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## Effectiveness of video assisted teaching module (V.A.T.M.) of adolescent girls menstrual problems in a girl's high school

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### Abstract

A semi exploratory investigation with pre and post-test without control gathering and test approach was embraced in Ankuli territory of Berhampur, Ganjam area from first April to fifteenth April 2014. Information were gathered from 50 juvenile young ladies, chosen by deliberate irregular inspecting system through organized poll calendar to survey the adequacy of video helped instructing module with respect to Menstrual issues and their medicinal measures. In light of discoveries of the examination it very well may be condensed as pursues. Most noteworthy rates (68%) of juvenile young ladies were had a place with the age gathering of 13 to 14 years. Larger part of (88%) immature young ladies were had a place with Hindu religion. Most elevated rate (72%) of juvenile had Nuclear family. Dominant part of pre-adult young ladies (80%) were had a place with urban network. Most elevated rate (72%) of immature young ladies got their menarche at the age of 11-12 years. Prior to execution of video helped showing module the pre-adult young ladies had normal learning (44.73%) on Menstrual issues and their healing measures. The all out mean score amid post-test was  $23.46 \pm 2.12$  which is 78.20% of the all out score uncovering great information and adequacy was observed to be 33.47%. Most elevated post-test mean score was 83.50% of the greatest score was acquired by the pre-adult young ladies for the region "Menstrual cleanliness". Most reduced mean KS (75.33%) was acquired for the region Menstrual issues. Very critical distinction was found among pre and post-test learning score ( $p < 0.01$ ). No huge affiliation was found between pre-test KS when contrasted with age, religion, sort of family, kind of network and time of menarche.

**Keywords:** Menstrual hygiene, adolescence, health education

### Introduction

Adolescence, Menarche or first feminine cycle anyway it is called, is seen as an instrument of social power over ladies in every real culture and religions of the world. Puberty is the time of life in all ladies, by and large between the age of 10 and 15 years. Puberty speaks to the most punctual time of reproduction<sup>[1]</sup>. Feminine cycle is a typical, sound event for a long time throughout everyday life. However numerous ladies, over a scope of various societies, encounters menstrual issue that run from mellow inconvenience to intense agony. Albeit most ladies have some physical or enthusiastic changes or uneasiness connected to menstrual cycle, few about 5% find that the issues are increasingly genuine and may need to look for some sort of treatment<sup>[2]</sup>. Menstrual clutters are a typical introduction. By late youthfulness, 75% of young ladies experience some issue related with period. Postponed, unpredictable, agonizing, and overwhelming menstrual draining are driving explanations behind doctor office visits by young people<sup>[3]</sup>. The early menstrual cycles of immature young ladies might be unovular, unpredictable yet are not without issues for them. Pre-adult young ladies experience premenstrual side effects seven to ten days before the beginning of dying. These incorporate crabbiness, discomfort, migraine, skin break out, stomach torment and so on. The restorative and social outcomes of premenstrual indications and clutters of feminine cycle impact the person as well as her family and society<sup>[4]</sup>.

Dysmenorrhea is the most widely recognized gynecological issue in ladies in all ages. Most immaturity experience dysmenorrhea in the initial 3 years after menarche. Youthful grown-up ladies ages 17 to 24 years are well on the way to report difficult menses somewhere in the range of half and 80% of ladies report some dimension of distress related with menses and 10 to 18% report serious dysmenorrhea<sup>[5]</sup>. In spite of the fact that an ordinary physiological procedure, feminine cycle can likewise be mistaking and alarming for youthfulness,

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especially on the off chance that she experiences certain issues like unpredictable periods or premenstrual disorder (PMS). Menstrual issues have been accounted for in around 85 percent of ladies in India [6]. Feminine cycle is a subject that is frequently not talked about straightforwardly in our general public. A few ladies, even in the created nations, believed period to be badly designed or humiliating. Thus, there are a lot of doubts and superstitions related with it. Obliviousness has prompted numerous sorts of practices particularly among the ignorant ladies, some of which are especially unsafe [7]. In this investigation, we surveyed the viability of Video Assisted Teaching Module (VATM) on learning of pre-adult young ladies on menstrual issues and their medicinal measures.

**Materials and methods**

The selection of design depends upon the purpose of the study, research approach and variable to study. A quasi-experimental design where pre and post-test without control group with experimental approach was selected for the present study to evaluate the effectiveness of video assisted teaching module on knowledge of the Adolescent girls regarding menstrual problems & their

remedial measures.

**Sampling technique**

Systematic random sampling technique was used for the present study.

First a sampling frame was prepared which consisting the names of total 10<sup>th</sup> class adolescent girls. Then every 3<sup>rd</sup> girl was selected for the study. Total no. Of adolescent girls=155.

A structured questionnaire schedule was prepared consisting of 30 items on knowledge of adolescent girls on menstrual problems & their remedial measures. The scoring system for items was one score for correct answer and zero score for wrong answer. The items were covered different areas such as:

- Assessment of knowledge regarding reproductive system and menstruation.
- Assessment of knowledge regarding various menstrual problems.
- Assessment of knowledge regarding remedial measures of menstrual problems.
- Assessment of knowledge regarding menstrual hygiene.

**Table 1:** Scoring process

Level of knowledge	Actual score	Percentage (%)
Very poor	1-6	<20
Poor	7-12	21-40
Average	13-18	41-60
Good	19-24	61-80
Very good	25-30	80 Above

**Results**

Knowledge of adolescent girls regarding menstrual problems and their remedial measures before implementation of video assisted teaching module.

Area wise comparison of mean, SD, mean percentage of pre-test knowledge score of adolescent girls on menstrual problems and their remedial measures.

**Table 2:** Area wise comparison of mean, SD, mean percentage of pre-test knowledge score of adolescent girls on menstrual problems and their remedial measures.

Knowledge Score					
S. No	Area of knowledge	Pre-test			
		Max. Score	Mean	Standard Deviation	Mean Percentage
1	Reproductive System & Menstruation	9	4.58	1.36	50.89
2	Menstrual Problems	12	4.92	1.16	41
3	Remedial measures for menstrual problems	5	1.82	0.89	36.40
4	Menstrual hygiene	4	2.1	0.88	52.50
	Over all total	30	13.42	2.65	44.73

Analysis and application of statistics used on the areas as divided in the blue print.

Area wise analysis of mean, SD and mean percentage of pre test KS of adolescent girls regarding menstrual problems and their remedial measures shows that, during pre test highest more or less similar mean score 2.1±0.88 and 4.58±1.36 which were 52.50% and 50.89% of the maximum scores were obtained for the area of Menstrual hygiene and Reproductive system & Menstruation. Whereas the minimum mean score was 1.82± 0.89 which was 36.40% of the maximum score was obtained for in the area Remedial measures for menstrual problems. However the mean score 4.92±1.16 which was 41 % of the maximum score was obtained for the area of Menstrual problems.

It was also observed that, the overall mean score was (13.42) which was 44.73% of the maximum score reveals

that, the adolescent girls under this study had average knowledge regarding Menstrual Problems and their remedial measures. (Table -2)

**Section-III**

Assessment of the effectiveness of video assisted teaching module on knowledge of adolescent girls regarding Menstrual problems and their remedial measures after Implementation of video assisted teaching module.

Area wise comparison of mean, SD, mean percentage of pre-test and post-test knowledge score of adolescent girls regarding Menstrual problems and their remedial measures. Item wise comparison of pre-test and post-test knowledge score of adolescent girls regarding Menstrual problems and their remedial measures.

**Table 3:** Area wise Comparison of Pre and Post-test knowledge score of adolescent girls.

		Knowledge score							
S. No	Area of knowledge	Pre-test				Post-test			
		Max. Score	Mean	Standard deviation	Mean percentage	Mean	Standard deviation	Mean percentage	Difference In mean percentage
1	Reproductive System & Menstruation	9	4.58	1.36	50.89	7.28	0.98	80.89	30
2	Menstrual Problems	12	4.92	1.16	41	9.04	1.33	75.33	34.33
3	Remedial measures for menstrual problems	5	1.82	0.89	36.40	3.8	0.85	76	39.6
4	Menstrual hygiene	4	2.1	0.88	52.50	3.34	0.55	83.50	31
	Over all total	30	13.42	2.65	44.73	23.46	2.12	78.20	33.47

Area wise comparison of mean, SD, mean percentage of pre-test and post-test knowledge score shows that, during post-test the highest mean score was  $3.34 \pm 0.55$  which was 83.50% of the maximum score was obtained for the area of Menstrual hygiene which was also highest during pre-test (52.50%). Whereas the lowest mean score was  $9.04 \pm 1.33$  which was 75.33% of the maximum score was obtained for the area Menstrual problem which was 2<sup>nd</sup> lowest during pre-test (41%).

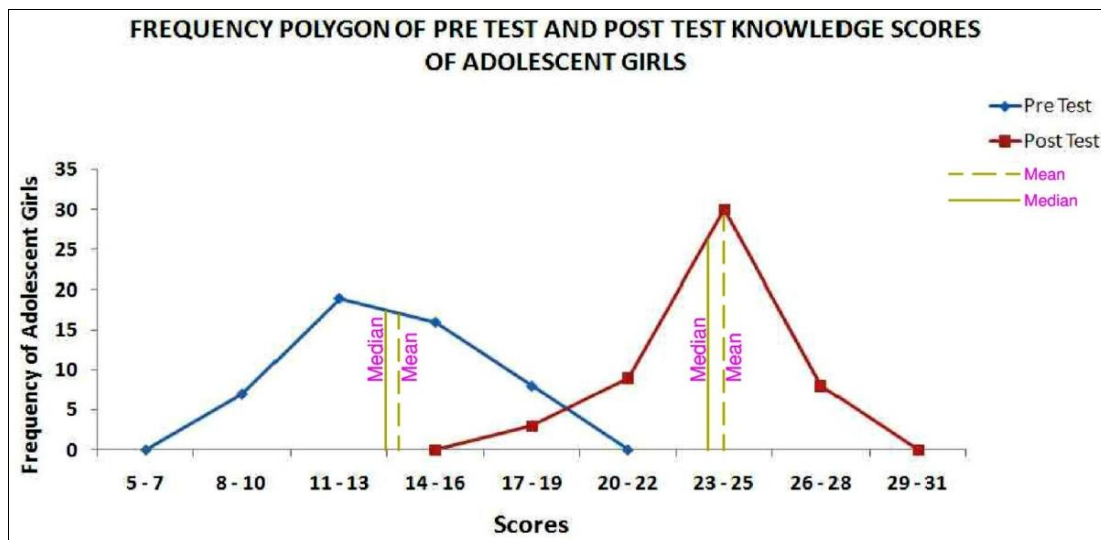
During post test except "Menstrual problems" and "Remedial measures for menstrual problems" in other two areas like "Reproductive system & Menstruation" and "Menstrual hygiene" have more or less similar mean scores were 7.28 and 3.34 which were 80.89% and 83.50% of the maximum scores respectively and having very good knowledge.

Further over pre test mean score was  $13.42 \pm 2.65$  which is 44.73% of maximum score and average knowledge whereas it was  $27.46 \pm 2.12$  which is 78.20% of maximum score

during post-test showing a difference of 33.47 % of effectiveness and having a very good knowledge. It was also observed that, difference between the pre and post-test area wise mean score values vary from 30 % to 39.6%. Hence, it can be interpreted that, VATM was effective both area wise and overall (Table-3).

Line graph showing the comparison of pre and post-test knowledge score reveals that, the lowest score of pre-test was 8-10 which was obtained by 14 % of adolescent girls where as in post-test it is ranged from 17-19 and also obtained by 6 % of adolescent girls. Similarly, highest score of pre-test was ranged from 17-19 which was obtained by 16 % adolescent girls where as in post-test it is ranged from 26-28 and obtained by 16 % of adolescent girls.

The median plotted on the line graph shows that the pre-test mean and median scores were 13.4 and 13 respectively. Whereas during post-test mean and median scores were 23.5 and 23 respectively. It shows the effectiveness of video (Fig. 1).



**Fig 1:** Line Graph showing comparison between pre and post-test Knowledge Score of Adolescent Girls

O-give curve showing the comparison of pre and post test cumulative percentage of KS of Adolescent girls on Menstrual Problems and their remedial measures shows that, post test score lies to the right of the pre test score; over the entire range showing that post score were higher than the pre test scores. In the pre test 25<sup>th</sup> percentile score

was 9.5 where as it was 21 in post test. The 50<sup>th</sup> percentile score for pre test was 12 where as it was 22 in post-test showing a difference of 10. Similarly 75 percentile score was 14 where as it was 24 in post test. It shows that video assisted teaching module was effective overall (Fig. 2).

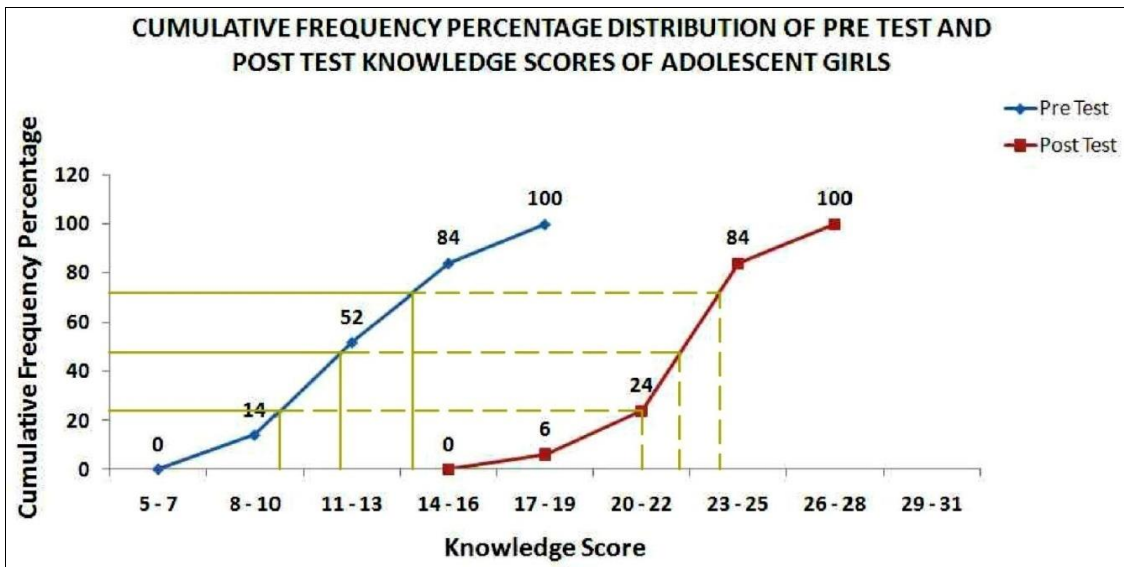


Fig 2: O-give Curve showing the comparison of pre and post-test cumulative percentage of KS of Adolescent Girls

Percentage wise distribution of pre and post test knowledge score of adolescent girls according to their level of knowledge shows that, during pre test the highest percentage (50%) of adolescent girls had average knowledge regarding Menstrual problems and their remedial measures and 46% had poor knowledge regarding it. Whereas during post test highest percentage (58%) of them

having good knowledge, whereas during pre-test only 4% of them were in this category. Similarly, 38% of adolescent girls having a very good knowledge during post test. Hence it can be interpreted that, the VATM was effective in improving knowledge of adolescent girls regarding Menstrual Problems and their remedial measures (Fig. 3).

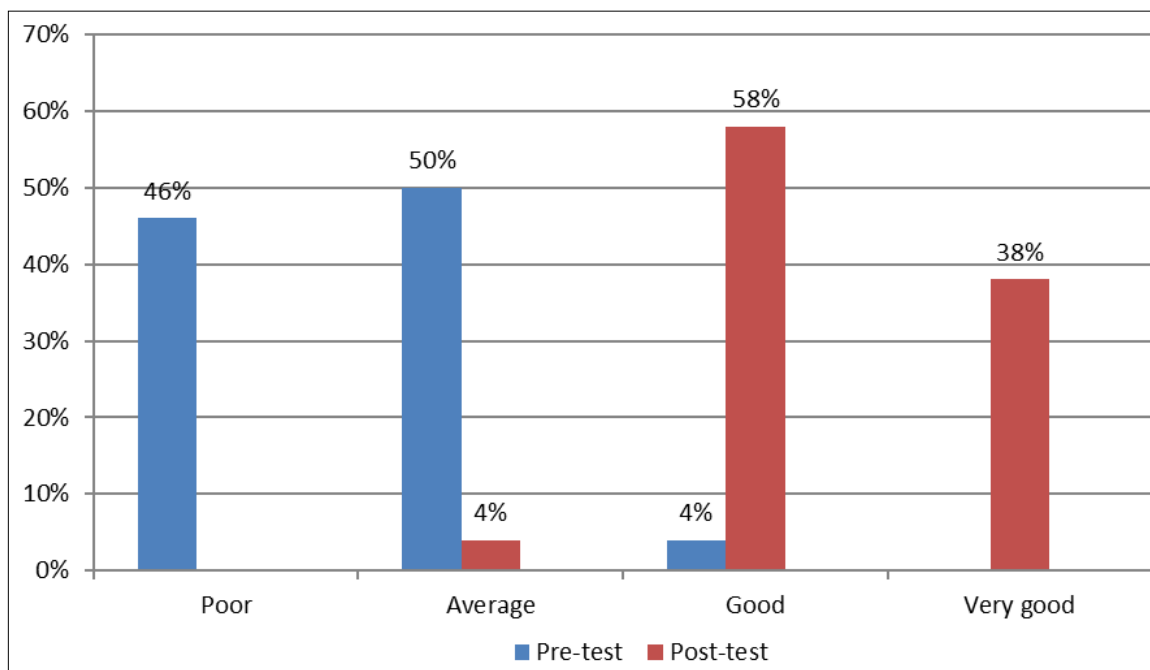


Fig 3: Bar diagram showing the comparison between pre and post test knowledge score of adolescent girls

**Discussions**

Rate savvy appropriation of the pre-adult young ladies as per their age bunch delineates that most noteworthy rates (68%) of the pre-adult young ladies were in 13-14 years age bunch where as 32% of the youthful young ladies were in age gathering of over 14 years and there was nobody in age gathering of not exactly and equivalent to 12 years. It uncovers that lion's share of them were in age gathering of 13 to 14 years. Percentage insightful appropriation of juvenile young ladies as per their religion uncovers that most noteworthy rate (88%) of youthful young ladies had a

place with Hindu and 12% of them had a place with Christian however nobody of them had a place with Muslim or other religion. It uncovers that larger part of them had a place with Hindu. Percentage shrewd dispersion of immature young ladies as indicated by their sort of family demonstrates that most elevated rate 72% of pre-adult young ladies had Nuclear family and 16% of pre-adult young ladies had Joint family where as just 12% of pre-adult young ladies had Extended family. Hence it very well may be translated that lion's share of them were from Nuclear family. Percentage savvy dissemination of pre-adult

young ladies as indicated by their kind of network uncovers that most elevated rate (80%) of them had a place with Urban people group and 20% of them had a place with Rural people group. It uncovers that greater part of them were from Urban Community. Rate insightful appropriation of juvenile young ladies as indicated by their period of menarche uncovers that most astounding rate (72%) of them had got their menarche at the age of 11-12 years though comparative rates (14%) of immature young ladies had got their menarche at 10 years and underneath and 13 years and above. Hence it very well may be translated that greater part of youthful young ladies had got their menarche at the age of 11-12 years. The present investigation had a vastly improved benchmark score. This was because of the low financial class, and training dimension of the families as the investigation in Haryana was led in a country area <sup>[8]</sup>. An examination led in Andhra Pradesh just 24.5% understudies were about monthly cycle before menarche <sup>[9]</sup>. In the present examination, feminine cycle as a pointer of ripeness was inadequately comprehended by the understudies amid gauge (11%), and essentially improved to 51.5%. The wellbeing instruction was powerful in training this specific idea as this yielded a vast contrast between pre-test and post-test. 40.5% of the understudies improved their reactions in the wake of instructing. Dominant part of the understudies thought about the recurrence of monthly cycle even before the instructing and hence, after the wellbeing training, the reactions scarcely improved (from 93% to 96%) with a unimportant  $P = 0.18$ . The purpose behind this could be that the young ladies have just achieved menarche, and thus, they can without much of a stretch reason from their own experience that feminine cycle happens once every month. Just 42.5% knew about menopause at gauge, and the showing improved their insight as 71.5% knew amid post-test. In the present investigation, 100% utilized sterile cushions. In the investigation by Arora <sup>[10]</sup> directed in a provincial piece of Haryana, the pattern was 35% which expanded to 55% post-intercession. The pattern esteems are much lower than the present investigation as the financial status is lower. At the point when interrogated concerning sun drying inners, 73% rehearsed this at first, and amid post-intercession, this expanded to 82.5%. An examination led in Uttarakhand by Singh *et al.* <sup>[11]</sup> just 36.3% rehearsed sun drying. The young ladies dried their inners toward the edge of their homes as they felt bashful and awkward in light of the fact that they didn't need others to see. Indeed, they left their inners in a specific spot until their next period. A similar report in Uttarakhand by Singh *et al.* <sup>[12]</sup> detailed that just 17.1% changed their cushions multiple times each day.

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