

# A STUDY TO ASSESS THE REPRODUCTIVE HEALTH PRACTICES AND QUALITY OF LIFE OF SECONDARY SCHOOL GIRLS IN SELECTED SCHOOLS OF TIRUPATHI.

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**ABSTRACT: Introduction:** Menstruation is the periodic vaginal bleeding that occurs with the shedding of the uterine mucosa is one of the signs of puberty, and occurs one or two years following appearance of secondary sexual characteristics. Once established, every mature female menstruates on the average 3-5days (minimum 2 days, maximum 7 days) each month until menopause. Menstrual hygiene deals with the special health care needs and requirements of women during monthly menstruation or menstrual cycle. **Objectives:** To assess the reproductive health practices of secondary school girls. To assess the quality of life of secondary school girls. To find out the association between reproductive health practices and quality of life of secondary school girls. To find the correlation between the selected demographic variables with the reproductive health practices and quality of life of secondary school girls. **Methodology:** Cross sectional descriptive research was adapted to carry out the study. 100 secondary school girls were selected using Probability simple random sample technique, lottery method, who attained menarche in selected schools of Tirupati. Structured questionnaire to assess the knowledge on menstrual hygiene, checklists were used to assess the dietary habits and life style practices and Standard BREF scale to assess the quality of life among secondary school girls consecutively. **Results:** The findings of the study revealed that 53 (53%) had moderate knowledge, 40 (40%) had inadequate knowledge and only 07 (7%) had adequate knowledge on menstrual hygiene practices. Majority of the respondents 43 (43%) had inadequate level knowledge scores, 43 (43%) had moderate knowledge and only 14 (14%) had adequate knowledge on dietary habits. Majority of the respondents 46 (46%) had moderate knowledge, 30 (30%) had adequate knowledge and only 24 (24%) had inadequate knowledge on life style practices and majority of the respondents 34 (34%) had low, 34 (34%) had moderate and only 32 (32%) had high quality of life. **Conclusion:** Poor reproductive health practices observed about menstrual hygiene, dietary habits, life style practices and quality of life. Hence there was need to give health education on menstrual hygiene, dietary habits, life style practices and quality of life. **Recommendation:** Similar study can be done on a large sample that helps to draw more definite conclusion and make generalization.

**Key Words:** Reproductive health practices, Quality of life, Secondary school girls.

## INTRODUCTION:

Adolescents are a large and growing segment of the world's population. More than half of the world's population is below the age of 25, and one in every two young people in the world is adolescent. During adolescence, young people develop their adult identity, move toward physical and psychological maturity. Physiologically, the hypothalamus produces growth hormone and gonadotropins which initiates pubertal changes. Menstruation, the periodic vaginal bleeding that occurs with the shedding of the uterine mucosa is one of the signs of puberty, and occurs one or two years following appearance of secondary sexual characteristics. Once established, every mature female menstruates on the average 3-5days (minimum 2 days, maximum 7 days) each month until menopause.<sup>1</sup>

This may result in incorrect and unhealthy behaviour during their menstrual period. Also, many mothers lack correct information and skills to communicate about menstrual hygiene which they pass on to their children, leading to false attitudes, beliefs and practices in this regard. Recent discussion on the introduction of sexuality education into secondary schools in Nigeria generated a lot of tension amongst parents and religious scholars particularly in northern parts of the country. Learning about hygiene during menstruation is a vital aspect of health education for adolescent girls as patterns that are developed in adolescence are likely to persist into adult life.<sup>2</sup>

Several studies have reported restrictions during the daily activities. Apart from these, they believe in specified taboos at menarche and menstruation phenomenon. Several research studies have revealed this gap and they showed that there was a low level of awareness about menstruation among the girls when they first experienced it. Social prohibitions and the negative attitude of parents in discussing the related issues openly, have blocked the access of adolescent girls to the right kind of information, especially in the rural and tribal communities. Infections due to lack of hygiene during menstruation have been reported in many studies.<sup>3</sup>

Vijay Agarwal, Manish J Fancy, et al., (2017)<sup>4</sup> conducted a cross sectional study on 250 adolescent girls of rural sabarkantha district. Study title was "Menstrual Hygiene: Knowledge and Practice among Adolescent Girls of Rural Sabarkantha District". A predesigned pretested question-naire was prepared for data collection from February 2016. Purposive sampling technique was used in the study. The results were evident that 35.6% participants were aware about menstruation before their menarche and important sources of information were mothers in 54.2% girls. 14.8% respondents used only sanitary napkin during menstruation. 83.8% changed absorbent 1 to 2 times a day. The study conclusion has highlighted the need of adolescent girls to have accurate and adequate information about menstruation before the menarche.

Shubhangi Nayak, Neelam Anupama Toppo, et al., (2016)<sup>5</sup> conducted a cross sectional study on 200 adolescent girls of urban areas of Jabalpur District. Study title was "Practices regarding menstrual hygiene among adolescent girls of urban areas of Jabalpur District". A pretested, self-administered questionnaire was used for data collection from June 1, 2014 to October 31, 2014. Multistage

random sampling technique was used in the study. Analysis was done by using SPSS windows version 20.0. The results shows that total of 70.2% of the girls used sanitary pads but the rest used cloth and the practice of reusing without washing properly was seen commonly among girls. A total of 74.4% of the girls reported pain in abdomen, 57.7% reported lower back pain, and 29% experienced pain in breast and tiredness during menstruation. The study concluded that some adolescent girls had poor information about the hygienic practices during menstruation.

**Kamath R, Ghosh D, et al., (2013)<sup>6</sup>** conducted a cross-sectional study on 550 rural and urban adolescent girls in Udipi taluk, Manipal, India. Study title was “Knowledge and practices regarding menstrual hygiene among rural and urban adolescent girls in Udipi Taluk, Manipal, India”. A pre-designed, pre-tested semi-structured questionnaire was used. Simple random sampling technique was used in the study. Analysis was done by using SPSS version 15. The results show that around 34% participants were aware about menstruation prior to menarche, and mothers were the main source of information among both groups. Overall, 70.4% of adolescent girls were using sanitary napkins as menstrual absorbent, while 25.6% were using both cloth and sanitary napkins. Almost half of the rural participants dried the absorbent inside their homes. The study concluded that there is a need to equip the adolescent girls with knowledge regarding safe, hygienic practices to enable them to lead a healthy reproductive life.

## MATERIALS AND METHODS:

Cross sectional descriptive research design was used to assess the reproductive health practices and quality of life of secondary school girls in selected schools of tirupathi. The data collection tool was validated and reliability was determined by Cron Bach Alpha method its Alpha coefficient with a score of  $r = 0.80$  for section II: Knowledge on menstrual hygiene of secondary school girls,  $r = 0.83$  for section III: Checklist on dietary habits among secondary school girls,  $r = 0.76$  for section IV: Checklist on life style practices among secondary school girls and  $r = 0.87$  for section V: Modified BREF scale for measuring the quality of life in secondary school girls and pilot study was conducted. 100 secondary school girls were selected using Probability simple random sample technique, lottery method who attained menarche in selected schools of tirupathi, A.P.

## RESULTS:

### Demographic variables of respondents with reproductive health practices

Majority 36 (36%) belongs to the age group of 14 years, 48 (48%) were 9<sup>th</sup> class, 49 (49%) were attended menarche at the age of 13 years, 87 (87%) were Hindus, 68 (68%) belongs to nuclear family, 74 (74%) were living in urban area, 55 (55%) mothers were educated up to intermediate, 44 (44%) fathers were educated up to intermediate, 40 (40%) mothers were homemakers, 47 (47%) fathers were working as coolies, 47 (47%) family income per month was between 10,000-15,000/- and 72 (72%) had knowledge gain due to discussion with friends and family.

**Table 1: Distribution of respondents according to their knowledge on menstrual hygiene practices (n=100)**

Sl. no	Knowledge on menstrual hygiene practices	Frequency ( f )	Percentage ( % )
1	Inadequate	40	40.00
2	Moderate	53	53.00
3	Adequate	07	07.00

**Table 1:** Shows that majority of the respondents 53 (53%) had moderate knowledge, 40 (40%) had inadequate knowledge and only 07 (7%) had adequate knowledge on menstrual hygiene practices.

**Table 2: Distribution of respondents according to their knowledge on dietary habits (n=100)**

Sl. no	Knowledge on dietary habits	Frequency ( f )	Percentage ( % )
1.	Inadequate	43	43.00
2.	Moderate	43	43.00
3.	Adequate	14	14.00

**Table 2:** Shows that majority of the respondents 43 (43%) had inadequate level knowledge scores, 43 (43%) had moderate knowledge and only 14 (14%) had adequate knowledge on dietary habits.

**Table 3: Distribution of respondents according to their knowledge on life style practices**

(n= 100)

Sl. no	Knowledge on life style practices	Frequency ( f )	Percentage ( % )
1.	Inadequate	24	24.00
2.	Moderate	46	46.00
3.	Adequate	30	30.00

**Table 3:** Shows that majority of the respondents 46 (46%) had moderate knowledge, 30 (30%) had adequate knowledge and only 24 (24%) had inadequate knowledge on life style practices.

**Table 4: Distribution of respondents according to their quality of life**

(n=100)

Sl. no	Quality of life	Frequency ( f )	Percentage ( % )
1.	High	34	34.00
2.	Moderate	34	34.00
3.	Low	32	32.00

**Table 4:** Shows that majority of the respondents 34 (34%) had low quality of life, 34 (34%) had moderate and only 32 (32%) had high quality of life.

#### **Association between the knowledge on menstrual hygiene practices of respondents and their demographic variables.**

There was significant association between respondents level of knowledge on menstrual hygiene related to their study class, education of the mother, education of the father, occupation of the mother, occupation of the father and family income per month in rupees at  $p < 0.01$  level and age in years, age at menarche in years at  $p < 0.05$  level where as remaining demographic variables (Religion, type of family, place of residence, exposure to mass media) were not showing any significant relationship.

#### **Association between the knowledge of respondents on dietary habits and their demographic variables**

There was significant association between level of knowledge of respondents regarding dietary habits related to their demographic variables as education of the mother, education of the father and occupation of the father at  $p < 0.01$  level and age in years, study class, occupation of the mother at  $p < 0.05$  level where as remaining demographic variables (Age at menarche in years, religion, type of family, place of residence, family income per month in rupees and exposure to mass media) were not showing any significant relationship.

#### **Association between the knowledge of respondents on life style practices and their demographic variables**

There was significant association between level of knowledge of respondents regarding life style practices related to their demographic variable family income per month in rupees was statistically significant at  $p < 0.01$  level and type of family, education of the mother, education of the father, were significant at  $p < 0.05$  level where as remaining demographic variables ( Age in years, study class, age at menarche in years, religion, place of residence, occupation of the mother, occupation of the father, and exposure to mass media) were not showing any significant relationship.

#### **Association between the respondents quality of life and their demographic variables.**

There was significant association between respondents quality of life related to their demographic variables as age in years, study class at  $p < 0.01$  level and education of the father, family income per month in rupees at  $p < 0.05$  level where as remaining demographic variables (Age at menarche in years, religion, type of family, place of residence, education of the mother, occupation of the mother, occupation of the father, and exposure to mass media) were not showing any significant relationship.

**DISCUSSION:****The first objective of the study was to assess the reproductive health practices of secondary school girls.**

The findings of the study revealed that 53 (53%) had moderate knowledge, 40 (40%) had inadequate knowledge and only 07 (7%) had adequate knowledge on menstrual hygiene practices, majority of the respondents 43 (43%) had inadequate level knowledge scores, 43 (43%) had moderate knowledge and only 14 (14%) had adequate knowledge on dietary habits, majority of the respondents 46 (46%) had moderate knowledge, 30 (30%) had adequate knowledge and only 24 (24%) had inadequate knowledge on life style practices among secondary school girls.

Similar cross-sectional study conducted by **Gitanjali Kapoor, Dinesh Kumar et al., (2017)<sup>7</sup>** on 132 school going girls in Marh block of Jammu district. Study title was “Menstrual hygiene: knowledge and practice among adolescent school girls in rural settings”. A predesigned, pretested and structured questionnaire was used in the study. Personnel interview technique was used for data collection. The study result showed that only 65 (49.24%) of the participants were aware about menstruation before menarche and the most important source of the information about menstruation for them was found to be their mothers. 59.09% girls used sanitary pads only, 27.27% used new cloth and 13.64% used old washed cloth. Regular hand washing was present in 90.91% subjects of which 86.36% subjects used soap and water for hand washing. Regular cleaning of the external genitalia was present in 65.91% subjects only, of which 66.67% used soap and water and 33.33% used only water. The study highlighted the needs of the adolescent girls to have accurate and adequate information about menstruation and its appropriate management. Mothers are the first teacher of the children, so they need to be equipped with the correct information as well as communication skills, so that adolescent girls are ready for this important physiological event in their life.

**The second objective of the study was to assess the quality of life of secondary school girls.**

The findings of the study revealed that majority of the respondents 34 (34%) had, 34 (34%) had moderate and only 32 (32%) had high on quality of life among secondary school girls.

**The third objective of the study was to find out the association between reproductive health practices and quality of life of secondary school girls.**

The findings of the association between respondents level of knowledge on menstrual hygiene practices and their demographic variables as study class, education of the mother, education of the father, occupation of the mother, occupation of the father and family income per month in rupees shows significant association at  $p < 0.01$  level and age in years, age at menarche in years at  $p < 0.05$  level. Whereas remaining demographic variables (Religion, type of family, place of residence, exposure to mass media) were not showing any significant relationship. The findings of the association between respondents level of knowledge on dietary habits and their demographic variables as education of the mother, education of the father and occupation of the father shows significant association at  $p < 0.01$  level and age in years, study class, occupation of the mother at  $p < 0.05$  level. Whereas remaining demographic variables (Age at menarche in years, religion, type of family, place of residence, family income per month in rupees and exposure to mass media) were not showing any significant relationship. The findings of the association between respondents level of knowledge on life style practices related to their demographic variable family income per month in rupees was statistically significant at  $p < 0.01$  level and type of family, education of the mother, education of the father, were significant at  $p < 0.05$  level. Whereas remaining demographic variables (Age in years, study class, age at menarche in years, religion, place of residence, occupation of the mother, occupation of the father, and exposure to mass media) were not showing any significant relationship and the findings of the association between respondents level of knowledge on quality of life related to their demographic variables as age in years, study class shows significant association at  $p < 0.01$  level and education of the father, family income per month in rupees at  $p < 0.05$  level. Whereas remaining demographic variables (Age at menarche in years, religion, type of family, place of residence, education of the mother, occupation of the mother, occupation of the father, and exposure to mass media) were not showing any significant relationship.

Similar cross-sectional study conducted by **Shivaleela P. Upashe, Tesfalidet Tekelab et al., (2015)<sup>8</sup>** on 828 high school girls in Nekemte Town, Western Ethiopia. Study title was “Assessment of knowledge and practice of menstrual hygiene among high school girls in Western Ethiopia”. Data collection was carried out from May 04 to May 30, 2014 using a pre- tested structured questionnaire. A multi stage sampling technique was used. The data analysis was done by using SPSS Windows version 20.0. The study concluded that 504 (60.9 %) and 330 (39.9 %) respondents had good knowledge and practice of menstrual hygiene respectively. The findings of the study showed a significant positive association between good knowledge of menstruation and educational status of mothers (AOR = 1.51, 95 % CI = 1.02 – 2.22), having radio/TV (AOR = 2.42, 95 % CI: 1.64 – 3.56). Educational status of the mother (AOR = 2.03, 95 % CI = 1.38 – 2.97) and earning permanent pocket money from parents (AOR = 2.73, 95 % CI = 1.76 – 4.26) revealed significant positive association with good practice of menstrual hygiene. The study concluded that the knowledge and practice of menstrual hygiene is low. Awareness regarding the need for information about good menstrual practices is very important. So, health education program should be setup to create awareness and practice of good menstrual hygiene.

**The fourth objective of the study was to find the correlation between the selected demographic variables with the reproductive health practices and quality of life of secondary school girls.**

In correlation of demographic variables with the knowledge on menstrual hygiene practices among secondary school girls, the correlation revealed that age in years, education of the mother, education of the father, family income per month in rupees were positively correlated at  $p < 0.01$  level; religion was negatively correlated at  $p < 0.01$  level. Age at menarche in years and occupation of the father were positively correlated at  $p < 0.05$  level exposure to mass media was negatively correlated at  $p < 0.05$  level. In correlation of demographic variables with the respondents level of knowledge on dietary habits, the correlation revealed that age in years was positively correlated at  $p < 0.01$  level, education of the mother and occupation of the father were positively correlated at  $p < 0.05$  level. In correlation of demographic

variables with the knowledge of respondents on life style practices, the correlation revealed that type of family was positively correlated at  $p < 0.01$  level. In correlation of demographic variables with the knowledge of respondents on quality of life, the correlation revealed that age in years, study class, education of the father, were positively correlated at  $p < 0.01$  level.

Similar cross-sectional study conducted by **Vijayakeerthi. R, Kalyani. P, et al., (2016)<sup>9</sup>** on 337 women in Pichavaram, Chidambaram, Tamilnadu. Study title was “A Study on Knowledge and Practice of Menstrual Hygiene Among Menstruating Women of Age Group 15-44 Yrs in a Rural Area, Tamilnadu”. Data was collected using validated, structured, pre tested questionnaire from January to August 2016. Analyzed by using SYSTAT12 software. The study result shows that 29.7% had adequate knowledge about menstruation and menstrual hygiene and 46.6% had good level of menstrual hygiene practice. It was found that there was a positive correlation between knowledge level and practice of menstrual hygiene in the women. The study concluded that nearly 70% of the women were not having adequate knowledge about menstruation and menstrual hygiene. Nearly half of them were not having good practice during menstruation. Therefore there is a need to increase awareness about menstrual hygiene among the women by giving periodic health education.

## CONCLUSION

The study concluded that nearly 60% of the secondary school girls were not having adequate knowledge about reproductive health practices and quality of life. Nearly half of them were not having good practice during menstruation. Therefore there is a need to increase awareness about menstrual hygiene practices, dietary habits, life style practices and quality of life among the secondary school girls by giving periodic health education.

## RECOMMENDATIONS

- Similar study can be done on a large sample that helps to draw more definite conclusion and make generalization.
- A comparative study can be conducted between secondary school girls and higher secondary school girls about reproductive health practices among who attained menarche.

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