponential snowball sampling, and families were approached. The questionnaire was filled out by the adolescents after obtaining consent from their parents.

Declaration of interest:

None.

Funding:

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Statistical analysis

The data were coded and transferred onto an Excel sheet, and statistical analysis was done using SPSS software version 16. Descriptive statistics and inferential statistics were used for data analysis. Frequency, percentage, means, and standard deviation has been used to describe the socio-demographic variable, emotional problems, and behavioral problems. Chi-square test had been used to check the association of emotional and behavioral problems with selected socio-demographic variables.

Result:-

In the present study, more than half of the participants are belonging to the age range 13-15yrs followed by 45.3% from 16-18yrs and 3% from <13yrs. More than half of the participants are male (63.33%) followed by 36% of females. 27.7% of the participant's father's occupation is a private job followed by 20.3% of government job, 19.7% of a businessman, 8.7% of a farmer, shopkeeper of 7%, labor of 6.3% and the rest 6.3% are others. More than half of the participant's mother is housewife i.e. 79% followed by govt. job 11.7%, private job 3.3%, tailor 2.3%, and rest comes under category other that is 2.7%. Nearly half of the participant has more than one sibling i.e. 49.7% followed by 42% having one sibling and 8.3% having no siblings. Most of the participants i.e. 94% are Hindu followed by 4.3% of Muslim, 1.3% christen, and 0.3% Sikh. Most of the participant i.e. 89% has both type of parenting and 10.7% have single parents. More than half of the participants i.e. 59.3% lived in a nuclear family followed by 33.3% living in a joint family and the rest 7.3% in an extended family. (Table 1)

Among all adolescents, 57.33% of adolescents fall under normal score, 41% have fallen under borderline emotional problems, and 4% fall under the severe category (table 2). The mean score of each domain was also calculated among which the highest mean score is of anxious depression is 8.4033 ± 4.409 followed by attention problem (7.04 ± 3.097) and withdrawal depression (5.297 ± 2.419) and thought problem (5.657 ± 3.383). (Table 3)

For behavioral problems, 78% of adolescents fall under normal score, 21.66% have fallen under borderline behavioral problems, and 0.34% fall under severe. (Table 4) whereas for behavioral problem domains, social problem (7.37 ± 3.262), rule-breaking behavior (6.054 ± 4.508) and aggressive behavior (6.457 ± 3.359), and the lowest mean are somatic complaints (3.01 ± 2.148). (table 5)

For calculating the association between the emotional and behavioral problems with demographic variables chi-square test was used. All demographic factors are non-significantly associated with emotional problems among adolescents. (Table 6) and for behavioral problems, a number of siblings are significantly associated, the rest of the demographic variables are non-significant with behavioral problems among adolescents. (Table 7)

Discussion:-

In the present study prevalence of emotional among adolescents aged between 12-18 years residing in jodhpur city found to be 26.41 ± 11.17 among which 57.33% of adolescents fall under normal score, 41% have fallen under borderline emotional problems and 4% fall under the severe category and the mean score for the behavioral problems among which 78% adolescents falls under normal behavioral problems is 22.884 ± 10.649 scores, 21.66% have fallen under borderline behavioral problems and 0.34% falls under severe. The finding of the study suggests that emotional problems are more prevalent in Jodhpur adolescents than behavioral problems.

A study conducted in Chandigarh on 1123 adolescents shows that the prevalence of emotional and behavioral problems is 30.4%. Robert et al conducted a meta-analysis of 52 studies done from different 20 countries; found that the prevalence of mental problems among adolescents (12 to 18 years) varies from 6% to 41%. In a study on school-going adolescents in Delhi, 50% of the students were found to have problems of emotional maladjustment (Polaha et al, 2011). A similar study done on adolescents in Bangalore city reported that 20 % of the children had psychiatric problems (Muzammil et al, 2009). Thus, a third of our adolescents, by even the most conservative estimate, are suffering silently without even being recognized, except for some localized studies.

The study of emotional and behavioral problems had not been done separately till now. This study is the first approach to studying emotional and behavioral problems separately based on domains. In the current study, emotional problems, as well as behavioral problems, are observed to increase with age in both genders. Other studies reported that the prevalence increases in boys till 17years and then decreases while in girls it continues to rise.

The problems are more prevalent in males as compared to females this may be because of the lack of an adequate female sample. But the significant finding was the association of emotional problems with no. of siblings.

The working status of both mother and father had studied and it was found that adolescents having fathers doing the private job, government jobs, or business are having more emotional and behavioral problems

Many of the demographic factors were associated with the emotional behavioral findings but an association is found between a number of siblings and behavioral problems.

Tables:

Table 1:- Frequency and percentage distribution of participants in terms of demographic variable(N=300).

S. no.	Personal variable	F	Percentage
1	Age		
	<13	9	3
	13-15yrs	155	51.7
	16-18yrs	136	45.3
2	Gender		
	Male	190	63.3
	Female	110	36.7
3	Fathers occupation*		
	Private job	83	27.7
	Govt. job	61	20.3
	Businessman	59	19.7
	Farmer	26	8.7
	Shopkeeper	21	7.0
	Labor	19	6.3
	Other	19	6.3
4	Mothers occupation**		
	Housewife	237	79
	Govt. job	35	11.7
	Private job	10	3.3
	Tailor	7	2.3
	Other	8	2.7
5	Number of siblings		
	No	25	8.3
	One	126	42
	≥2	149	49.7
6	Religion		
	Hindu	282	94
	Muslim	13	4.3
	Christen	4	1.3

	Sikh	1	0.3
7	Education		
	Up to 10	12	4
	10-11 th	225	75
	12 th	63	21
8	Parenting		
	Single	32	10.7
	Both	268	89.3
9	Types of family		
	Nuclear	178	59.3
	Joint	100	33.3
	Extended	22	7.3

*N=288, **N=297

Table 2:- Frequency, percentage and mean score of emotional problems among adolescents.(N=300).

s. no.	Score	f	%	Mean ± SD
1	Normal	173	57.33	
2	Borderline	123	41	26.41 ± 11.17
3	Severe	4	1.33	

Table 3:- Mean score of emotional problems according to each domain among adolescents. (N=300).

s. no.	Domain	Mean ± SD
1	Anxious depress	8.4033±4.409
2	Withdrawal depress	5.297±2.419
3	Thought problem	5.657±3.383
4	Attention problem	7.04±3.097

Table 4:- Frequency, percentage and mean score of behavioral problems among adolescents.(N=300).

s. no.	Score	f	%	Mean ± SD
1	Normal	234	78	
2	Borderline	65	21.66	22.884 ± 10.649
3	Severe	1	0.34	

Table 5:- Mean score of behavioral problems according to each domain among adolescents.(N=300).

s. no.	Domain	Mean ± SD
1	Somatic complaint	3.01±2.148
2	Rule-breaking behavior	6.054±4.508
3	Aggressive behavior	6.457±3.359
4	Social problem	7.37±3.262

Table 6:- Association between emotional problems and selected demographic variables (N=300).

S. no.	Personal variable	Emotional problem			Df	Chi-square value	P-value
		Normal	Borderline	Severe			
1	Age						
	<13	5	4	0	4	2.564	0.633 ^{NS}
	13-15yrs	96	57	2			
	16-18yrs	72	62	2			
2	Gender						
	Male	111	75	4	2	2.661	0.264 ^{NS}
	Female	62	48	0			
3	Fathers occupation*						
	Private job	45	37	1			

	Govt. job	33	27	1			
	Business man	37	21	1	12	3.469	0.991 ^{NS}
	Farmer	16	10	0			
	Shopkeeper	14	7	0			
	Labor	11	8	0			
	Other	11	8	0			
4	Mothers occupation**						
	Housewife	138	96	3			
	Govt. job	20	15	0	8	10.112	0.257 ^{NS}
	Private job	5	5	0			
	Tailor	3	3	1			
	Other	5	3	0			
5	Number of siblings						
	No	14	11	0			
	One	66	56	4	4	7.573	0.109 ^{NS}
	≥2	93	56	0			
6	Religion						
	Hindu	163	115	4	6	2.461	0.894 ^{NS}
	Muslim	7	6	0			
	Christen	3	1	0			
	Sikh	0	1	0			
7	Education						
	Primary	5	7	0			
	Secondary	132	89	4	4	2.955	0.565 ^{NS}
	Senior secondary	36	27	0			
8	Parenting						
	Single	21	10	1	2	2.086	0.352 ^{NS}
	Both	152	113	3			
9	Types of family						
	Nuclear	103	71	4			
	Joint	60	40	0	4	4.469	0.346 ^{NS}
	Extended	10	12	0			

Not significant at p level > 0.05, *N=288, **N=297

Table 7:-Association between behavioral problems and selected demographic variables(N=300).

S. no.	Personal variable	Behavioral problem			Df	Chi-square value	P-value
		Normal	Borderline	Severe			
1	Age						
	<13	8	1	0	4	4.366	0.359 ^{NS}
	13-15yrs	128	26	1			
	16-18yrs	102	34	0			
2	Gender						
	Male	146	43	1	2	2.330	0.312 ^{NS}
	Female	92	18	0			
3	Fathers occupation*						
	Private job	63	19	1			
	Govt. job	50	11	0			
	Business man	50	9	0	12	4.705	0.967 ^{NS}
	Farmer	20	6	0			
	Shopkeeper	16	5	0			
	Labor	14	5	0			

	Other	15	4	0			
4	Mothers occupation**						
	Housewife	189	47	1			
	Govt. job	30	5	0	8	5.984	0.649 ^{NS}
	Private job	6	4	0			
	Tailor	4	3	0			
	Other	7	1	0			
5	Number of siblings						
	No	22	3	0			
	One	89	36	1	4	10.805	0.029[#]
	≥2	127	22	0			
6	Religion						
	Hindu	225	56	1	6	4.127	0.659 ^{NS}
	Muslim	10	3	0			
	Christen	3	1	0			
	Sikh	0	1	0			
7	Education						
	Primary	10	2	0			
	Secondary	179	45	1	4	0.580	0.965 ^{NS}
	Senior Secondary	49	14	0			
8	Parenting						
	Single	27	5	0	2	0.625	0.732 ^{NS}
	Both	211	56	1			
9	Types of family						
	Nuclear	143	34	1			
	Joint	81	19	0	4	4.427	0.351 ^{NS}
	Extended	14	8	0			

#: Significant at the level of 0.05, NS: Not significant at p level > 0.05, *N=288, **N=297

Conclusion:-

The current study was conducted to assess the prevalence of emotional and behavioral problems among adolescents in Jodhpur city. Among all domains, anxious depression domain is found most prevalent. The findings reveal that emotional problems are more prevalent in adolescents as compared to behavioral problems. There is a need for more focus on health services for adolescent health in India.

Relevance for the clinical practice:

Emotional and behavioral problems affect the health care provided to the adolescent population. As per the study result, emotional problems, as well as behavioral problems, may be present in adolescents so it is important to consider this aspect of psychology during the care of adolescents in hospital as well as community setting. As the study is conducted in a community setting and all the participants were from the urban area so the problems might be uncertain to every adolescent, especially when considering their background.

Ethical compliance section

Ethical clearance:

The ethical clearance was obtained from the Institutional Ethics Committee. Prior permission from the principal college of nursing was taken.

Informed consent:

Written informed consent was obtained from the participant's guardian. Informed consent: English, Hindi. Assent was taken from the participants prior involved in the study. Participants were assured of confidentiality with the autonomy to withdraw themselves from the study before data collection.

Conflict of interest:

There are no conflicts of interest.

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