

Psychosocial Health Status of Adolescent Girls in a Rural Area of Guntur District

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Abstract

Background: Adolescence is a distinct phase of complex developmental and psychological needs. UNICEF states that suicide is the second leading cause of death in this age group of young girls. A myriad of social, economic and health factors undermine the ability of the adolescents to lead full and productive lives. There is a need to study these factors as they are bound to health-related outcomes.

Objective: To assess the psycho-social health of adolescent girls (15-19 years) living in a rural area using WHO HEEADSSS questionnaire and to compare their psychosocial risk profiles and demographic profiles to identify important risk factors.

Methodology: This cross-sectional study was conducted from April to August 2017 on a convenient sample of 180 adolescent girls of 15-19 years residing in the rural field practice area of NRI Medical College, Guntur. The WHO's HEEADSSS (Home and Environment, Education and Employment, Activities, Drugs, Sexuality, Suicide & Depression and Safety) questionnaire was used to assess the psychosocial risk profile of the subjects. The findings were subjected to multiple regression and chi-square test at 5% level of significance.

Results and Discussion: Only 6.11% of the girls had scores within the normal range. 10% were at severe risk and 1.11% were in the very severe risk category. The following factors accounted for 75% of the psychosocial risk: Age, Marital Status, Occupation, Positive History of Smoking or Alcohol intake in Family, Having Sleep Problems, Thoughts of inflicting self-hurt and Thoughts of inflicting physical hurt on others.

Conclusion: HEEADSSS questionnaire is a useful tool to assess the psycho-social health of adolescent girls. Most girls didn't have adequate knowledge regarding family planning methods or STDs. Qualitative methods would give further insight into these issues.

Keywords: Adolescent girls, HEEADSSS, psychological, social, health, rural

Introduction

Adolescence is a phase separate from both early childhood and adulthood. It is a transitional period that requires special attention and protection. Children go through several transitions physically while they mature.

The brain also undergoes considerable development in early adolescence affecting emotional skills as well as physical and mental abilities¹.

In India, adolescents constitute around 22% of the population². Though adolescents are generally considered as adults, they are known to suffer significant morbidity due to their risk-taking behaviour and inadequate access to healthcare³. In India, a myriad of social, economic and health factors undermine the ability of the adolescents to lead full and productive lives⁴.

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Amongst the adolescent girls, the age group of 15-19 years is commonly involved in teenage pregnancies. 11% of all births worldwide are to girls aged 15-19 years⁵. However, these girls are not physically or psychologically ready to bear the burden of motherhood.

The HEEADSSS Assessment is a systematic process for assessing a young person's psychosocial status and identifying underlying health concerns and risk factors. One can obtain a profile of the young person's psychosocial health, the overall level of risk of the young person, specific risk factors in their lives – as well as protective factors and areas for possible intervention⁶.

Objectives

To assess the psycho-social health of adolescent girls (15-19 years) living in a rural area using WHO HEEADSSS questionnaire and to compare their psychosocial risk profiles and demographic profiles to identify important risk factors.

Methodology

This cross-sectional study was conducted from April to August 2017 and involved a convenient sample of 180 adolescent girls of 15-19 years residing in the villages Venigandla and Pedaparimi, which fall under the rural field practice area of NRI Medical College, Guntur. All the adolescent girls available in the villages during the study period were included. The World Health Organization's HEEADSSS (Home and Environment, Education and Employment, Activities, Drugs, Sexuality, Suicide and Depression and Safety) psycho-social interview / questionnaire was used to assess the psychosocial risk profile of the subjects. The questionnaire also included demographic questions pertaining to age, marital status, socioeconomic status, religion and caste. The findings were subjected to statistical tests such as multiple regression and chi-square test at 5% level of significance. Microsoft Excel and R software, with EZR package were used to carry out the statistical analysis.

Results

Out of the 180 girls included in the study, 27.8%, 13.9%, 13.9%, 15.6% and 28.9% were 15, 16, 17, 18 and 19 years respectively. The majority were Hindus 31.6% were Christians and 11.6% Muslims. 15% of the girls were married. Analysis using Kuppaswamy Socioeconomic Scale revealed that 2.22% belonged to

Class I, 28.33% to Class II, 22.22% to Class III, 43.33% to Class IV and 3.89% to Class V. 31.11% belonged to Backward Castes, 28.88% to Scheduled Castes, 17.77% to Scheduled Tribes and 22.22% to Other Castes.

Table 1 shows the distribution of the average HEEADSSS scores obtained in the study in each of the components. The categorization of the study subjects according to the risk of developing future mental health issues has been enumerated in Table 2.

Home: 98.9% had satisfactory relationships with all the members of their homes and 83.9% felt they were closest to their parents. 31.11% had to live away from home for more than six months. None of the girls had ever run away from home. 7.22% said there were subjected to physical violence at home. 3.33% girls did not feel safe in their home.

Education & Employment: 24.45% girls had dropped out of school due to their own reason or due to pressure from family. 6.43% had to repeat a class. 44.29% had changed schools recently. 85.7% were attending a co-education school. 6.43% of the girls currently attending school had considered dropping out. 5.04% did not have future educational or employment goals. 5.56% were working 4-6 hours per day.

Eating: 68.9% girls said they ate meals in front of TV or computer. 22.8% reported having had a decrease in their weight. 3.33% felt their eating was out of control. 17.8% had done dieting in the past year in order to reduce their weight. 86.11% of the girls did not do regular exercise. 32.2% girls said they would like it if they decreased 5 kgs.

Activities: 59.4% did not participate in sports. 81.7% did not have hobbies. 30.6% watched TV for more than 4 hours per day. 57.2% did not know how to use a computer and internet. 88.9% did not have any productive activity they did when they met with their friends. 52.8% just gossiped with family members during leisure time.

Drugs & Alcohol: None of the girls had ever smoked or taken alcohol or drugs. 40% had a family member who smoked or drank alcohol or both.

Sexuality: 17.78% had a romantic relationship or used to have one. 16.67% had been involved in sexual relations. 10.56% were aware of safe sexual practices. 11.67% had been pregnant or were currently pregnant.

7.14% were using a scientifically sound method of birth control. 29.63% admitted to not being satisfied with the birth control they were using. 73.89% had inadequate knowledge of sexually transmitted diseases (STDs).

A significant association was found between married and unmarried girls regarding romantic and sexual relations and satisfaction with birth control.

Suicide & Depression: 27.22% girls said they felt sad constantly. 27.78% said they felt bored most of the time and had comparatively increased risk scores. 18.33% admitted to having sleeping problems and having disturbed sleep patterns. 11.11% stated they had lost interest in things they used to enjoy before.

None of the girls admitted to trying to kill herself. 3.33% admitted to having wanted to hurt themselves in the past. 9.44% said they had wanted to hurt others in the past.

Safety: 4.44% girls had been injured in the past. 10.56% said there was violence at home. None of the girls admitted to having been subjected to repeated physical abuse or sexual abuse. Four girls said they had gotten into physical fights in the neighborhood. Two girls said they still got into physical fights in the neighborhood.

The factors found to have a significant association with the HEEADSSS scores obtained have been listed in Table 3, along with the Chi-Square values and p values obtained. Multiple Linear regression showed that the following seven factors accounted for 75% of the HEEADSSS psycho-social risk scores: Age, Marital Status, Occupation, Positive History of Smoking or Alcohol intake in Family, Having Sleep Problems, Thoughts of inflicting self-hurt and Thoughts of inflicting physical hurt on others.

Table 1 : Distribution of HEEADSSS score by components (n=180)

S.No.	Components of HEEADSSS	Maximum possible score*	Study group average score
1	Home	13	1.51
2	Education & Employment	14	4.14
3	Eating	8	2.7
4	Activities	8	4.58
5	Drugs	15	0.4
6	Sexuality	12	3.4
7	Suicide	16	2.09
8	Safety	14	0.62

*Contribution of each parameter to the HEEADSSS total score of 100

Table 2 : Categorisation of the adolescent girls by HEEADSSS psychosocial score (n=180)

Psycho-Social Risk Categories (Scores)	No. of study subjects (%)
Normal (0 -10)	11 (6.11)
Mild risk (10.1 - 20)	101(56.11)
Moderate risk (20.1 - 30)	48 (26.67)
Severe risk (30.1 - 40)	18 (10)
Very severe risk (>40)	2 (1.11)
Total	180

Table 3 : Significant factors affecting adolescent girls

S.No	Significant Risk Factors in adolescence	Average HEEADSSS Score	Chi Sq	p Value
1	Age - 18 & 19 years	21.92	21.72	< 0.0001
2	Religion - Christian	21.45	6.98	0.03
3	Caste - ST	27.11	40.65	< 0.0001
4	SES – Lower socio-economic class	25.04	16.07	0.007
5	Marital Status - Married	29.09	42.98	< 0.0001
6	Occupation – school drop out	27.45	65.78	< 0.0001
7	Not participating in Sports	21.89	27.21	< 0.0001
8	Not having Hobbies	20.54	9.98	0.02
9	Experienced Forced sex	33.75	4.68	0.03
10	Having sleep problems	25.02	15.48	< 0.0001
11	Have hurt themselves	36.55	9.52	0.002
12	Wanted to hurt others	31.45	23.49	< 0.0001
13	Get into physical fights	35.44	6.28	0.01
14	Family History of Alcohol	22.08	5.59	0.01

Discussion

The commonly found psychiatric disorders found in adolescents are anxiety and depressive disorders and behavioural issues^{7,8}. However, reporting systems for adolescent psychiatric disorders are mostly inadequate⁹. Only 6.11% of the girls had scores within the normal range. 82.78% fell under the mild and moderate risk categories. 10% were at severe risk and 1.11% were in the very severe risk category. In a similar study, 40%, 43.6% and 11.75% girls were categorized as mild, moderate and severe risk respectively for psychological problems¹⁰.

7.22% of the girls said that they were subjected to physical violence and 3.33% girls did not feel safe in their home. Home is meant to be a safe haven for every individual and this finding is of great concern.

Educating the girl child would play a major role in averting adolescent maternal deaths¹¹. In this study, it has been found that the girls who had dropped out of school on their own due to family pressure had much higher risk scores. However, the drop out percentage was lower than what has been found in other similar studies; 30.64%¹² and 37.4%¹³.

Higher risk scores were seen in girls attending a co-education school (85.71%), those who had considered dropping out (6.43%) and those who did not have future educational or employment goals (5.04%).

There wasn't much difference between the risk scores of the girls who worried about their weight and those who did not, probably due to influence of other components of the questionnaire. Most of them did not do regular exercise. It was seen that the girls in this study

had more body image issues than was found in a study conducted in urban slum in northern India¹⁴.

The difference in risk scores between the girls having hobbies and playing sports and those who were not was found to be statistically significant. Higher risk scores were seen in girls who stated that they did domestic work during leisure time.

Only 10.56% of the girls were aware of safe sexual practices. Many did not feel the need to understand or practice safe sex. It has been found that 56% of abortions of adolescents were carried out by unqualified personnel at unapproved centres¹⁵. Adolescent girls contribute to 17% of the total fertility rate and are most of these births are unplanned. In this study, only 7.14% were using a scientifically sound method of birth control. Unable to discuss birth control with their partners was an important cause for not using birth control, as has been suggested in other studies¹⁶. Three girls had been forced to have sexual relations and they had very high risk scores. The sexual abuse was by their husbands or family members as has been found in other studies¹⁷. When probed further, it was clear that these encounters had a major effect on the girls' trust in adults.

The girls had poor knowledge of STDs. 26.11% of the girls were aware of HIV/AIDS which is lower than findings in similar studies^{17,15,18,19}. Urban adolescents have better knowledge regarding HIV/AIDS compared to their rural counterparts¹⁸. A similar picture was seen in a study conducted in rural adolescent girls in Bangladesh²⁰. There is a need to correct this as 2.2 million adolescents are living with HIV world-wide and 60% of them are girls²¹.

Girls who had higher risk scores said they felt sad constantly, felt bored most of the time, had sleeping problems, and had lost interest in things they used to enjoy before. In India, suicide among adolescents is higher than other age groups⁹. Pre-marital sex, sexual abuse and physical abuse have been found to be important pre-determinants for suicidal behaviour in a study done in Goa¹⁰.

10.56% of the girls said there was physical violence at home. The victim was usually the mother. None of the girls admitted to having been subjected to repeated physical abuse.

Girls in rural India shoulder a disproportionate burden of domestic work and childcare. They are denied

equal participation in decision-making. There is a need to transform societal structures that tolerate discrimination against girls in homes and other places²².

Conclusion

HEEADSSS questionnaire is a useful tool to assess the psycho-social health of adolescent girls. It was found that age, marital status, occupation, positive history of smoking or alcohol intake in family, having sleep problems, thoughts of inflicting self-hurt, thoughts of inflicting physical hurt on others were the factors that contributed to 75% of the psycho-social risk scores. Thus, an adolescent girl having these findings should be given special attention and counselled. Most girls didn't have adequate knowledge regarding family planning methods or STDs. Qualitative methods would give further insight into these issues.

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