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A Pre Experimental Study to Assess the Effectiveness of Structured Teaching Programme on Level of Awareness among Adolescent Girls Regarding Complications and Prevention of Stress in Selected Hostels at Tamil Nadu

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Abstract

It is observed that suicidal rate is high among adolescence, that too in girls child due to high pressure from academic side and from parents side. The support system available for adolescence are not accessible if they stay in hostel that add their stress level more and complicate their coping mechanism. School-related situations such as tests, grades, studying, self-imposed need to succeed, as well as that induced by others are the main sources of stress for high school students Uncompensated stress leads to depression, anxiety, fear and anger that result in poor academic performance and suicidal risk. Adolescence knows which is stress provoking situations but we believe that the complication of stress is danger that need to be addressed quickly. So it is necessary for adolescent children having awareness about the complications of stress and its preventive measures. The present study investigates the awareness among the adolescent girls staying in hostel regarding complication of stress and prevention of stress. A total of 60 samples were taken by lottery method. Tool consists of two session, demographic variable and structured closed ended question. After ethical clearance and informed concern Post test was conducted after 7 days of STP. Tables and figures were used to describe the data. Thus the difference in the level of awareness was confirmed by Paired't' test value 8.89 which was significant at $p< 0.001$ level. It shows that the structured-teaching programme was effective and the subjects gained knowledge in complication and prevention of stress.

Keywords: Stress; Complications; Prevention; Adolescence; Structured Teaching Programme.

Introduction

Stress and anxiety in children and teenagers are just as prevalent as in adults. Negligence of parents, high expectations in academic or other performances, abused childhood, growing up tensions and demand for familial responsibility etc. the main causes of childhood and teen stress. Parents who are not emotionally available for their children or lack positive coping mechanisms themselves, often spur stress in their offspring. Kouzma and Kennedy reported that school-related situations – such as tests, grades, studying, self-imposed need to succeed, as well as that induced by others – are the main sources of stress for high school students . Stressed children show signs of emotional disabilities, aggressive behavior, shyness, social phobia and often lack interest in otherwise enjoyable activities. In a study Dawood (1995) found that students stress affects their academic performance. He further showed that the most frequently mentioned stressor by students was school and fear related stressors. Many teenagers tend to become non-conformist and fall prey to teenage depression in response to a variety of growing up anxieties. However, stress induced fears and anxiety in children adversely affects children's performances at various levels. Hodge (1996) investigated that prevalence of stress were found particularly among those students who were by their

nature prone to anxiety.

Adolescence is a crucial phase in life and the presence of conditions like depression, anxiety and stress at this stage of life is a matter of concern. Depression in this population has been shown to be associated with increased risk of suicidal behavior, homicidal ideation, tobacco use and other substance abuse into adulthood. It has been noted that the majority of suicides in India are by those below the age of 30 years and also that around 90% of those who die by suicide have a mental disorder. Increasing concern has been expressed about the mental health of students in higher education. Concerns have been articulated by students themselves and by the academic staff who teach them. The World Health Report has quoted India as having a substantial prevalence of childhood and adolescent mental health disorders. The present study was carried out with an objective to study the levels of knowledge regarding complications of stress and it prevention, among school students the association with various socio demographic characteristics of the students. The hypothesis is students will have adequate awareness regarding complications of stress and its preventive measures and STP is effective in improving their awareness regarding complications and prevention of stress.

Objectives

1. To assess the level of awareness among adolescent girls regarding complications and prevention of stress
2. To assess the effectiveness of STP on level of awareness among adolescent girls regarding complications and prevention of stress
3. To associate the selected demographic variables with pre test awareness on complication and prevention of stress

Method

A quantitative approach, A pre experimental was conducted for the target population of adolescent girls with accessible population of girls staying in Chidambaram, Nandanar Govt girls hostel & K.G.Kandigai Govt Girls hostel Tamil Nadu in an urban setting. Inclusion criteria of the study are adolescent girls who are staying in the hostel during the period of the study, aged between 15 and 18 years & are studying between 9th to 12th standard. A total of 60 students were selected by simple random sampling technique by adopting lottery method. The conceptual framework for the study was derived from General Systems Theory. The self administered structure tool was prepared after an extensive review of literature and books and validity of the tool were obtained by experts in the field of nursing. The tool consists of 2 sessions. Session-I: are demographic variable. Session-II are structured closed ended questions (MCQ) (30) which focus on complications and prevention of stress. Pilot study was conducted for the 10% of total sample. The reliability and feasibility of the tools and study was observed. The actual data were collected from the sample after obtaining concern from the ample and ethical clearance from the hostel incharge. Structured teaching programme was conducted on next day of pre test. After 7 days post test was conducted. The data were complited & tabulated for data analysis. Escriptive and inferential statistics were used to analyze the data.

Result

Figure 1: Age: Out of 60 subjects, more than 43.33 % (26) of them belonged to the age group of 15 years, 23.33% (14) belonged to 16 years, 23.34% (14) belonged to 17 years, and 10% (6) belonged to 18 years.

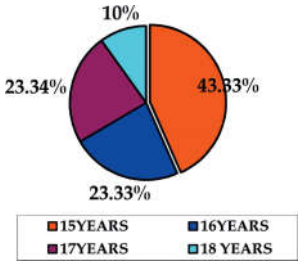

Fig. 1: frequency distribution of the adolescent girls according to age

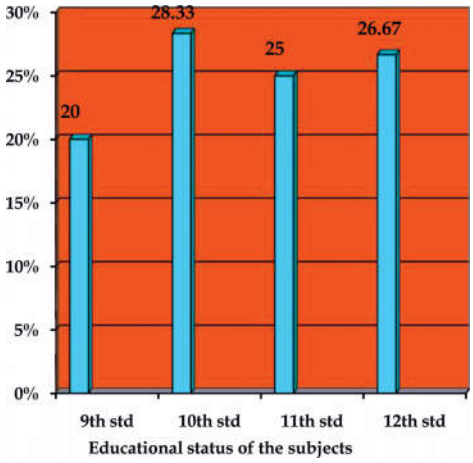

Fig. 2: frequency distribution of the adolescent girls according to educational status

Figure 2: Educational status: A total of 12 students were studying 9th standard, 17 were studying 10th standard, 15 were studying 11th standard, and 16 were studying 12th standard.

Table 1 shows the distribution of demographic characteristics of the subjects.

Table 1: frequency and percentage distribution of demographic characteristics of the adolescent girls

N= 60

S. No.	Demographic Variables	Number/Frequency	Frequency Percentage (%)
1	**Religion**		
	• Hindu	45	75.00
	• Christian	10	16.67
	• Muslim	05	08.33
2	**Previous history of hostel stay**		
	• Yes	0	0.00
	• No	60	100
3	**Duration of hostel stay**		
	• 1 year	20	33.33
	• 1 to 3 years	40	66.67
	• 4 to 7 years	0	0.00
	• above 7 years	0	0.00
4	**Place of living**		
	• Rural	45	75.00
	• Urban	15	25.00
5	**Educational status of the mother:**		
	• Uneducated	28	46.67
	• Primary education	19	31.67
	• Higher secondary education	08	13.33
	• Graduate	05	08.33
6	**Educational status of the father:**		
	• Uneducated	19	31.67
	• Primary education	12	20.00
	• Higher secondary education	15	25.00
	• Graduate	14	23.33
7	**Occupation of the mother:**		
	• Unemployment	23	38.33
	• Professional worker	08	13.33
	• Non professional work	29	48.34
8	**Occupation of the father:**		
	• Unemployment	06	10.00
	• Professional worker	17	28.34
	• Non professional worker	37	61.66
9	**Type of family**		
	• Joint family	16	26.60
	• Nuclear family	44	73.34
10	**No of siblings**		
	• 0	05	08.33
	• 1	12	20.00
	• 2	23	38.33
	• 3 and above	20	33.34

- Religion: As for as the religion is concerned, majority 75% (45) of them were Hindu, 16.67% (10) of them were Christians and the remaining 8.33% (5) were Muslims.
- Previous history of hostel stay: While considering the previous history of hostel stay, it was found that none of them had stayed in any hostel previously.
- Duration of hostel stay: Regarding the present duration of hostel stay, 33.34% (20) of them were staying <1 year in the hostel, and remaining 66.67% (40) were staying 1 to 3 years in the hostel.
- Place of living: Regarding residency 45 of them came from rural area and remaining 15 of them came from urban area.
- Educational status of the parents: Majority of parents were uneducated, (mothers were 46.67% and fathers were 31.67%), minority of them were graduates (mother from 8.33% and fathers from 23.33%)
- Occupation of the mother: Regarding the occupational status of the parents, majorities

were non professional workers, 6 were not working, and remaining 17 subject's fathers were professionals.

- Type of family: Regarding family structure 16 samples were from joint family, and 44 subjects were from nuclear family.
- No of siblings: While considering the number of siblings, 5 of them had no sibling, 12 had 1 sibling, 23 had 2 siblings and remaining 13 subjects had 3 and more siblings.

Table 2: Frequency and percentage distribution of pre and post-test awareness of the adolescent girls regarding complication and prevention of stress N=60

S. No.	Level of awareness	Pre-test knowledge		Post-test knowledge	
		No.	%	No.	%
1.	Inadequate awareness	37	61.7	3	5
2.	Moderately adequate awareness	21	35	8	13.3
3.	Adequate awareness	2	3.3	49	81.7
	Total	**60**	**100**	**60**	**100**

Table 3: Comparison of mean and standard deviation of awareness score regarding various aspects of stress reduction techniques in pre and post-test N=60

Awareness	Pre test		Post test		Paired 't' test	'p' value
	Mean	SD	Mean	SD		
Complication and prevention of stress	3.21	1.41	13.9	1.08	8.89	<0.001 (S)

S- Significant

Table 4: Association of demographic variables with pre-test knowledge on complication and prevention of stress N=60

Demographic variables	Mean	Standard deviation	Kruskal Wallis	'p' value
Age				
• 15 years	25.04	6.45		
• 16 years	28.97	4.54	0.489	0.548
• 17 years	24.80	7.40		(NS)
• 18 years	21.8	5.24		
Religion				
• Hindu	26.4	6.10		
• Christian	23.28	2.60	1.04	0.211
• Muslim	19.75	1.03		(NS)
Educational Status				
• 9th standard	27.7	4.35		
• 10th standard	19.1	7.15	2.346	0.616
• 11th standard	25.7	4.95		(NS)
• 12th standard	26.6	6.94		
Educational status of the father				
• Uneducated	23.09	6.49		
• Primary education	24.9	4.93		
• Higher secondary education	26.3	5	1.673	0.578
• Graduate	27.7	7.73		(NS)
Educational status of the mother				
• Uneducated	24.8	5.96		
• Primary education	25.1	5.53		
• Higher secondary education	27.3	6.41	0.92	0.724
• Graduate	22.9	8,88		(NS)
Occupation of the father:				
• Unemployment	23.13	3.87		
• Professional worker	19.5	6.63	0.847	0.452
• Non professional worker	25.13	5.65		(NS)
Occupation of the mother				
• Unemployment	25.6	6.5		
• Professional worker	24.5	7.60	1.21	0.682
• Non professional worker	26.0	5.82		(NS)
No of siblings				
• 0	23.02	3.98		
• 1	24.73	5.17	3.78	0.942
• 2	27.77	6.67		(NS)
• 3 and above	24.11	5.59		

NS – Non Significant

Table 2 reveals that 37 (61.7%) of adolescent girls had inadequate awareness, 21 (35%) of them had moderately adequate awareness, and only 2 (3.3%) had adequate knowledge on complications and prevention of stress in pre-test. In post-test 8 (13.3%) of them had moderately adequate awareness, 49 (81.7%) had adequate awareness and 3 (5%) had inadequate awareness.

It shows that the LCD teaching programme was very effective in improving the knowledge level of the adolescent girls regarding complication and prevention of stress.

Table 3 reveals that mean knowledge score in complication & prevention of stress was 3.21 with standard deviation of 1.41 in the pre-test. In the post-test the mean score was 13.9 with standard deviation of 1.08.

Thus the difference in the level of knowledge was confirmed by Paired 't' test value 8.89 which was significant at $p< 0.001$ level.

It shows that the structured-teaching programme was effective and the subjects gained knowledge in complication and prevention of stress.

Table 4 shows that the mean pre-test knowledge score obtained by the adolescent girls with the age group of 16 years had higher knowledge score. The Kruskal Wallis test shows that the age group of adolescent girls had no significant influence on the pre-test knowledge.

Further, the results revealed that the adolescent girls belonged to Hindu religion had a mean score of 26.4 with standard deviation of 6.10, Christian had a mean score of 23.8 with standard deviation of 2.6 and the Muslims had a mean score of 19.75 with standard deviation of 1.03.

The Kruskal Wallis' test infers that the religion of adolescent girls had no significant influence on the pre-test knowledge score.

Further, the results showed that the educational status of the adolescent girls also had no significant influence in the pre-test knowledge.

The above table shows that the mean score obtained by the samples of graduated father is 27.7 with standard deviation of 7.73. Where as the mean score obtained by the children of uneducated father is 23.09 with standard deviation of 6.49. The Kruskal Wallis test infers that there is no influence on the knowledge score of the adolescent girls with educational status of the father.

The result also showed that the educational status of the mother also had no significant influence in the pre-test knowledge level of the adolescent girls.

The result also showed that the occupational status of the parents also had no significant influence in the pre-test knowledge.

The above table reveals that the adolescent girls who have 2 siblings had higher mean knowledge score of 27.77 with standard deviation of 6.67. The mean score of adolescent girls who had 1 sibling is 24.73. The adolescent girls who have 3 and above siblings had mean knowledge score of 24.11 with the standard deviation of 5.59. The adolescent girls who have no sibling had mean knowledge score of 23.02 with standard deviation of 3.98.

The Kruskal Wallis test infers that there is no significant influence in the knowledge level of adolescent girls with no of siblings.

The Kruskal Wallis test infers that there is no significant association between the demographic variables (Age, religion, educational status, occupation of the parents, educational status of the parents and number of siblings) and level of awareness regarding complication and prevention of stress.

Discussion

In the present study the above tables and figures it revealed that 37 (61.7%) of adolescent girls had inadequate awareness, 21 (35%) of them had moderately adequate awareness, and only 2 (3.3%) had adequate knowledge on complications and prevention of stress in pre-test. In post-test 8 (13.3%) of them had moderately adequate awareness, 49 (81.7%) had adequate awareness and 3 (5%) had inadequate awareness.

The mean knowledge score in complication & prevention of stress was 3.21 with standard deviation of 1.41 in the pre-test. In the post-test the mean score was 13.9 with standard deviation of 1.08.

Thus the difference in the level of knowledge was confirmed by Paired 't' test value 8.89 which was significant at $p< 0.001$ level.

It shows that the STP teaching programme was very effective in improving the knowledge level of the adolescent girls regarding complication and prevention of stress.

The Kruskal Wallis test infers that there is no significant association between the demographic variables (Age, religion, educational status, occupation of the parents, educational status of the parents and number of siblings) and level of awareness regarding complication and prevention

of stress.

A similar study was investigated by Sibnath D, the academic stress and mental health of Indian high school students and the associations between various psychosocial factors and academic stress. A total of190 students from grades 11 and 12 (mean age: 16.72 years) from three government-aided and three private schools in Kolkata India were surveyed in the study. Data collection involved using a specially designed structured questionnaire as well as the General Health Questionnaire. Nearly two-thirds (63.5%) of the students reported stress due to academic pressure – with no significant differences across gender, age, grade, and several other personal factors. About two-thirds (66%) of the students reported feeling pressure from their parents for better academic performance. The degree of parental pressure experienced differed significantly across the educational levels of the parents, mother's occupation, number of private tutors, and academic performance. In particular, children of fathers possessing a lower education level (non-graduates) were found to be more likely to perceive pressure for better academic performance. About one-thirds (32.6%) of the students were symptomatic of psychiatric caseness and 81.6% reported examination-related anxiety. Academic stress was positively correlated with parental pressure and psychiatric problems, while examination-related anxiety also was positively related to psychiatric problems. Academic stress is a serious issue which affects nearly two thirds of senior high school students in Kolkata. Potential methods for combating the challenges of academic pressure are suggested.

Recommendations

- At school, adolescents should be trained on how to manage stress and anxiety
- Knowledge about mental health and academic stress should be promoted among the parents of the adolescents and taught strategies to help improve the resilience and coping strategies of their children.

Conclusion

The mental health of students, especially in terms of academic stress and its impact has become a serious issue among researchers and policymakers because of increasing incidence of suicides among students across the globe. Unfortunately, the magnitude of mental health problems of children and adolescents has not yet been recognized sufficiently by the policy makers in many countries. Unexplained headaches, migraine and hypertension are becoming alarmingly common among teenagers often an outcome of their stressful lives. Even recreational activities like sports, music, painting or swimming have become as competitive as studies. Hostalization of children is trend now to succeed because of parents concern for the welfare of the children. The overall unemployment situation in India has also provoked parents to put pressure on their children for better performance. Some of the parents wish to fulfil their unfulfilled dreams through their children. All these put pressure on children and put them at the end of stress and related complication. This study assessed adolecenct girls awreness about the complication and prevention of stress. Potential methods for combating the challenges of academic and social pressures are suggested.

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