Original Research

A study to assess the knowledge regarding selected aspects of reproductive health among adolescent girls in selected school of Faridkot, Punjab

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ABSTRACT
The statement of study is "A study to assess the knowledge regarding selected aspects of reproductive health among adolescent girls in selected school of Faridkot, Punjab." the purpose of the study was to explore the knowledge regarding selected aspects of reproductive health among adolescent girls. The objectives of the present study to assess the knowledge regarding selected aspects of reproductive health among adolescent girls, to find out the relationship between knowledge score of adolescent girls and selected demographic variables regarding selected aspects of reproductive health and to prepare and distribute an information booklet on selected aspects of reproductive health. The review of literature given under the following headings: literature review related to reproductive health, puberty, menstrual hygiene, dysmenorrhea and its management. A non experimental (descriptive) research design was used. A sample consists of 100 adolescent girls was selected by purposive method of non-probability sampling technique at Dasmesh Public School, Faridkot, Punjab. Maximum number 76 (76%) had average knowledge, followed by 12 (12%) of them had good knowledge and also 12 (12%) of adolescent girls had below average knowledge regarding the selected aspects of reproductive health. From the finding of the study, it was concluded that family income, type of family and source of information had significant impact on knowledge of adolescent girls regarding selected aspects of reproductive health. Whereas age, religion, qualification, mother's education and place of living had no significant impact on knowledge of adolescent girls regarding selected aspects of reproductive health.

BACKGROUND OF THE STUDY
Today's adolescent health is tomorrow's adults who are power of the state. This day adolescent girls are future homemakers. Adolescents belong to essential age group not only because they are beginner population to parenthood but also because they are threshold between childhood and adulthood. As they attempt to cross this doorstep, they face various physical, psychosocial changes. The word 'adolescent' derived from the Latin word 'adolescere' which means to grow to maturity. Most of the adolescent tend to be extremely ignorant of their own body their physical wellbeing and psychological change.

Reproductive health is a critical part of general health and central features of human development. WHO reported that just about one-third of all healthy life lost among adolescent girls due to reproductive health problems? Adolescent's often have poor information about reproduction and little access to reproductive health services.

There are many changes that occur in a female body during puberty. There are so many physical changes occur in a females are increase in size, change in the body including formation of breasts and widening of the hips, both in preparation in child bearing, body hair grows around the genitals and under arms. The menstruation begins, involving ovulation. The action of hormone such as estrogen and progesterone cause changes in the body and many of the unstable feelings that she may experience.

Adolescent are the future of India. The existence of adolescent's reproductive health problems in reality. Hence their reproductive health aspects need special and urgent attention to all concerned. Lack of awareness, insufficient health facilities and practice

are other important factors are needed to address. The health of the adolescents is an important factor which makes the health and positive energy of nation. By ensuring the health of our adolescents we can envisage the growth of India from developing nation to developed one.[22]

STATEMENT OF PROBLEM
A study to assess the knowledge regarding selected aspects of reproductive health among adolescent girls in selected school of Faridkot, Punjab.

OBJECTIVES
The objective for the study is:
1. To assess the knowledge regarding selected aspects of reproductive health among adolescent girls.
2. To find out the relationship between knowledge score of adolescent girls and selected demographic variables regarding selected aspects of reproductive health.
3. To prepare and distribute an information booklet regarding selected aspects of reproductive health among adolescent girls.

OPERATIONAL DEFINITIONS
Assess: It refers to find out the knowledge of adolescent girls regarding reproductive health.
Knowledge: It refers to the study participant's response and understanding about reproductive health as measured by a knowledge questionnaire.
Reproductive health: Reproductive health is a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity, in all matters relating to reproductive system and its function and processes.
Puberty: The period during which adolescent reach sexual maturity and become capable of reproduction.
Menstrual Hygiene: Refers to assess to menstrual hygiene products to absorb or collect the flow of blood during menstruation, privacy to change materials and assess to facilitate to dispose of used menstrual management materials.
Dysmenorrhea: Refers to the medical term for pain with menstruation or menstrual cramps.
Adolescent girls: It is transition period between childhood and adulthood a time of rapid physical, cognitive, social and emotional maturation as girls prepare womanhood between the age group of 13-19.

ASSUMPTIONS
Adolescent girls may have some knowledge regarding selected aspect of reproductive health.

DELIMITATIONS
The study is delimited to adolescent girls:
1. Who will be available in the selected school of Faridkot, Punjab.
2. Who will be able to understand English and Punjabi langua

Research design
For the present study, **non-experimental research design** was utilized to achieve the objective of the study.

Research setting
The present study was conducted in Dasmesh Public School, Faridkot

Target population
The target population for the present study was adolescent girls of Dasmesh public School, Faridkot, Punjab.

Sample size and Sampling technique
Sample size for the present study was 100 adolescent girls selected by using non-random method of non-probability purposive sampling technique.

Demographic variables
In the study, selected demographic variables such as the age in years, religion, qualification, mother's education, family income, and place of living, type of family and source of information.

Research variable
The research variables were the knowledge regarding selected aspects of reproductive health.

Inclusion criteria
- Adolescent girls whose age was 12-14 years.
- Adolescent girls who were willing to participate in the study.
- Adolescent girls who were able to understand Punjabi/English.

Exclusion criteria
- Adolescent girls whose age was less than 12 or above 14 years.
- Adolescent girls who were not available during data collection.
- Adolescent girls who were not willing to participate in the study.

Selection and Development of the tool
A study to assess the knowledge regarding selected aspects of reproductive health among adolescent girls in selected school of Faridkot. Therefore, a structured questionnaire was prepared to assess the knowledge of adolescent girls regarding selected aspects of reproductive health. Preliminary drafting of 30 multiple choice questions was prepared after extensive review of literature and thereafter consulting with subject guide.

Description of tool
The tool will be consisting of the following two parts:
Part 1- Sample characteristics
The part consist of demographic variables such as age in years, religion, qualification, mother's education,

family income, place of living, type of family and source of information.

Part 2- A structured questionnaire to assess the knowledge regarding selected aspects of reproductive health.

This part consists of the multiple choice questions regarding selected aspects of reproductive health. A total of 30 questions are included and each question has a score of one mark. Each correct answer carry one mark and incorrect answer awarded with zero mark. Maximum score is 30 and minimum score is 0.

Criterion measure
Criterion measure used in this study was as follows:

Part I: It was related to sample characteristics which were not included in scoring system.

Part II: A structured questionnaire to assess the knowledge regarding selected aspects of reproductive health.

The criterion measure used in this study was knowledge score on selected aspects of reproductive health. The knowledge score refers to the total obtained score on knowledge items in the structured questionnaire by adolescent girls.

The knowledge score is categorized into 3 levels:

Level of knowledge	Score	%
Good	23-30	76-100
Average	16-22	51-75
Below average	≤ 15	≤ 50

Maximum score-30
Minimum score-0

Content Validity of the tool
Content validity refers to the adequacy of domain being studied. Content validity of the tool was confirmed by the expert's opinions and suggestions regarding the relevance of the items. The experts included such as 6from department of Obstetrics and Gynecological Nursing, 1 from department of mental health nursing,and 2 from department of community health nursing, 1 from department of child health nursing, 1 from MD gynecologist, and 1 from statistician. Their valuable suggestions were obtained and incorporated. The tool was modified according to expert's opinion. After considering the expert suggestions and modification the tool was finalized and translated in Punjabi language.

Pilot study
The pilot study was conducted in the month of January 2023 at Gandhi Memorial Sr. Sec. School, Faridkot. The sample consists of 10 adolescent girls. The time taken by each respondent for filling the tool was average 20 -30 minutes.

Reliability of tool
Reliability refers to the accuracy of measuring the tool. The tool after validation was subjected to test for its reliability. The reliability of the tool was computed by split half method, Karl Pearson's co efficient of correlation, Spearman's Brown Prophecy formula. The reliability of tool was r = 0.80 and statistically validity was $\sqrt{r} = 0.80 = 0.89$ that shows tool was highly reliable.

Data collection procedure
Data was collected after obtaining formal permission from Principal of Dasmesh Public School, Faridkot in the month of March 2023. The data was collected from adolescent girls by using simple random method of non-probability purposive sampling technique. The investigator gave self-introduction to adolescent girls and explains the purpose of gathering information they were assured that their response would be kept confidential and should be used for only research purpose. Informed consent was taken from the adolescent girls .The data was collected from adolescent girls in school by non-random method. The questionnaires were administered to adolescent girls depending on the availability of adolescent girls and questionnaires were administered individually and data was collected in English and Punjabi language. The time taken by each respondent for filling the tool was average 20- 30 minutes. At the end, information booklet was provided to adolescent girls and quarries of subjects were clarified.

Ethical considerations
With the view of ethical considerations the researcher had taken the permission from research and ethical committee of Dasmesh College of Nursing, Faridkot to conduct research study in selected school of Faridkot. Then discussed the type and purpose of the study with the Principal of Dasmesh school of Nursing, Faridkot and Coordinators of the each class and written permission was obtained thereafter. Also the adolescent girls were explained about the purpose

of the study and informed consent was taken from the adolescent girls for participation in the study. They were also informed about their right to refuse from participation in the study. The adolescent girls were assured that information given by them will be kept confidential and will be used for research.

Plan for data analysis
Analysis and interpretation of the data in the accordance with the objective of the study. It was done by using descriptive and inferential statistics such as mean, percentage, standard deviation, coefficient of correlation and 'ANOVA -test', 'unpaired t- test', chi-sqaure, pie and bar diagrams are used to depict the findings of the study

Organization of data analysis

The raw data collected were entered in a master sheet and analyzed and interpreted by using descriptive and inferential statistics. The data was organized and presented under following sections.

Section I: Sample characteristics

Section II: Findings related to assessment of knowledge of adolescent girls regarding selected aspects of reproductive health.

Section III: Findings related to the relationship of knowledge score of adolescent girls and selected demographic variables such as the age in years, religion, qualification, mother's education, family income, place of living, type of family and sources of information.

SECTION –I
SAMPLE CHARACTERISTICS
TABLE NO. 1: Percentage distribution of Sample characteristics
N=100

S. No.	Characteristics	n	%
	1. Age		
a)	12year	26	26
b)	13 years	51	51
c)	14 years	23	23
	2. Religion		
a)	Hindu	31	31
b)	Muslim	-	-
c)	Sikh	62	62
d)	Christian	07	07
	3. Qualification		
a)	7th standard	33	33
b)	8th standard	32	32
c)	9th standard	35	35
	4. Mother's education		
a)	Primary	27	27
b)	Secondary	27	27
c)	Graduate	33	33
d)	Post-Graduate	13	13
	5. Family income		
a)	< 5000	21	21
b)	5001-10000	26	26
c)	10001-15000	32	32
d)	>15000	21	21
	6. Place of living		
a)	Urban	42	42
b)	Rural	58	58
c)	Semi urban	-	-
d)	Slums	-	-
	7. Types of family		
a)	Nuclear	53	53
b)	Joint family	36	36
c)	Extended family	11	11
	8. Sources of Information		
a)	Health professional	42	42
b)	Family members	22	22

c) Friend/neigbhours		26	26
d) Mass media		10	10

SECTION-II

OBJECTIVE-1 –To assess the knowledge level of adolescent girls regarding selected aspects of reproductive health.

TABLE-2

Frequency and distribution of knowledge score of adolescent girls regarding selected aspects of reproductive health.

Level of knowledge	score	percentage	n	(%)
Good	23-30	76-100%	12	12%
Average	16-22	51-75%	76	76%
Below average	≤15	≤50%	12	12

Maximum Knowledge score= 30

Minimum knowledge score= 0

Table 2 and Figure 4 depicts that maximum number 76 (76%) adolescent girls has average knowledge, followed by 12 (12%) adolescent girls had good knowledge and 12 (12%) of adolescent girls had below average knowledge regarding selected aspects of reproductive health.

Hence, it was concluded that maximum number of adolescent girls has average knowledge regarding selected aspects of reproductive health.

SECTION-III

OBJECTIVE-2 To find out relationship between knowledge score of adolescent girls and selected demographic variables such as age, religion, qualification, mother's education, family income, place of living, type of family and sources of information regarding selected aspects of reproductive health.

TABLE-7

Mean knowledge score of adolescent girls regarding selected aspects of reproductive health according to family income (in Rupees).

			N=100
Income	n	Mean	SD
a) <5000	21	18.76	3.145
b) 5001-10000	26	18.15	3.094
c) 10001-15000	32	19.78	2.254
d) >15000	21	22.10	2.827
Variance	**df**	**F**	**P**
Within the group	96		
Between the groups	3	8.518***	<0.001
Maximum knowledge Score=30		**highly significant at p<0.05 level**	

Minimum knowledge Score=0

Table 8 and Figure 9 depicts that adolescent girls who had family monthly income ≥ 15000 had maximum mean knowledge score (22.10), followed by adolescent girls who had family monthly income 10001-15000 had mean knowledge score (19.78), adolescent girls who had family income ≤5000 had mean knowledge score (18.76) and adolescent girls who had monthly income 5001-10000 had minimum knowledge score (18.15) regarding the selected aspects of reproductive health. The mean knowledge score of family income of adolescent girls was found statistically highly significant at p<0.05 level according to F ration.

Hence, it was concluded that family monthly income had a highly significant impact on knowledge score of adolescent girls regarding selected aspects of reproductive health.

TABLE-9: Mean knowledge score of adolescent girls regarding selected aspects of reproductive health according to type family.

			N=100
Type of family	n	Mean	SD
a) Nuclear	53	20.26	2.520
b) Joint	36	18.92	3.500
c) Extended	11	18.91	3.885
Variance	**df**	**F**	**P**

Within the groups	97		
Between the groups	2	2.417*	.045
Maximum knowledge score=30		***Significant at p <0.05 level**	

Minimum knowledge score=0

Table 10 and figure 11 depicts that adolescent girls who were belong to nuclear family had maximum mean knowledge score (20.26), followed by adolescent girls who were belong to extended family had mean knowledge score (18.91) and adolescent who were belong to joint family had minimum mean knowledge score (18.92) regarding selected aspects of reproductive health. The mean knowledge score of type of family adolescent girls was statistically significant at p<0.05 level according to F ratio.

Hence, it was concluded that type of family had significant impact on knowledge score of adolescent girls regarding selected aspects of reproductive health.

TABLE-10

Mean knowledge score of adolescent girls regarding selected aspects of reproductive health according to source of information.

					N=100
Sources of information	**n**	**Mean**		**SD**	
a) Health professionals	42	21.62		2.409	
b) Family members		22	18.45		2.614
c) Friends/neighbors		26	18.04		3.026
d) Mass media	10		18.00	2.494	
Variance		**df**	**F**		**P**
Within the groups		96			
Between the groups		3	13.879****		<0.001

Maximum knowledge score=30   ******significant at p <0.05 level**
Minimum knowledge score=0

Table 11 and figure 12 depicts adolescent girls who getting information from health professionals had maximum mean knowledge score (21.62), followed by adolescent girls who were getting from family members had mean knowledge score (18.45), adolescent girls who were getting information from friends/neighbors had mean knowledge score (18.04) and adolescent girls who were getting information from mass media had minimum knowledge score (18.00).

Hence, it was concluded that the source of information had significant impact on knowledge score of adolescent girls regarding selected aspects of reproductive health.

CONCLUSION

➤ In the level of knowledge, maximum number 76 (76%) adolescent girls had average knowledge, followed by 12 (12%) adolescent girls had good knowledge and minimum number 12 (11%) adolescent girls had below average knowledge regarding selected aspects of reproductive health.

RECOMMENDATIONS

➤ A similar study can be conducted on large sample for wonder generalization.
➤ A Quasiexperimental study can be done to assess the knowledge regarding selected aspects of reproductive health.
➤ A comparative study can be conducted to assess the knowledge regarding selected aspects of reproductive health.

➤ A comparative study can be conducted between urban and rural adolescent girls to assess the knowledge regarding selected aspects of reproductive health.

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