

Effectiveness of Video Assisted Teaching on Knowledge Regarding Antenatal Care Among Primigravidae Attending Antenatal OPD's of Vani Vilas Hospital, Bengaluru

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Abstract: *Antenatal care (ANC) is a cornerstone of maternal health services, vital in reducing maternal and neonatal morbidity and mortality. This study investigates the effectiveness of Video Assisted Teaching (VAT) on knowledge enhancement regarding antenatal care among primigravidae at Vani Vilas Hospital, Bengaluru. A pre-experimental one group pre-test post-test design was implemented among 60 primigravidae using purposive sampling. A structured interview schedule was administered before and after a VAT intervention. Results demonstrated a statistically significant improvement in knowledge scores post intervention. These findings suggest that VAT is an effective method for antenatal education, especially among first-time mothers.*

Keywords: Antenatal Care, Video Assisted Teaching, Primigravidae, Nursing Education, Maternal Health

1. Introduction

Antenatal care (ANC) refers to the care provided by skilled health-care professionals to pregnant women to ensure the best health conditions for both mother and baby during pregnancy. It includes risk identification, prevention and management of pregnancy-related or concurrent diseases, and health education and promotion. In India, maternal mortality remains a public health challenge. According to the Sample Registration System (SRS) 2020 report, India's maternal mortality ratio stands at 103 per 100,000 live births.

Primigravidae are women experiencing pregnancy for the first time. They often lack knowledge about the physiological, emotional, and medical aspects of pregnancy. Inadequate knowledge can lead to poor compliance with antenatal visits, misunderstanding of warning signs, and suboptimal birth preparedness. Health education, particularly through engaging and interactive methods, plays a crucial role in empowering them.

Video Assisted Teaching (VAT) is an emerging educational strategy in nursing and health sciences. It utilizes audio-visual elements to convey information effectively. Studies have shown that VAT enhances retention and understanding compared to traditional methods. In the context of antenatal care, VAT may offer consistent, comprehensive, and repeatable instruction.

This study aims to evaluate the effectiveness of VAT on improving knowledge regarding antenatal care among primigravidae attending the OPD at Vani Vilas Hospital, a

tertiary care hospital in Bengaluru. The outcomes of this research may provide insights into incorporating multimedia tools in routine antenatal education programs.

2. Methodology

An evaluative approach using a pre-experimental one-group pre-test post-test design was adopted for this study. The research was conducted at the Antenatal OPD of Vani Vilas Hospital, Bengaluru. The target population comprised primigravidae attending the OPD during the study period. A total of 60 participants were selected through non-probability purposive sampling technique.

Inclusion criteria included primigravidae aged between 18 and 35 years, willing to participate, and able to understand Kannada or English. Exclusion criteria included those with complications or pre-existing conditions requiring specialized care.

A structured interview schedule was developed based on literature review and expert validation. It comprised demographic variables and 30 multiple-choice questions related to antenatal care, including topics such as nutrition, personal hygiene, warning signs of complications, antenatal checkups, immunizations, and birth preparedness. The reliability of the tool was assessed using test-retest method and found to be 0.87, indicating high reliability.

After administering the pre-test, a VAT program was conducted using a 30-minute video module prepared in Kannada. The video included visuals, narration, and case-based explanations

of antenatal care principles. Post-test was conducted on the 7th day using the same questionnaire. Data were analyzed using SPSS software. Descriptive statistics were used to describe demographics and knowledge scores, and paired t-test was applied to determine the effectiveness of the intervention.

3. Results

The study included 60 primigravidae, most of whom were in the age group of 21–25 years, educated up to secondary level, and belonged to nuclear families. Pre-test results showed that a majority of participants had inadequate knowledge regarding antenatal care.

- **Mean Pre-Test Score:** 12.06 ± 3.7
- **Mean Post-Test Score:** 25.55 ± 2.4
- **Paired t-value:** 23.12 ($p < 0.001$)

This indicates a statistically significant improvement in knowledge after the video-assisted teaching intervention.

Table 1: Comparison of Pre-Test and Post-Test Knowledge Scores

Test Type	Mean	SD	t-value	p-value
Pre-Test vs Post-Test	12.06 vs 25.55	3.7 vs 2.4	23.12	< 0.001

Demographic analysis also indicated that knowledge scores were significantly associated with participants' education level and area of residence.

4. Discussion

The findings of the study support the hypothesis that Video Assisted Teaching significantly improves knowledge regarding antenatal care among primigravidae. The substantial increase in post-test scores indicates that video-based health education is an effective and practical tool in clinical settings.

This result is supported by Kamble (2021), who found that VAT led to improved knowledge retention among expectant mothers. Patil et al. (2020) also demonstrated that interactive videos were more effective than traditional lectures. Additionally, WHO (2022) emphasizes the importance of using multimedia tools in patient education, particularly in low-literacy settings.

The demographic analysis revealed that residence and educational qualification had a significant influence on baseline knowledge scores. This emphasizes the need for tailored health education strategies based on the audience profile.

5. Conclusion

The study concludes that Video Assisted Teaching is highly effective in improving knowledge regarding antenatal care among primigravidae. It is recommended that healthcare facilities incorporate VAT modules into regular prenatal education to enhance maternal outcomes and preparedness. The findings also underline the need for innovative, engaging, and

language-appropriate education tools in maternal health programs.

6. Recommendations

- VAT programs should be integrated into regular antenatal counseling sessions.
- Community health workers and nurses should be trained to deliver video-based health education.
- Further research should evaluate long-term retention of knowledge and behavior change post-VAT.
- Similar interventions should be tested among multigravidae and high-risk pregnancies.

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