



“THE EFFECTIVENESS OF VIDEO ASSISTED TEACHING PROGRAM ON KNOWLEDGE REGARDING PUBERTY AMONG GIRLS”

Author: Mamta Sahu, PhD Scholar, Malwanchal University
Dr. Anu V Kumar, Research Supervisor, Malwanchal University

ABSTRACT

Adolescence in girls is a turbulent period, which includes stressful events like menarche, considered as a landmark of female puberty. The girl might receive the menarche positively however negative responses such as shame, fear, anxiety and depression are more common. The study made use of one group pretest and posttest design. Convenient sampling method was used to select 150 samples. Video assisted teaching program was administered to the samples and the effectiveness of video assisted teaching program was evaluated. (122) 81.33% had inadequate knowledge and (28) 18.67% had moderately adequate knowledge in the pre-test. 74.67% had adequate knowledge and 25.33% had moderately adequate knowledge in post-test. The mean post-test knowledge score was significantly higher than the mean pre-test knowledge score at 0.001 levels. This indicated that the video assisted teaching program has helped the samples to improve their knowledge on puberty. The present study finding shows that the samples who were attending the video assisted teaching program have shown improvement in the level of knowledge which was proved statistically. The respondents expressed their gratitude for the knowledge they gathered regarding puberty. This feedback led the future researcher to use the questionnaire as a guide for assessing knowledge on puberty. The Headmistress and teachers were appreciated the topic and video compact disc.

KeyWords: Video Assisted Programme, Girls, Puberty

INTRODUCTION

Puberty may be the biological time frame involving the child as well as their adult seen as a physical body changes that lead to sex maturity. In these times adolescence experiences a growth spurt develops, create secondary sex features and attain the reproductive system maturity. The moment associated with puberty beginning and its progress tend to be varied between people and therefore are influenced mostly by genetics.

Major hormonal events encircling menarche entail the secretion regarding follicle stimulating hormone from the pituitary gland. FSH energizes the ovaries to begin follicular readiness also to produce the extra estrogen. Continuing growth of the secondary sexual characteristics commences around the age 11 to 13.

Through the entire process of puberty girls may experience a myriad of physical and emotional changes, modifications in system image as well as interpersonal connections generally accompany these kinds of changes. Menarche is the time of combined emotions. Emotional changes might occur using the bodily adjustments just similar to girls tend to be nervous and also frightened, pleased as well as embarrassed. However, changes in body picture are common and also taken care of in different ways after puberty.

Menarche may occur as early as 8 or 9 year of age. It is good to include health teaching information on pubertal changes and menarche to girls.

Nurses can help young adolescence to understand the normal physical and psychosexual changes taking place during puberty and menstruate. So they may learn to see it positively.

NEED FOR THE STUDY

Puberty can be a challenging moment for many girls. In many communities menarche is definitely an indicator of a girl's developing sexuality.

Teenage is a period of extreme anxiety and stress. Menarche sure brings about tremendous psychological as well as interpersonal reaction in them. Menstruation continues to be considered to be something not clean and also filthy in Indian society. The response towards menstruation depends upon attention as well as knowledge about the topic. Although menstruation can be a natural process, it's really linked with a number of myths practices which sometimes result in adverse outcomes. Improved information about menstruation right from the child years might escalate safe procedures and may help in abating as well as enduring of an incredible number of ladies.

In lots of societies, the family and also immediate neighborhood usually provide young adults with information and also guidance regarding sexuality and sex. In Ghana, family members used to observe closely the teenage girls who reached menarche were instructed through their own moms along with other females regarding habits related to menstruation. They were also instructed concerning taboos to become observe in the course of menstruation.

In our curriculum sex education starts from the 9th standard but our girls are attaining menarche from 10 years that is 5th standard. Hence the investigator thought that the teaching will improve the knowledge and awareness among girls regarding pubertal changes and menarche. So she selected this study.

STATEMENT OF THE PROBLEM

A study to determine the effectiveness of video assisted teaching program on knowledge regarding puberty among girls in selected school at Indore.

OBJECTIVES OF THE STUDY:

- ✦ To assess the pre-test level of knowledge regarding puberty among girls.
- ✦ To assess the post-test level of knowledge regarding puberty among girls.
- ✦ To evaluate the effectiveness of the teaching program on knowledge regarding puberty among girls.
- ✦ To find out the association between pre-test level of knowledge and the selected demographic variables such as age, education, mother's education, mother's occupation, type of family, religion, birth order, source of information and place of living.
- ✦ To find out the association between post-test level of knowledge and the selected demographic variables.

HYPOTHESES:

- ✦ The post-test level of knowledge score for girls who are exposed to video assisted teaching program will be significantly higher than the pretest level of knowledge.
- ✦ There will be a significant association between pre-test level of knowledge on puberty and selected variables such as age, education, mother's education, mother's occupation, type of family, religion, birth order, source of information and place of living.
- ✦ There will be a significant association between post-test level of knowledge on puberty and selected variables.

ASSUMPTION

- School girls at the age of 10-13years will not have adequate knowledge regarding puberty.
- Video assisted teaching programme may improve the knowledge regarding puberty on school girls.
- Selected demographic variables may influence the knowledge of girls regarding puberty.

LIMITATIONS:

- The study was limited to 6 weeks.
- The study was limited to 150 samples.

RESEARCH METHODOLOGY

RESEARCH APPROACH

The research approach used for this study was a quantitative approach. The investigator compares the pre-test and post-test knowledge regarding puberty among girls who are studying 6th and 7th standard.

RESEARCH DESIGN

One group pre-test post-test design was used.

| Pre-test | Intervention | Post-test |
|----------|--------------|-----------|
| O1 | X | O2 |

O1 - Pre-test knowledge regarding puberty.

X - Video assisted teaching program on puberty.

O2 - Post-test knowledge regarding puberty.

SETTING OF THE STUDY

The study was conducted among girls at Government Girl's Higher Secondary School Indore.

POPULATION

The population of the study was girls who are studying in 6th and 7th standard. The Target population of the study was girls who are not attained menarche.

SAMPLING

Sample size:

The sample comprised of 150 girls studying in 6th and 7th standard who are not attained menarche.

CRITERIA FOR SAMPLE SELECTION

Inclusion criteria:

- Girls who are not attained menarche.
- Girls those who are in 6th and 7th standard.
- Those who are willing to participate in the study.
- Those who can understand and read Hindi & English.
- Girls those who are having normal growth and development.

Exclusion criteria:

- Those who are not interested to participate in the study.
- Girls who are absent to school during data collection.
- Girls who already attained menarche.

SAMPLING TECHNIQUE

The sample was selected adopting a convenient sampling technique.

PRESENTATION OF THE DATA

The analysis was organized and presented under the following headings.

Section – I

Distribution of samples according to the demographic variables.

Section – II

1. Distribution of pre-test level of knowledge score of samples.
2. Distribution of post-test level of knowledge score of samples.

Section – III

Difference between the pre-test and post-test knowledge score.

Section – IV

Association between post-test knowledge score and selected demographic variables

SECTION – I

Table No.1: Distribution samples according to their demographic variables.

n = 150

| Demographic variables | | Frequency | Percentage % |
|-----------------------|---------------------|-----------|--------------|
| Age | years | 17 | 11 |
| | years | 83 | 55 |
| | years | 45 | 30 |
| | years | 5 | 3 |
| Education | 6 th std | 92 | 61 |
| | 7 th std | 58 | 39 |
| Mother's Education | Illiterate Primary | 29 | 19 |
| | Secondary | 52 | 35 |
| | Higher Secondary | 27 | 18 |
| | Degree | 41 | 27 |
| Mother's Occupation | House wife | 84 | 56 |
| | Employed | 5 | 7 |
| | Self – Employed | 39 | 26 |
| | Others | 20 | 13 |
| Type of Family | Joint family | 47 | 31 |
| | Nuclear family | 100 | 67 |
| | Extended family | 3 | 2 |
| Religion | Hindu | 137 | 92 |
| | Christian | 5 | 3 |
| | Muslim | 2 | 1 |
| | Others | 6 | 4 |
| Birth order | I | 48 | 32 |
| | II | 62 | 42 |
| | III | 29 | 19 |
| | IV | 11 | 7 |
| Source of information | Family | 99 | 66 |
| | Friends | 18 | 12 |
| | Peer Group | 17 | 11 |
| | All | 16 | 11 |
| Place of living | Urban | 66 | 44 |
| | Rural | 84 | 56 |

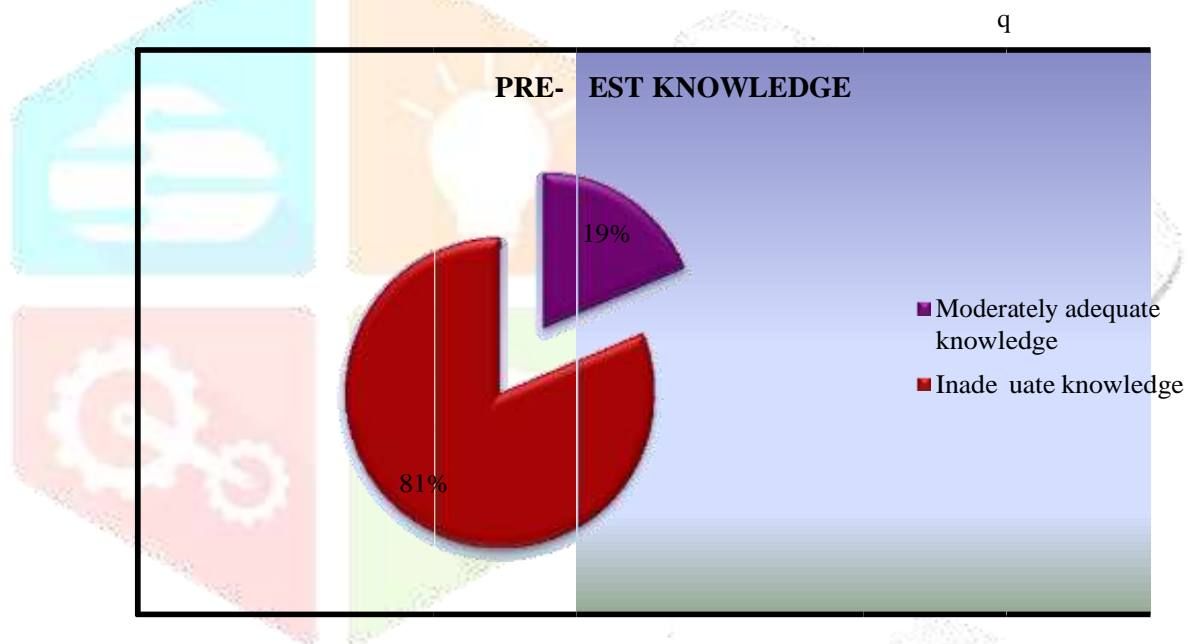
SECTION – II

DISTRIBUTION OF SAMPLES ACCORDING TO KNOWLEDGESCORE

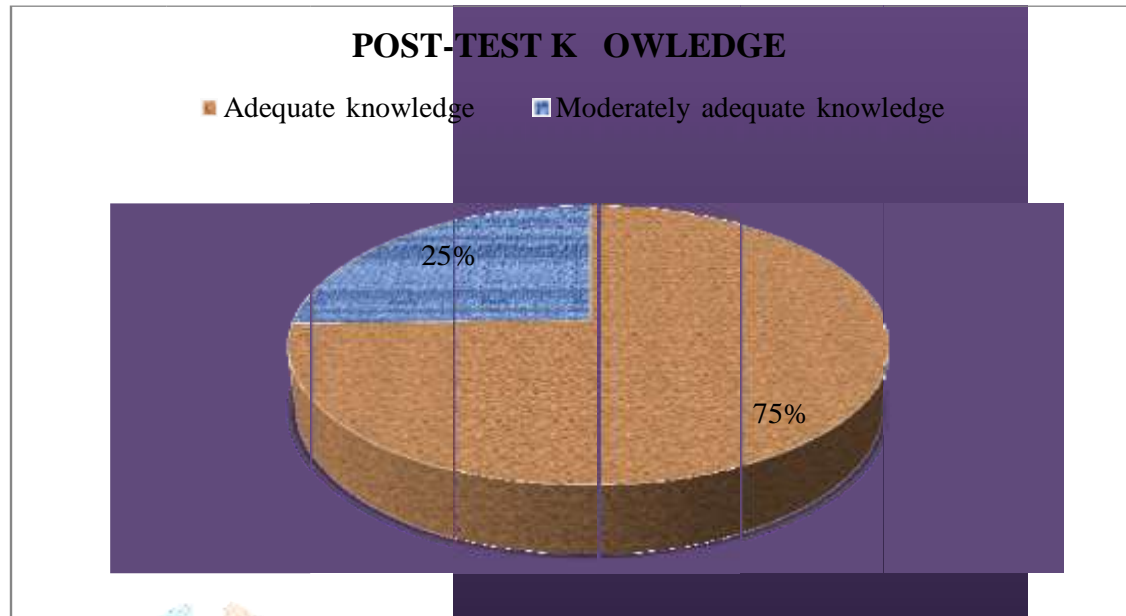
Table no. 2: Distribution of samples according to knowledge score

| Categories | Adequate Knowledge | Moderatelyadequate knowledge | Inadequate knowledge |
|------------|--------------------|------------------------------|----------------------|
| Pre test | - | 18.67% | 81.33% |
| Post test | 74.67% | 25.33% | - |

DISTRIBUTION OF KNOWLEDGE SCORE IN PRE-TEST AND POST-TEST



Distribution of Post-test knowledge regarding puberty among girls.



SECTION III

This section deals with the difference between pre-test and post-test knowledge score.

Table no.3: Effectiveness of video assisted teaching on improving knowledge regarding puberty.

| Categories | Mean | Standard Deviation | Paired 't' test | |
|------------|-------|--------------------|------------------|-------------|
| | | | Calculated value | Table value |
| Pre test | 10.14 | 2.51 | 44.458** | 3.29 |
| Post test | 21.71 | 3.69 | | |

p<0.001 highly significant

**** Highly significant**

Table No.4: Area wise comparison of pre-test and post-test scores for correct response regarding puberty among girls

(n=150)

| Areas of puberty | Pretest | posttest | Effectiveness |
|------------------------|---------|----------|---------------|
| Anatomy and physiology | 39% | 66% | 27% |
| Menstruation | 25% | 70% | 45% |
| Pubertal changes | 27% | 56% | 29% |
| Menstrual hygiene | 31% | 67% | 36% |

Table No .5: Item wise comparison of pre-test and post-test scores for correct response regarding anatomy and physiology:

(n=150)

| Item wise | Pre-test | Post-test | Effectiveness |
|---|----------|-----------|---------------|
| 1. The internal reproductive organs are situated within the bony pelvis. | 28% | 52% | 24% |
| 2. Internal reproductive organ comprises of Uterus, uterine tubes, ovaries, vagina. | 21% | 56% | 35% |
| 3. Function of uterus is development of baby. | 68% | 89% | 21% |
| 4. The ovaries produce Egg (female egg) | 48% | 91% | 43% |

| | | | |
|---|-----|-----|-----|
| 5. Menstrual flow drains from the uterus through the vagina | 19% | 43% | 24% |
|---|-----|-----|-----|



Table No .6: Item wise comparison of pre and post-test scores for correct response regarding menstruation

(n=150)

| Item wise | Pre-test | Post-test | Effectiveness |
|---|----------|-----------|---------------|
| 6. The common sign of ovulation is pain in one side of the abdomen. | 33% | 73% | 40% |
| 7. The unfertilized egg discharged as menstrual blood through the vagina is called as menstruation. | 25% | 83% | 58% |
| 8. The content of menstrual flow include blood, fluids, shed ovum. | 21% | 43% | 22% |
| 9. The duration of normal menstrual bleeding cycle is 3-5 days. | 21% | 83% | 62% |

Table No .7: Item wise comparison of pre and post-test scores for correct response regarding pubertal changes:

(n=150)

| Item wise | Pre-test | Post-test | Effectiveness |
|--|----------|-----------|---------------|
| 10. The average age puberty begins 10- 14yrs | 43% | 78% | 35% |
| 11. Early puberty for a girl starts at when she is 8years. | 11% | 25% | 14% |
| 12. White discharge will be present before menstruation. | 25% | 57% | 32% |
| 13. Pubertal changes in girls are except voice changes. | 21% | 47% | 26% |
| 14. The first sign of puberty for girls is usually breast budding. | 29% | 48% | 19% |
| 15. Teens begin to get acne because hormonal changes. | 15% | 76% | 61% |

| | | | |
|--|-----|-----|-----|
| 16. Reducing mood swings during puberty. | 19% | 31% | 12% |
| 17. Teens need 9 hours of sleep per night. | 35% | 71% | 36% |
| 18. The best way to reduce the body smell. | 13% | 30% | 17% |
| 19. Puberty begins first in girls. | 61% | 94% | 33% |

Table No .8: Item wise comparison of pre and post-test scores for correct response regarding menstrual hygiene:

| Item wise | Pre-test | Post-test | Effectiveness |
|--|----------|-----------|---------------|
| 20. Common premenstrual manifestation is except, headache. | 28% | 44% | 16% |
| 21. Methods to reduce premenstrual syndrome exercise and others. | 17% | 29% | 12% |
| 22. The ideal material to be used during menstruation is sanitary napkin. | 25% | 78% | 53% |
| 23. During menstruation the perineum needs to be washed Everytime after attending toilet. | 27% | 74% | 47% |
| 24. The pad should be changed every 4-6hrs. | 23% | 61% | 38% |
| 25. Perineal area should be clean from front to back. | 38% | 63% | 25% |
| 26. Methods to wash the panties soaking plain water before wash with soap and dry it under sunlight. | 47% | 92% | 45% |
| 27. Burning is the method for disposing the soiled napkin. | 27% | 58% | 31% |

| | | | |
|--|-----|-----|-----|
| 28. The important nutrient lost through menstrual blood is iron. | 29% | 71% | 42% |
| 29. The diet to be included during menstruation Iron rich diet, fruits with normal diet. | 41% | 78% | 37% |
| 30. Iron rich diet includes ragi,jiggery, spinach. | 43% | 77% | 34% |
| 31. During menstruation girls cantake bath twice a day. | 44% | 84% | 40% |
| 32. Do moderate exercise during menstruation | 29% | 53% | 24% |
| 33. Ways to relieve menstrual pain | 21% | 43% | 22% |
| 34. Usually menstruation occursonce in 28 days. | 21% | 95% | 74% |

SECTION IV

This section deals with the association between pre-test knowledgescores and with their selected demographic variables.

**Table No 9: Associations between pre-test knowledge score anddemographic variables
(n=150)**

| Sl. No | Demographicvariables | Level of knowledge | | | | Chi square | |
|--------|----------------------|--------------------|----|---------------------|---|-------------|------------------|
| | | Inadequate | | Moderately adequate | | Table value | Calculated value |
| | | f | % | f | % | | |
| 1. | Age | | | | | 7.81 | 7.742 |
| | a. 10 | 12 | 8 | 5 | 3 | | |
| | b. 11 | 74 | 49 | 9 | 6 | | |
| | c. 12 | 32 | 21 | 13 | 9 | | |
| | d. 13 | 4 | 3 | 1 | 1 | | |
| 2. | Educational status | | | | | | |

| | | | | | | | |
|----|---|---------------------------|---------------------------|------------------------|-----------------------|------|---------|
| | a. 6 th std b. 7 th std | 80 42 | 53 28 | 12 16 | 8 11 | 3.84 | 4.95* |
| 3. | Mother's education a. illiterate b. Primary c. Secondary d. Higher secondary e. Degree | 21 42 27 32 0 | 14 28 18 21 0 | 8 10 0 9 1 | 5 7 0 6 1 | 9.49 | 12.376* |
| 4. | Mother's Occupation a. House wife b. Employed c. Self employed d. Others | 64 6 34 18 | 43 4 23 12 | 20 1 5 2 | 13 1 3 1 | 7.81 | 3.419 |
| 5. | Type of family a. Joint family b. Nuclearfamily c. Extendedfamily | 38 82 2 | 25 55 1 | 9 18 1 | 6 12 1 | 5.99 | 0.462 |
| 6. | Religion a. Hindu b. Christian c. Muslim d. others | 114 2 1 5 | 76 1 1 3 | 23 3 1 1 | 15 2 1 1 | 7.81 | 7.254 |
| 7. | Birth order a. I b. II c. III d. IV | 40 52 21 9 | 27 35 14 6 | 8 10 8 2 | 5 6 5 1 | 7.81 | 1.911 |
| 8 | Exposure to media a. TV b. Radio c. Newspaper d. All | 82 12 15 13 | 55 8 10 9 | 17 6 2 3 | 11 4 1 2 | 7.81 | 3.229 |
| 9 | Place of living a. Urban b. rural | 50 72 | 33 48 | 16 12 | 11 8 | 3.84 | 2.413 |

Significant at 0.05% level * Significant

Table 10: Associations between post-test knowledge score demographic variables.

(n=150)

| Sl. No | Demographic variables | Level of knowledge | | | | Chi-square | |
|--------|-----------------------|---------------------|----|----------|----|-------------|------------------|
| | | Moderately adequate | | Adequate | | Table value | Calculated value |
| | | f | % | f | % | | |
| 1. | Age | | | | | | |
| | a. 10 | 6 | 4 | 11 | 7 | 7.81 | 5.97 |
| | b. 11 | 39 | 26 | 44 | 29 | | |
| | c. 12 | 12 | 8 | 33 | 22 | | |
| | d. 13 | 1 | 1 | 4 | 3 | | |
| 2. | Educational status | | | | | | |
| | 6 th std | 43 | 29 | 49 | 33 | 3.84 | 6.538* |
| | 7 th std | 15 | 10 | 43 | 29 | | |
| 3. | Mother's education | | | | | | |
| | a. illiterate | 8 | 5 | 21 | 14 | 9.49 | 4.945 |
| | b. Primary | 18 | 12 | 34 | 23 | | |
| | c. Secondary | 14 | 9 | 13 | 9 | | |
| | d. Higher secondary | 18 | 12 | 23 | 15 | | |
| | e. Degree | 0 | 0 | 1 | 1 | | |
| 4. | Mother's Occupation | | | | | | |
| | House wife | | | | | 7.81 | 0.558 |
| | Employed | 34 | 23 | 50 | 33 | | |
| | Self employed | 2 | 1 | 5 | 3 | | |
| | Others | 14 | 9 | 25 | 17 | | |
| | | 8 | 5 | 12 | 8 | | |

| | | | | | | | |
|----|-------------------|----|----|----|----|------|-------|
| 5. | Type of family | | | | | | |
| | Joint family | 20 | 13 | 27 | 18 | 5.99 | 2.209 |
| | Nuclear family | 38 | 25 | 62 | 41 | | |
| | Extended family | 0 | 0 | 3 | 2 | | |
| 6. | Religion | | | | | | |
| | a. Hindu | 52 | 35 | 85 | 57 | 7.81 | 0.466 |
| | b. Christian | 2 | 1 | 3 | 2 | | |
| | c. Muslim | 1 | 1 | 1 | 1 | | |
| | d. others | 3 | 2 | 3 | 2 | | |
| 7. | Birth order | | | | | | |
| | a. I | 19 | 13 | 29 | 19 | 7.81 | 1.015 |
| | b. II | 25 | 17 | 37 | 25 | | |
| | c. III | 9 | 6 | 20 | 13 | | |
| | d. IV | 5 | 3 | 6 | 4 | | |
| 8 | Exposure to media | | | | | | |
| | a. TV | 43 | 29 | 56 | 37 | 7.81 | 3.191 |
| | b. Radio | 5 | 3 | 13 | 9 | | |
| | c. Newspaper | 6 | 4 | 11 | 7 | | |
| | d. All | 4 | 3 | 12 | 8 | | |
| 9 | Place of living | | | | | | |
| | Urban | 20 | 13 | 46 | 31 | 3.84 | 3.476 |
| | rural | 38 | 25 | 46 | 31 | | |

significant at 0.05% level * Significant

CONCLUSION

The present study finding shows that the samples who were attending the video assisted teaching program have shown improvement in the level of knowledge which was proved statistically. The respondents expressed their gratitude for the knowledge they gathered regarding puberty. This feedback led the future researcher to use the questionnaire as a guide for assessing knowledge on puberty. The Headmistress and teachers were appreciated the topic and video compact disc.

Video assisted teaching method was very much encouraging among the school girls rather than other methods. It is necessary to learn about puberty for the girls who attend menarche. Series of teaching on the same aspect of all school girls will be improve their knowledge as well as improve their physical and mental health.

REFERENCES

- ❖ Abioje – kutiyi, (2000). Menstrual knowledge and practices amongst secondary school girls in Ile Ife, Nigeria. The journal of the royal society for the promotion of health, 120 (1): 23-26.
- ❖ Adele Pillitteris, Maternal and Child Health Nursing (5th Edn), Lippincott publications.
- ❖ Adhikari P, (2007). Knowledge and practice regarding menstrual hygiene in rural adolescent girls of Nepal, Kathmandu university Medical Journal, 5 (3): 382-386
- ❖ Amrita Bagga, (2000). Is there a secular trend in the menarcheal age of Maharashtrian girls, Indian Journal Physiol Pharmacology ; 47 (3) : 361–362
- ❖ Anuradha R. (2000). Menstrual hygiene practices and reproductive morbidity,
- ❖ Batubara JR. (2010). Age at menarche in Indonesian girls: a national survey. Acta Medical Indonesia. 42(2):78-81
- ❖ Benjet, (2002). A Short-Term Longitudinal Study of Pubertal Change, Gender, and Psychological Well-Being of Mexican Early Adolescents. Journal of Youth and Adolescence, 31 (6) 429-442
- ❖ Dannii Y. L. Yeung, (2005). Psychosocial and Cultural Factors Influencing Expectations of Menarche. Journal of Adolescent Research 20: 118
- ❖ Dashiff C, Education for menarche, Journal of School Health, 56 (2). 56-58.
- ❖ Danger A.R , Deshmukh P.R, (2007). The effect of community- based health education intervention on management of menstrual hygiene among rural Indian adolescent girls. World health population , Volume: 9, Issue: 3, Pages: 48-54.