



A PRE-EXPERIMENTAL STUDY TO EVALUATE THE EFFECTIVENESS OF VIDEO ASSISTED TEACHING PROGRAM REGARDING BIRTH PREPAREDNESS ON KNOWLEDGE, CHILD BIRTH ATTITUDE AND SELF EFFICACY AMONG PRIMIGRAVIDA MOTHERS ATTENDING ANTENATAL OPD AND WARDS OF SELECTED HOSPITALS, AGARTALA

Nursing

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ABSTRACT

Birth preparedness plays a critical role in ensuring positive maternal and neonatal outcomes, especially among primigravida mothers who face childbirth for the first time. This study was conducted to evaluate the effectiveness of a video-assisted teaching program on enhancing knowledge, improving attitude, and promoting self-efficacy regarding birth preparedness among primigravida mothers. A pre-experimental one group pretest-posttest design was used. Thirty primigravida mothers attending antenatal OPD and wards in selected hospitals of Agartala, Tripura were selected through purposive sampling. Tools included structured questionnaires, attitude scales, and self-efficacy scales. Results showed significant improvement in post-test scores of knowledge (mean increased from 19.53 to 29.97), attitude (33.37 to 75.17), and self-efficacy (16.10 to 32.17). The video-assisted teaching program significantly enhanced all three aspects ($p < 0.05$). Thus, structured visual teaching can empower first-time mothers, leading to better birth outcomes.

KEYWORDS

Video-assisted teaching program, birth preparedness, primigravida mothers, knowledge, attitude, self-efficacy

INTRODUCTION

Motherhood is a transformative journey, and the experience of childbirth is both physical and emotional. Among primigravida mothers, lack of prior experience may lead to fear, anxiety, and uncertainty, affecting their readiness and outcome of delivery. Birth preparedness is essential for managing complications and ensuring the safe delivery of the baby. It involves educating mothers about antenatal care, recognizing danger signs, preparing for delivery, and postnatal care.

Despite ongoing maternal health programs, knowledge gaps, poor attitudes, and low self-efficacy prevail, especially among first-time mothers. WHO recommends a personalized birth plan, and in India, initiatives like the Janani Suraksha Yojana aim to encourage institutional deliveries. However, awareness and preparedness remain inadequate.

In this context, a video-assisted teaching program offers a visual, engaging medium to improve understanding and retention. This study aimed to measure its effectiveness in enhancing birth preparedness among primigravida mothers in selected hospitals in Agartala, Tripura.

Objectives Of The Study:

1. To assess the pre-test & Posttest level of knowledge, child birth attitude and self efficacy towards birth preparedness among primigravida mothers attending antenatal OPD and wards of selected Hospitals, Agartala, Tripura.
2. To evaluate the effectiveness of video assisted teaching program regarding birth preparedness on knowledge, child birth attitude and self-efficacy among primigravida mothers attending antenatal OPD and wards of selected Hospitals, Agartala, Tripura.
3. To find out the association between pre-test scores of knowledge, child birth attitude and self-efficacy among primigravida mothers with their selected socio-demographic variables.

Hypothesis:

H1: The mean post-test scores of knowledge child birth attitude and self-efficacy scores of primigravida mothers related to birth preparedness is significantly higher than their mean pre-test scores at 0.05 level of significance.

H2: There is significant association between the scores of pre-test knowledge, child birth attitude and self-efficacy among primigravida mothers with their selected socio-demographic variables at 0.05 level of significance.

Research Methodology:

Research Approach:

This study adopted a quantitative evaluative research approach..

Research Design: The study employed a pre-experimental one-group

pre-test post-test design.

Setting Of The Study: The research was conducted in Tripura Medical College and Dr. BRAM Teaching Hospital and IGM Hospital, located in Agartala, West Tripura.

Population: The population included primigravida mothers attending antenatal outpatient departments and admitted in maternity wards.

Target Population: All primigravida mothers attending antenatal OPDs and wards in selected hospitals of Agartala, Tripura.

Sample And Sample Size: The sample consisted of 30 primigravida mothers. The sample size was determined considering feasibility, accessibility, and available time frame for the study, allowing for meaningful analysis of the intervention's effectiveness.

Sampling Technique: A non-probability purposive sampling technique was employed to select participants who met specific inclusion criteria and were willing to participate in the study.

Criteria For Sample Selection

Inclusion Criteria:

- Primigravida mothers in 1st, 2nd, or 3rd trimester.
- Mothers able to read and understand Bengali, English, or Kokborok.
- Willing to participate and provide informed consent.

Exclusion Criteria:

- Mothers diagnosed with high-risk pregnancies.
- Unwilling or unable to participate in the study.

Development & Description Of Tools:

- **Section A:** Demographic proforma with 11 items.
- **Section B:** Structured knowledge questionnaire on birth preparedness (36 items).
- **Section C:** 5-point Attitude scale to assess childbirth attitude (20 items).
- **Section D:** Modified General Self-Efficacy Scale adapted from Schwarzer (10 items).

Pilot Study: A pilot study was conducted from April to 20th April 2022 at Bishalgarh Sub-Divisional Hospital, Sepahijala, involving 10 participants. It validated the content clarity, reliability, and feasibility of the tools and procedure. Based on the pilot findings, necessary modifications were made before the main study.

Ethical Considerations: Ethical approval was obtained from the Institutional Ethical Committee of Tripura College of Nursing. Official permissions were secured from hospital authorities. Written informed consent was obtained from all participants. Confidentiality, privacy, and voluntary participation were maintained throughout the study.

Procedure For Data Collection: Data collection took place in May 2022. During the first contact, participants were briefed about the study's purpose and invited to participate. After obtaining consent, the pre-test was conducted using the structured tools.

The video-assisted teaching program—designed in local language—was then administered, covering antenatal, intranatal, and postnatal components of birth preparedness. After a gap of 7 days, a post-test was conducted using the same tools.

Development And Distribution Of Educational Material:

The video-assisted teaching program served as the educational intervention. Developed in simple, culturally appropriate language, the video included visuals and narration about nutrition, hygiene, antenatal visits, labour process, postpartum care, and newborn safety.

The content was reviewed by experts for accuracy and clarity. The same video was made accessible in OPDs and wards to maximize its impact and encourage ongoing learning.

Study Results:

Demographic Findings:

The demographic analysis revealed that the majority of the primigravida mothers (60%) were aged between 20–25 years, with most residing in nuclear families (66%) and predominantly belonging to Hindu households. A significant proportion (70%) were in their third trimester, and 56% were engaged in daily wage labor, indicating a lower socio-economic status. Educationally, a considerable number had only secondary-level education, and 40% had attended more than three antenatal checkups. Additionally, 85% of the participants had received at least one tetanus diphtheria (TD) injection, while only 26.6% reported consistent iron-folic acid (IFA) tablet consumption, highlighting gaps in antenatal compliance.

Table 1: Distribution of Primigravida Mothers According to Level of Knowledge, Attitude and Self efficacy Scores Regarding Birth Preparedness (N = 30)

Level of Knowledge	Pretest		Posttest	
		%		%
Adequate Knowledge	1	3.33%	27	90%
Moderate Knowledge	12	40%	3	10%
Inadequate Knowledge	17	56.67%	0	0%
Level of Attitude				
Favorable	2	7%	26	87%
Mostly Favorable	10	33%	3	10%
Unfavorable	18	60%	1	3%
Level of Self-Efficacy				
Greater the individual self efficacy belief	10	33%	24	80%
Lesser the individual self-efficacy belief	20	67%	06	20%

Table 1 presents the frequency and percentage distribution of primigravida mothers based on their level of knowledge, attitude, and self-efficacy scores regarding birth preparedness, before and after the video-assisted teaching program.

In the knowledge domain, a significant improvement was observed: only 3.33% of mothers had adequate knowledge in the pre-test, which increased to 90% in the post-test. Simultaneously, the percentage of mothers with inadequate knowledge decreased from 56.67% to 0%, indicating the effectiveness of the intervention.

In terms of attitude, the number of mothers with a favourable attitude increased from 7% in the pre-test to 87% in the post-test, while those with an unfavourable attitude reduced from 60% to 3%, showing a strong positive shift in mindset after the educational session.

Regarding self-efficacy, the proportion of mothers with greater individual self-efficacy rose from 33% in the pre-test to 80% in the post-test, while those with lesser self-efficacy dropped from 67% to 20%.

Overall, the results clearly indicate that the video-assisted teaching program was effective in enhancing the knowledge, promoting a positive attitude, and increasing the self-confidence of primigravida mothers related to birth preparedness.



Table 2: Comparison of Pre-Test and Post-Test Knowledge and Attitude Scores Regarding Birth Preparedness Among Primigravida Mothers.

Parameter	Group	Mean	Mean Difference	t-value
Knowledge Score	Pre-test	19.53	10.44	9.98*
	Post-test	29.97		
Attitude Score	Pre-test	33.37	41.8	16.58*
	Post-test	75.17		
Self Efficacy	Pre-test	16.10	16.07	14.46*
	Post-test	32.17		

*Significant at 0.05 level

Table 2 presents the comparison of **pre-test and post-test knowledge and attitude scores** of primigravida mothers regarding birth preparedness using a **paired t-test**. The **mean knowledge score** increased significantly from **19.53 (± 5.67)** in the pre-test to **29.97 (± 4.47)** in the post-test, with a **mean difference of 10.44**. The calculated **t-value of 9.98** exceeds the **tabulated value of 2.05** at **df = 29**, indicating a statistically significant improvement (**p < 0.05**) in knowledge after the video-assisted teaching program.

Similarly, the **attitude score** improved markedly, with the **mean pre-test score of 33.37 (± 7.16)** rising to **75.17 (± 7.11)** in the post-test. The **mean difference of 41.80** and the calculated **t-value of 16.58**, which is also higher than the tabulated value, confirm that this difference is statistically significant at the 0.05 level.

These results strongly support the **effectiveness of the video-assisted teaching program** in enhancing both the knowledge and attitude of primigravida mothers towards birth preparedness.

Description of Chi-Square Test Results for Association Between Demographic Variables and Knowledge, Attitude, and Self-Efficacy

The chi-square test was used to determine the association between selected socio-demographic variables (such as age, education, occupation, trimester, family type, antenatal visits, and IFA intake) and the pre-test scores of knowledge, attitude, and self-efficacy among primigravida mothers regarding birth preparedness.

For knowledge, the test revealed no statistically significant association between the pre-test knowledge scores and any of the selected demographic variables. This suggests that the knowledge level prior to the intervention was uniformly inadequate across different demographic groups.

For attitude, a statistically significant association was found between current trimester and attitude score (**p < 0.05**), indicating that mothers in later stages of pregnancy had a more favourable attitude towards birth preparedness. No significant association was observed between attitude and other variables such as age, education, or occupation.

For self-efficacy, the test results showed no significant association with any socio-demographic variable. This implies that individual confidence levels before the intervention were not influenced by factors such as education level, type of family, or antenatal **check-up frequency**.

CONCLUSION:

The study concluded that the video-assisted teaching program was highly effective in enhancing knowledge, attitude, and self-efficacy regarding birth preparedness among primigravida mothers. Significant improvements were observed in post-test scores across all three areas, confirming the impact of the intervention. The program proved to be a valuable educational tool, especially for first-time mothers, helping

them to feel more informed, confident, and prepared for childbirth. Integrating such visual teaching methods into routine antenatal care is recommended to promote safer and more positive maternal outcomes.

REFERENCES:

1. Asrat T, Baraki N, Assefa N, Alemkere G. Birth preparedness among women who gave birth in the last twelve months in Jardega Jarte district, Western Ethiopia. *J Pregnancy*. 2019;6473725.
2. Regmi R. Birthpreparedness [Internet]. Slideshare.net. [cited 2021 Jun 4]. Available from: <https://www.slideshare.net/rashmiregmi/birthpreparedness>
3. Acharya AS, Kaur R, Prasuna JG, Rasheed N. Making pregnancy safer-birth preparedness and complication readiness study among antenatal women attendees of a primary health center, delhi. *Indian J Community Med*. 2015;40(2):127-34.
4. Samuel, O., & Ronnah, A. (2019). Knowledge and attitude towards birth preparedness among Prime Gravid mothers attending Antenatal Clinic at bwindi community hospital. *Journal of Health, Medicine and Nursing*, 58(0), 10-23. <https://www.iiste.org/Journals/index.php/JHMN/article/view/46173/47670>
5. Effectiveness of video assisted teaching on knowledge and attitude regarding childbirth preparation among primi mothers in selected hospitals at dindigul district. (n.d.). Repository-Tnmgrmu.Ac.In. Retrieved May 14, 2022, from <http://www.repository-tnmgrmu.ac.in/1653/1/3003233bendangnaro.pdf>
6. Maternal mortality [Internet]. Who.int. [cited 2021 Jun 4]. Available from: <https://www.who.int/news-room/fact-sheets/detail/maternal-mortality>