

Effectiveness of Video-assisted Teaching on Anxiety Related to Labor Process and Preparation for Labor Among the Primigravida Mothers Attending Antenatal OPD at GMCH-32 Chandigarh

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Abstract

Aims and background: A randomized control trial to assess the effectiveness of video-assisted teaching on anxiety related to labor process and preparation for labor among primigravida mothers attending antenatal OPD of GMCH-32, Chandigarh, was carried out in full compliance with ethical standards laid down by the Research and Ethical Committee of GMCH-32, Chandigarh. **Method:** A systematic random sampling technique was used to select 80 subjects, 40 each in control and experimental group, who were attending the antenatal OPD of GMCH-32, Chandigarh. **Results:** The study revealed that primigravida mothers of experimental group have lesser anxiety than primigravida mothers of control group. **Conclusion:** It is concluded that video-assisted teaching is an effective intervention for the reduction of anxiety among primigravida mother.

Keywords: Video assisted teaching, pregnancy, anxiety, labor process, primigravida mother, antenatal period, randomization

INTRODUCTION

Anxiety is an emotional state characterized by feelings of fear, tension, and an increase in autonomic nervous activity [1]. Pregnancy is a crucial time of an emotional, psychological and physical wellbeing in a female's life. Anxiety and depression are inseparable and may also lead to adverse outcomes during antenatal period [2].

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Physiological manifestations experienced by pregnant women when consulting a general practitioner encompass symptoms such as nausea, vomiting, pelvic pain, and back pain. These symptoms may occur concurrently, potentially inducing anxiety in first-time pregnant women. Increased anxiety during pregnancy is associated with heightened occurrences of nausea and vomiting [3]. Fear, stress and anxiety significantly affect the progress of child birth. During childbirth there may be some signs that the mother will not survive the birth, and she will begin to panic and take stress about the event. If the mother has significant stress and anxiety during antenatal period mainly in the month before the delivery, it is more likely to intensify during labor and more likely

that the mother may require medical or surgical intervention [4]. Video assisted teaching is a novel method of providing information to many subjects at a single time. The main advantage of video assisted method is to reduce the work load of the educator and provide quality information at the same time [5]. A first-time pregnant mother typically experiences joy and heightened curiosity regarding personal changes and fetal development. However, concomitantly, there is also a presence of anxiety in pregnant women. These alterations lead to psychological and emotional instability, giving rise to persistent concerns throughout the pregnancy. If anxiety is not addressed effectively, it can adversely affect the mother's quality of life and the cognitive development of her child [6].

AIMS AND OBJECTIVES

1. To assess and compare the anxiety level among primigravida mothers in experimental and control group.
2. To find association of anxiety related to labor process and preparation for labor with selected sociodemographic variables among primigravida mothers in experimental and control group.

MATERIAL AND METHODS

A systematic random sampling technique was used to select 80 subjects, 40 each in control and experimental group, who were attending the antenatal OPD of GMCH-32, Chandigarh. After performing comprehensive literature review, we came across various tools to assess the anxiety level of the primigravida mothers, from which the most appropriate tool according to our study was selected, i.e. Pregnancy related Anxiety Scale (PrAS) with reliability 0.908 for the study and permission was obtained for the same. The tool has two sections: section A (sociodemographic data) and section B (a standardized tool, namely PrAS).

Description of Intervention

An educative video on labor process and preparation of labor was developed for one-to-one teaching among primigravida mothers for the reduction of anxiety. Video was prepared with the guidance and supervision of experts and by referring previous interventions, textbooks and journals. A 11-min video was recorded by the researchers that was divided into three sections (Table 1).

Process of Data Collection

1. Formal consent was obtained from the relevant authority.
2. Alternate days were dedicated for data collection from experimental and control group. It was done in order to prevent data contamination.
3. Investigators introduce themselves and described the objectives and need for the study to the subjects.
4. Study participants provided informed written consent.
5. Good interpersonal relationship was developed to gain their trust.
6. The sample were educated regarding preparation of bag for the mother and newborn, stages and preparation for labor through the video intervention of 11.09 min one-to-one basis.
7. Anxiety was assessed using pregnancy related anxiety scale after an hour of video assisted teaching.
8. After completion of data collection process, data coding was done SPSS software.
9. Analysis and interpretation of the data was done.

Table 1. Description of the Video Intervention.

S.N.	Section	Duration
1	Preparation of bag for the primigravida mother	01:47 min
2	Preparation of bag for the newborn	02:26 min
3	Stages and preparation for labor: <ul style="list-style-type: none"> • True vs. false labor pain • Stage 1 of labor • Stage 2 of labor • Stage 3 of labor • Post natal care of newborn 	06:54 min

Plan for Analysis

The data analysis and interpretation were done by calculating mean, standard deviation, percentage and association using descriptive and inferential statistics by SPSS software.

Ethical Consideration

1. Permission was taken from the research and ethics committee.
2. The information obtained from the participants was utilized for the research project and revealed to only researchers and supervisors.
3. Study participants were free to participate and withdraw from the research at any time without facing any penalty or loss of benefits to which they would otherwise be entitled. No questioning was conducted if a participant decided to withdraw from the study.
4. Participants knew the purpose, benefits and risks behind the study.
5. Physical, social, psychological or other types of harm were kept to an absolute minimum.
6. The work was free of misconduct and every result was represented accurately.

RESULTS

Table 2 depicts that mean anxiety score of control group is 73 ± 17.98 . While for the experimental group, mean score has a value of 46.05 ± 10.83 . The statistical analysis revealed a significant difference between the mean post-test scores of the experimental group and the control group at $p < 0.000$. Therefore, it can be inferred that video-assisted teaching is effective in reducing anxiety.

Table 3 depicts the relation of mentioned sociodemographic variables with the level of anxiety and the result found out was not significant for each variable. The association between marital status and level of anxiety was not calculated as this variable is constant for sample for experimental group.

Table 2. Comparison of anxiety scores among subjects between control and experimental group.

Group	Mean \pm SD	t-value	p-value
Control	73 ± 17.98	8.118	0.000***
Experimental	46.05 ± 10.83		

*** = Significant.

Table 3. Association between sociodemographic variables and level of anxiety in experimental group.

Sociodemographic	Variable	Level of anxiety		Chi value	df	p-value	Significance
		Low	High				
Age (in years)	<20	0	0	48.121	46	0.387	Not significant
	20–25	12	1				
	25–30	20	0				
	>30	7	0				
Marital status	Married	39	1	-	-	-	Not significant
	Unmarried	0	0				
	Divorced	0	0				
	Widowed	0	0				
Duration of marriage	<1 year	12	0	68.889	69	0.481	Not significant
	1–2 years	11	1				
	2–3 years	4	0				
	>3 years	12	0				
Residency	Rural	11	0	19.937	22	0.646	Not significant
	Urban	28	1				
	Slums	0	0				

Participant's education level	Illiterate	1	0	77.146	92	0.867	Not significant
	Primary	1	0				
	Secondary	17	0				
	Institute	12	1				
	Post-graduate	8	0				
Husband's education level	Illiterate	1	0	47.762	69	0.976	Not significant
	Primary	0	0				
	Secondary	20	0				
	Institution	13	1				
	Post-graduate	5	0				
Occupation	Student	1	0	38.148	46	0.788	Not significant
	Government employee	0	0				
	Private sector worker	3	0				
	Housewife	35	1				
Type of family	Small/nuclear	27	1	40.810	46	0.689	Not significant
	Expanded	5	0				
	Large	7	0				
Religion	Hindu	29	1	36.111	69	1.000	Not significant
	Muslim	0	0				
	Sikh	8	0				
	Christian	1	0				
	Others	1	0				
Gestational weeks	<33 weeks	6	0	80.786	69	0.157	Not significant
	33–37 weeks	13	0				
	37–42 weeks	19	1				
	>42 weeks	1	0				
Nature of pregnancy	Planned	25	0	21.511	23	0.550	Not significant
	Unplanned	14	1				

DISCUSSION

The statistical information indicated a noteworthy distinction in anxiety levels between the control and experimental groups, attributed to the implementation of video-assisted teaching. After calculating level of anxiety by using PrAS, mean and standard deviation of the score of control and experimental group was 73 ± 7.98 and 46 ± 10.83 respectively. Association of socio-demographic data with level of anxiety was assessed. There was no significant association between any of the sociodemographic variable with the level of anxiety, as the value of significance was not less than 0.05 for any variable [7–11].

CONCLUSION

The purpose of this research study was to assess the effectiveness of video-assisted teaching on anxiety related to labor process and preparation of labor among 80 primigravida mothers attending antenatal OPD at Government Medical College and Hospital, Chandigarh. According to the findings of the study, video-assisted teaching is an effective method to reduce anxiety among primigravida mother as it is shown by the significant difference in level of anxiety among control and experimental group.

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