

RELATIONSHIP BETWEEN HEALTH PROBLEM ADOLESCENT GIRLS LIVING IN URBAN AND RURAL LOCALITY



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ABSTRACT

The present investigation attempts to find out the relationship between health problems and health anxiety among adolescent girls in urban and rural areas. The present study was conducted on 200 adolescent girls of age group between 16-18 years, of which 100 belonged to urban area and 100 were from rural area. The tools used for the present investigation were Health Problem Inventory devised by the Investigator (2013) and Health Anxiety Inventory formulated by Lucock and Morley (1996) to find out the health problem and health anxiety among adolescent girls. The data obtained was subjected to statistical analysis using arithmetic mean, standard deviation, Standard 't' test, Karl Pearson co-efficient of correlation. The results from the present study revealed that locality has an effect on the health problem of adolescent girls. There is no significant difference in the health anxiety of adolescent girls belonging to urban and rural areas. There existed relationship between health problem and health anxiety among adolescent girls with regard to urban and rural areas.

Keyword: health problem, health anxiety, adolescent girls, urban, rural.

Introduction

Nutter (2003) described that the maintenance and promotion of health is achieved through different combination of physical, mental, and social well-being, together sometimes referred

to as the health triangle. Meghachandra et al (1999) opined that during adolescence phase of growth the girls first experience menstruation and related problems which is marked by feelings of anxiety. Steinhausen et al (2005) enumerated eating problems normally onset in adolescence, with a peak at about 15-16 years. Eating disorders are the third most common chronic illness in young females. Daniel et al (2006) enumerated physical activity plays an important role in preventing the development of overweight and obesity in young people and stemming its progression into young adulthood. Adolescence is a particularly vulnerable time for the development of obesity because it is marked by a slowing of growth and corresponding decrease in physical activity levels.

Costello et al (2003) described anxiety as one of the most common psychological disorders in school-aged children and adolescents worldwide. It is a period of intense fear or discomfort characterized by palpitations, sweating, tremor, a choking sensation, chest discomfort, unsteadiness or shortness of breath. Anxiety has substantial negative effects on children's social, emotional and academic success. Specific effects include poor social and coping skills, often leading to avoidance of social interactions, loneliness, low self-esteem, perceptions of social rejection, and difficulty forming friendships. Importantly, school avoidance, decreased problem-solving abilities, and lower academic achievement have also been noted as consequences. Anxiety is considered to be a universal phenomenon existing across cultures, although its contexts and manifestations are influenced by cultural beliefs and practices. According to Williams (2013) a health anxiety, otherwise known as hypochondria, is a mental illness in which individuals have a fear of a life threatening or undiagnosed serious disease. Hypochondriacs believe minor pains and vague symptoms are the result of an underlying disease. Many hypochondriacs seek multiple doctors in search of a diagnosis, when in reality, no serious diseases or conditions exist.

According to Knutson (2012) obesity develops when energy intake is greater than expenditure. Diet and physical activity play an important part in this, but an additional factor may be inadequate sleep. A review of the evidence shows how short or poor quality sleep is linked to increased risk of obesity by deregulating appetite, leading to increased energy consumption. The study revealed, how signals from the brain which control appetite regulation are impacted by experimental sleep restriction. Inadequate sleep impacts secretion of the signal hormones ghrelin, which increases appetite, and leptin, which indicates when the body is satiated. This can lead to increased food intake without the compensating energy expenditure. The evidence suggests the association between inadequate sleep and higher BMI is stronger in children and adolescents.

Reeves et al (2008) examined depression and obesity have been recognized as major public health issues in youths. Although they have traditionally been compartmentalized as separate physical and emotional health conditions. Evidence suggests interactions and common pathways between them, implying that successful treatment should ideally target shared underlying mechanisms. Deliwala et al (2013) opined that urban females are more exposed to stress as compared to rural. The different types of stress and its gravity are related to their jobs, studies, social and economical factors. They are more prone to develop menstrual problems.

Methodology

Objectives of the study

1. To determine the effect of locality on the health problems of adolescents.
2. To find out whether locality has any impact on the health anxiety of adolescents.
3. To examine the relationship between health problems and health anxiety of adolescents.

Sample

The sample for the present study was obtained from different colleges from Chennai city. A sample of 200 adolescent girls of age group 16-18 years were selected. Equal number 100 adolescent girls belonging to urban and rural locality were selected for the present investigation.

Tools

The tools used for the present investigation were Health Problem Inventory devised by the Investigator (2013) and Health Anxiety Inventory formulated by Lucock and Morley (1996) to find out the health problem and health anxiety among adolescent girls. Health Problem Inventory consists of two section. The first section dealt with the demographic details and the second section consists of five domains such as body mass index, sleep disorder, menstrual problems, improper dietary habits and physical inactivity to be answered either in Yes or No. To find out the body mass index, the investigator utilized the vertical measuring scale to measure height and weighing scale to measure weight. Health Anxiety Inventory was given to each adolescent girl. It is used to assess the anxiety regarding their health. Health anxiety Inventory was framed by Lucock and Morley in the year 1996. It consists of 21 statements categorized under 4 domains such as health worry and preoccupation, fear of illness and death, reassurance seeking behaviour, interference with life. The statements are answered in the form of not at all, sometimes, often and most of the time.

Procedure

In order to administer the inventories the Head of the Institutions were contacted and prior permission was sought. Students were selected by random sampling method and Inventories were administered individually. Direction was given to orient the students to the questionnaires. After the inventories were filled up, they were scrutinized to check whether all the statements were answered by the adolescent girls

Results and discussion

The finding of the study on the health problem and health anxiety among adolescent girls is presented and discussed, under the following section, namely

1. Health problems and locality

This section deals with the effect of locality on the health problems of adolescent girls, t' test was carried out and the results are presented in the tables given below.

Table -1
Comparison of health problem among adolescent girls living in urban and rural areas

Health problems	Locality				't' test	Level of significance
	Urban N=100		Rural N=100			
	Mean	SD	Mean	SD		
Body mass index	1.40	0.62	1.98	0.93	5.18	0.01
Sleep disorder	2.86	1.78	4.75	2.28	6.54	0.01
Menstrual problem	1.41	1.41	2.23	2.11	3.23	0.01
Improper dietary habits	3.59	1.45	3.91	1.26	1.67	NS
Physical inactivity	6.56	1.95	5.74	1.78	3.11	0.01
Overall health problems	15.82	4.01	18.61	5.07	4.31	0.01

Note: NS- Not significant

A perusal of table-1 indicates that there exist a significant difference in the domains of health problems such as body mass index, sleep disorder, menstrual problem and physical inactivity and no significant difference was observed in the improper dietary habits of the urban and rural adolescent girls. The mean values for body mass index ($\bar{X}=1.40$, $\bar{X}=1.98$), sleep disorder ($\bar{X}=2.86$, $\bar{X}=4.75$), menstrual problem ($\bar{X}=1.41$, $\bar{X}=2.23$) and physical inactivity ($\bar{X}=6.56$, $\bar{X}=5.74$) among urban and rural adolescent girls. The calculated 't' values 5.18, 6.54, 3.23 and 3.11 respectively for the domains were greater than the table value 2.58 at 1% level of significance, hence they were significant. With regard to improper dietary habits the 't' value 1.67 which was less than the table value 1.96 at 5% level of significance, hence it was not significant.

From the findings of overall health problem, it is interesting to note that there was a significant difference in the health problems of urban and rural adolescent girls. It is seen that rural adolescent girls suffered more from health problems when compared to urban adolescent girls. The mean values were 15.82 and 18.61 respectively. The calculated 't' value 4.31 was greater than the table value 2.58 at 1% level of significance, hence it was significant. From the findings it is noted that there is an increase in the level of body mass index which an indicator to show obesity among adolescents. Obesity is considered as an illness due to which many health related problems occur during adolescence which can be acute or chronic.

The finding is corroborated by Morgan (2002) who found out that rural residents exercise less, have less nutritional diets, and are more likely to be obese than suburban residents. The reason could be that rural adolescent girls has less nutritional diet, lack of basic facilities such as water and electricity in comparison to urban adolescent girls. Lack of basic infrastructure increase the rate of health related problems among rural dwellers.

Health anxiety and locality

This section deals with the effect of locality on the health anxiety among adolescent girls, ‘t’ test was carried out and the results are presented in the table given below.

Table 2

Comparison of health anxiety among adolescent girls living in urban and rural areas

Health Anxiety	Locality				‘t’ test	Level of significance
	Urban N=100		Rural N=100			
	Mean	SD	Mean	SD		
Health worry and preoccupation	6.78	4.11	7.20	4.04	0.72	NS
Fear of illness and death	5.52	4.34	5.19	3.99	0.56	NS
Reassurance seeking behavior	2.96	1.86	2.34	1.79	2.40	0.05
Interference with life	1.29	1.82	2.51	1.95	4.6	0.01
Overall health anxiety	16.36	9.80	17.21	10.52	0.59	NS

Note: NS- Not significant

The finding of the table-2 indicates that there exist a significant difference in the domains of health anxiety such as reassurance seeking behaviour and interference with life and no significant difference was observed in the health worry and preoccupation and fear of illness and death among adolescent girls living in urban and rural areas. The mean values for reassurance seeking behaviour ($\bar{X}=2.96$, $\bar{X}=2.34$) and interference with life ($\bar{X}=1.29$, $\bar{X}=2.51$) of adolescent girls living in urban and rural areas. The calculated ‘t’ value 4.6 was greater than the table value 2.58 at 1% level of significance, hence it was significant. With regard to reassurance seeking behaviour the ‘t’ value 2.40 was greater than the table value 1.96 at 5% level of significance, hence it was significant. From the findings of overall health anxiety no significant difference is observed in the health anxiety among adolescent girls living in urban and rural areas. The calculated ‘t’ value 0.59 was less than the table value 1.96 at 5% level of significance, hence it was not significant.

This result is substantiated by a study in which Costello etal (2003) who described anxiety as one of the most common psychological disorders in school-aged children and adolescents worldwide.

3. Relationship between health problems and health anxiety

This section deals with the relationship between health problems and health anxiety among adolescent girls living in urban and rural areas.

Table-3
Relationship between health problems and health anxiety among adolescent girls

Health Problem	Health anxiety				
	Health worry and preoccupation	Fear of illness and death	Reassurance seeking behavior	Interference with life	Overall Health Anxiety
Body mass index	0.01	0.04	0.06	0.14	0.04
Sleep disorder	0.33(**)	0.21(**)	0.15(*)	0.40(**)	0.33(**)
Menstrual problem	0.24(**)	0.18(**)	0.18(*)	0.28(**)	0.27(**)
Improper dietary habits	0.14(*)	0.06	0.06	0.29(**)	0.15(*)
Physical inactivity	0.32(**)	0.31(**)	0.25(**)	0.31(**)	0.36(**)
Overall health problems	.042(**)	0.31(**)	0.25(**)	0.53(**)	0.46(**)

** Correlation is significant at the 0.01 level.

* Correlation is significant at the 0.05 level.

A perusal of table-3 reveals that no relationship existed between body mass index and the domains of health anxiety. But a relationship was observed between all other domains of health problems such as sleep disorder, menstrual problem and physical inactivity with health anxiety. Whereas there was a relationship between improper dietary habits and the domains of health anxiety such as health worry and preoccupation, interference with life and overall health anxiety. From the overall findings it is viewed that there is a relationship between health problems and health anxiety among adolescent girls.

This finding is substantiated by a study in which Rab (2008) who found out that mild to moderate anxiety is seen among the adolescents. This could be due to more stress in the present day today modern life. This could be reduced or prevented by life style modification like eating balanced healthy diet, doing regular muscular activity and participation in stress reduction program.

Table-4

Relationship between health problems and health anxiety among adolescent girls living in urban areas

Health Problem	Health anxiety				
	Health worry and preoccupation	Fear of illness and death	Reassurance seeking behaviour	Interference with life	Overall Health Anxiety
Body mass index	0.09	0.04	0.04	0.10	0.07
Sleep disorder	0.29(**)	0.17	0.03	0.25(*)	0.26(*)
Menstrual problem	0.16	0.20(*)	0.24(*)	0.22(*)	0.26(**)
Improper dietary habits	0.09	0.03	0.03	0.19	0.05
Physical inactivity	0.19	0.11	0.06	0.25(*)	0.17
Overall health problems	0.30(**)	0.18	0.050	0.36(**)	0.30(**)

** Correlation is significant at the 0.01 level.

* Correlation is significant at the 0.05 level.

It is revealed from table- 4 that no relationship existed between body mass index and the improper dietary habits with the domains of health anxiety. Whereas there was a relationship between sleep disorder and the domains of health anxiety such as health worry and preoccupation score, interference with life score and overall health anxiety. With regard to menstrual problem, relationship existed with the domains of health anxiety such as fear of illness and death, reassurance seeking behaviour, interference with life and overall health anxiety. In case of physical inactivity there was a relationship with only interference with life. From the overall findings it is viewed that there is a relationship between health problems and health anxiety among adolescent girls living in urban areas.

The finding is corroborated by a study Pabst (2008) who found out that combination of evening sleep and overweight appears to have the strongest association on the emotional health of adolescent females.

Table-5

Relationship between health problems and health anxiety among adolescent girls living in rural areas

Health Problem	Health Anxiety				
	Health worry and preoccupation	Fear of illness and death	Reassurance seeking behavior	Interference with life	Overall Health Anxiety
Body mass index	0.04	0.13	0.02	0.11	0.09
Sleep disorder	0.39(**)	0.32(**)	0.42(**)	0.37(**)	0.42(**)
Menstrual problem	0.29(**)	0.21(*)	0.23(*)	0.23(*)	0.28(**)
Improper dietary habits	0.18	0.19	0.22(*)	0.37(**)	0.25(*)
Physical inactivity	0.50(**)	0.54(**)	0.55(**)	0.56(**)	0.60(**)
Overall health problems	0.52(**)	0.49(**)	0.53(**)	0.57(**)	0.59(**)

** Correlation is significant at the 0.01 level.

* Correlation is significant at the 0.05 level.

It was noticed from the above table-5 that no relationship existed between body mass index and the domains of health anxiety. Whereas there was a relationship between sleep disorder, menstrual problem and physical inactivity with domains of health anxiety. With regard to improper dietary habits relationship existed with the domains of health anxiety such as reassurance seeking behaviour, interference with life and overall health anxiety. From the overall findings it is viewed that there is a relationship between health problems and health anxiety among adolescent girls living in rural areas.

This finding is substantiated by a study in which, Aarons (2008) examined the relationship between mental and physical health problems in a sample of high-risk youth served in the public sector, who are at especially high risk for behavioural and emotional problems.

Conclusion

The conclusion drawn from the present study shows that locality has an effect on the health problem of adolescent girls. From the findings on overall health problems, it was interesting to note that rural adolescent girls suffered more from health problems than adolescent girls living in urban areas. There is a significant difference in the health anxiety of adolescent girls belonging to urban and rural areas, rural adolescent girls suffered more from health anxiety compared to their counterparts. Whereas, relationship existed between health problem and health anxiety of adolescent girls living in urban areas and rural areas.

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