

An Experimental Study to Assess the Effectiveness of Video Assisted Teaching Program On Awareness Regarding Early Menarche and Its Effects On Health Among Girls of 10-12 Years Studying at Selected School of Krishna Dist. Andhra Pradesh

Hiranmai Kolaganti¹, Preeti Chouhan²

¹Ph.D. Scholar, JJTU University, Jhunjhunu, Rajasthan

²Ph.D. Guide, JJTU University, Jhunjhunu, Rajasthan

Corresponding Author: HiranmaiKolaganti, Ph.D. Scholar, JJTU University, Jhunjhunu, Rajasthan

E-mail: navyakolaganti@gmail.com

Abstract

Introduction: Teenage pregnancy is defined as a pregnancy occurring between ages 10 and 19 and is associated with increased morbidity and mortality for both mother and child. Several factors have been identified with increased risk of a teenage pregnancy, including incomplete sexual education awareness and increased exposure at a young age.

Materials and methods: Quantitative Research Approach used for this study. For current study Pre-experimental pre-test and post-test research design was used. Setting was Selected school of Krishna district, Andhra Pradesh Population 10-12 years' school girls, 400 School girls used in this study with Purposive Sampling Techniques.

Results: in the Post-test awareness 11.53 +/- 2.121. Paired 't' test was 25.439 and df of 399 and p value were 0.000S which is highly significant.

Conclusion: post-test awareness level of girls regarding early menarche and its effects of health 1.5% were belong to poor score, 85.3% were belong to average score and 13.3% were belong to good score.

Keywords: Experimental Study; Effectiveness; Awareness; Early Menarche

SDES- International Journal of Interdisciplinary Research is a journal of Open access. In this journal, we allow all types of articles to be distributed freely and accessible under the terms of the creative common attribution- non-commercialshare. This allows the authors, readers and all scholars and general community to understand, use and to develop non-commercially work, as long as appropriate credit is given and the newly developed work are licensed with similar terms.

How to cite this article: Kolaganti H, Chouhan P. An experimental study to assess the effectiveness of video assisted teaching program on awareness regarding early menarche and its effects on health among girls of 10-12 years studying at selected school of krishna dist. Andhra Pradesh. SDES-IJIR; 2024; 5-3: 796-801

Submitted: 25-June-2024; **Accepted:** 01-July-2024; **Published:** 10-July-2024

Introduction

The decline in menarcheal age appears to be leveling off in many countries such as Britain, Iceland, Italy, Poland, and Sweden, but continues in Germany and some other countries. Late menarche is associated with a decreased risk of developing breast cancer in later life, a decreased frequency of coronary heart disease, later first pregnancy, and reduction in teen pregnancy. Late menarche may, however, be positively associated with

the risk of developing Alzheimer's disease.²

the age at menarche decreased significantly, as a result of the improvement of the socioeconomic conditions, occurring at 12-13 years. In the present times, in the developed countries, this trend seems to slow down or level off.³

Menarche is a milestone in a woman's life as it denotes the start of reproductive capacity. Aim of this report is to review the recent developments and the current knowledge in the neuroendocrinology of pubertal onset and the factors, genetic and environmental, that influence menarcheal age. We also review the implications of early or late menarcheal age on a young woman's life.⁴

The age at menarche appears to have a significant genetic component. With the advent of genome-wide association studies (GWASs), the genome has been interrogated to find associations between specific loci and age at menarche. It is apparent that multiple genetic loci, epigenetic mechanisms, and environmental factors modulate this biological event crucial for reproductive competence.⁵

- To improve our understanding of menarcheal timing among sexual minority (SM) people, we use a biocultural-evolutionary life history lens that takes into account the stresses of minoritization to examine the relationship between sexual orientation and self-reported age at menarche in a sample of American adults.⁶

The analysis also observed a secular declining trend in menarcheal age among Indian women and a significant variation in the mean age at menarche across birth cohorts. It also highlighted significant socio-economic patterning in menarcheal age among women.⁷

Materials and Methods:

Research Approach: (Quantitative Research Approach)

Research Design: Pre-experimental pre-test and post-test research design

Setting of the Study: Selected school of Krishna district, Andhra Pradesh

Population: 10-12 years' school girls,

Sample and Sample Size: 400 School girls

Sampling Technique: Purposive Sampling Techniques

Part I: Demographic Data

Part II : Structured Knowledge Questionnaire

Part III: Video assisted teaching program on early menarche and its effects on health.

Results: Finding are the following

Table 1: Mean pre-test awareness score of girls regarding early menarche and its effects of health

N=400

S. No.	Group	Mean pre-test awareness score	+/-SD
1.	10-12 year aged girls	8.64	2.011

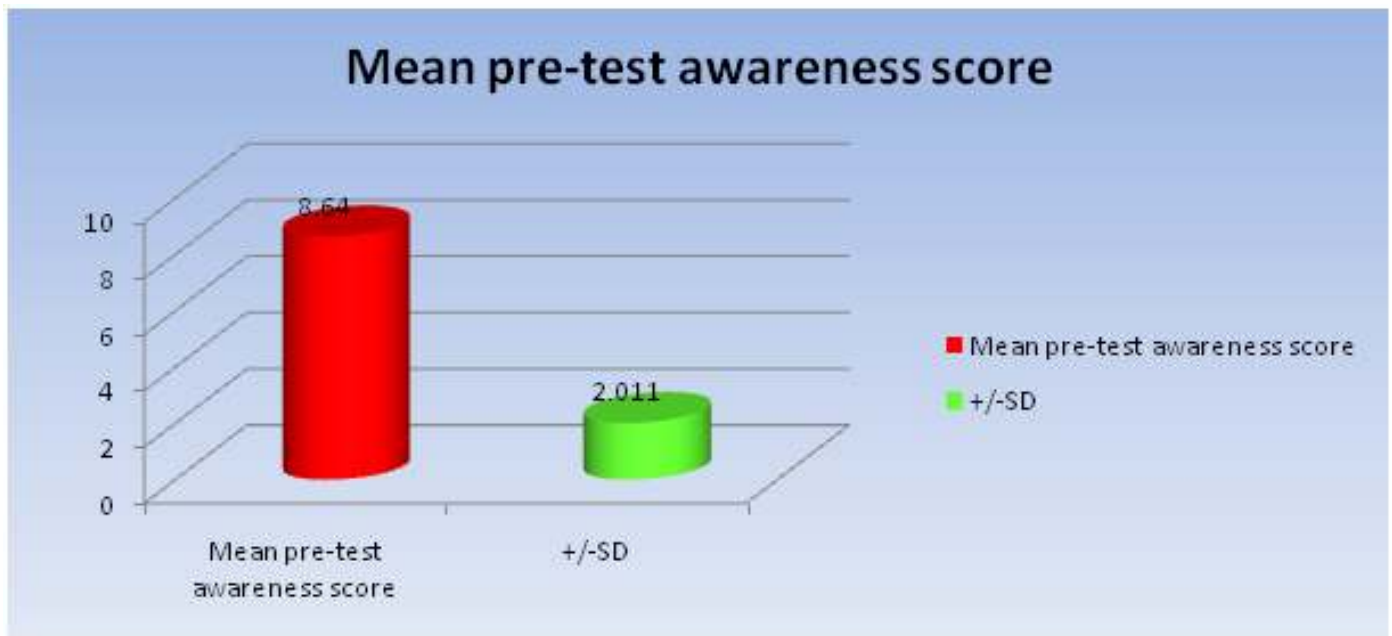


Figure 1 Bar diagram showing the mean pre-test awareness score and standard deviation of girls

Table 2: Pre-test awareness level of girls regarding early menarche and its effects of health

N=400

S. No.	Pre-test Level of Awareness	Frequency	
		(f)	%
1.	Poor	132	33.00
2.	Average	268	67.00
3.	Good	00	00.00

Table 3: Mean post-test awareness score of girls regarding early menarche and its effects of health

N=400

S. No.	Group	Mean post-test awareness score	+/-SD
1.	10-12 year aged girls	11.53	2.121

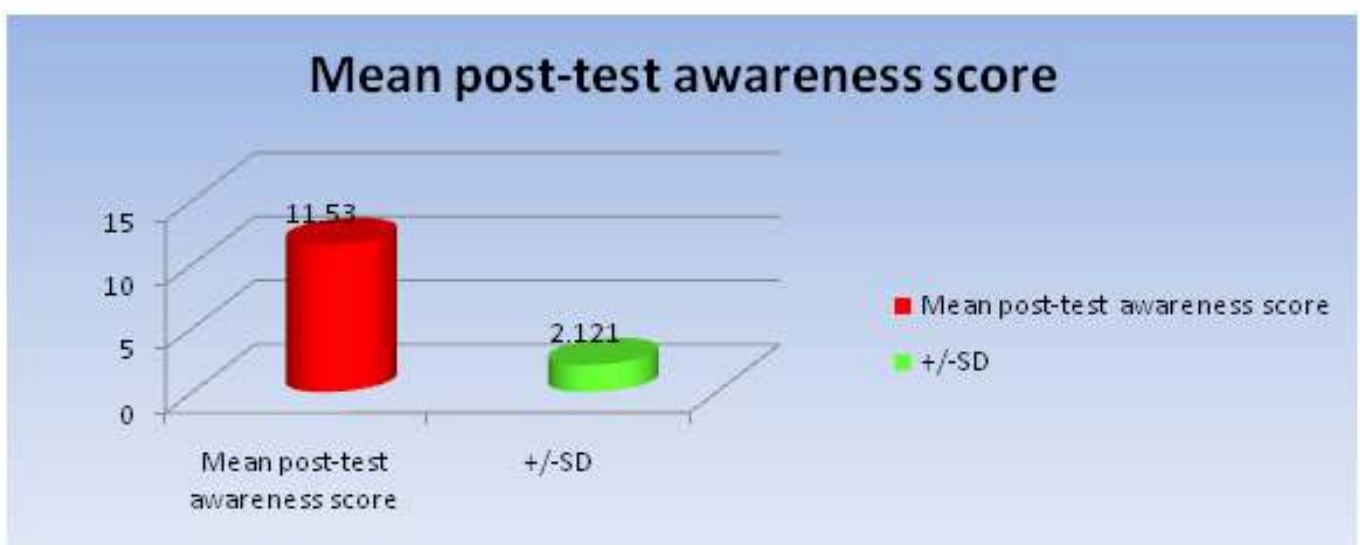


Figure 2 Bar diagram showing the mean post-test awareness score and standard deviation of girls

Table 4: Post-test awareness level of girls regarding early menarche and its effects of health

N=400

S. No.	Post-test Level of Awareness	Frequency	
		(f)	%
1.	Poor	6	1.5
2.	Average	341	85.3
3.	Good	53	13.3

Table 5: Effectiveness of video assisted teaching program on awareness regarding early menarche and its effects of health

N=400

S. No.	Group	Mean +/- SD		d f	p value
1.	Pre-test awareness	8.64 +/- 2.011	25.439	399	0.000 S
2.	Post-test awareness	11.53 +/- 2.121			

S - Significant at p<.

Table 6: Association of post-test awareness level regarding early menarche and its effects on health with demographic variables of girls

N=400

S. No.	Variables		Poor (f)	Average (f)	Good (f)	Chi-square value	d f	p value
1.	Age in years	10-11 Yrs	3	167	34	4.231	2	.121 NS
		11-12 Yrs	3	174	19			
2.	Education	5 th class	4	105	14	5.930	4	0.204 NS
		6 th class	2	114	16			
		7 th class	0	122	23			
3.	House pattern	Kaccha	4	158	27	1.312	2	0.519 NS
		Pakka	2	183	26			
4.	Father education	Illiterate	1	75	15	8.258	6	0.220 NS
		Up to 10 th class	1	92	17			
		Up to 12 th class	4	89	12			
		Above 12 th class	0	85	9			
5.	Mother education	Illiterate	1	75	16	8.592	6	0.198 NS
		Up to 10 th class	1	114	21			
		Up to 12 th class	4	103	12			
		Above 12 th class	0	49	4			

6.	Father occupation	Unemployed/not working	1	59	12	5.717	8	0.679 NS
		Labour/Agriculture	1	96	18			
		Business/self employed	3	85	12			
		Govt. employee	0	62	7			
		Private employee	1	39	4			
7.	Mother occupation	Unemployed/Housewife	1	74	16	10.433	8	0.236 NS
		Labour/Agriculture	1	96	18			
		Business/self employed	3	55	8			
		Govt. employee	0	62	7			
		Private employee	1	54	4			
8.	Family monthly income	Below 15,000	1	58	12	5.417	6	0.492 NS
		Below 25,000	0	79	16			
		25,000-50,000	3	102	13			
		More than 50,000	2	102	12			
9.	Source of information about menstruation	Family members (Mother, Grandmother, sibling)	0	68	14	7.101	8	0.526 NS
		Relatives other than family member	2	63	11			
		Professional health worker	0	66	9			
		Others (teachers, friends, neighbors)	2	76	7			
		Media (TV, newspaper, mobile etc.)	2	68	12			

S - Significant at $p < .05$

NS – Not Significant at $p < .05$

Above table (6), depicts that the Chi-square value computed for the Age in years, Education, House pattern, Father education, Mother education, Father occupation, Mother occupation, Family monthly income, Source of information about menstruation were found statistically (NS) Non-significant which indicate that there is no association between the awareness of menarche and the variables in relation to the video assisted teaching programme.

Conclusions:

Out of-400, 10-12 years' school girl's in selected school effectiveness of video assisted teaching program on awareness regarding early menarche and its effects of health in the Pre-test awareness Mean +/- SD value were .64 +/- 2.011 and in the Post-test awareness 11.53 +/- 2.121. Paired 't' test was 25.439 and df of 399 and p

value were 0.000S which found effective and means that video assisted teaching programme are benefit to school age girls.

Conflict of Interest: No

Financial Support: No

References:

01. Hinojosa-Gonzalez DE, Ramonfaur D, Morales-Palomino KL, Tellez-Giron VC, Latapi X, Insua J, Hernández-Escobar C, Apodaca-Ramos I, Flores-Villalba E. Relationship of age at menarche, coitarche and first gestation: A retrospective cohort analysis. *Eur J ObstetGynecolReprodBiol X*. 2023 Mar 29;18:100189. <https://pubmed.ncbi.nlm.nih.gov/37095764/>
02. Rees M. The age of menarche. *ORGYN*. 1995;(4):2-4. <https://pubmed.ncbi.nlm.nih.gov/12319855/>
03. Anastasios Papadimitriou. The Evolution of the Age at Menarche from Prehistorical to Modern Times. *Journal of Pediatric and Adolescent Gynecology*;Volume 29, Issue 6,2016;Pages 527-530. <https://www.sciencedirect.com/science/article/abs/pii/S1083318815004295>
04. Karapanou, O., Papadimitriou, A. Determinants of menarche. *ReprodBiolEndocrinol* 8, 115 (2010).<https://rbej.biomedcentral.com/articles/10.1186/1477-7827-8-115>
05. Witchel SF. Genetics, Genome-Wide Association Studies, and Menarche. *SeminReprod Med*. 2016 Jul;34(4):205-14. <https://pubmed.ncbi.nlm.nih.gov/27513021/>
06. Gibb JK, Spake L, McKinnon L, Shattuck EC, McKerracher L. Sexual minority status is associated with earlier recalled age of menarche: Evidence from the 2005-2016 National Health and Nutrition Examination Survey. *Am J Hum Biol*. 2023 Feb;35(2):e23825. Sexual minority status is associated with earlier recalled age of menarche: Evidence from the 2005-2016 National Health and Nutrition Examination Survey - PubMed (nih.gov)
07. Meher T, Sahoo H. Secular trend in age at menarche among Indian women. *Sci Rep*. 2024 Mar 5;14(1):5398. Secular trend in age at menarche among Indian women - PubMed (nih.gov)