

Effectiveness of Video Clip Intervention Related to Birthing Process on Behavioural Responses During First Stage of Labour among Primigravid Mothers

Blaze Asheetha Maria Rosario

Abstract:

An Evaluative research approach, using a quasi-experimental, time series, control group post-test only design, was adopted. Data was collected from 30 consecutively selected primigravid women using a Structured Observational Checklist. The data gathered was analysed and interpreted using descriptive and inferential statistics. The findings revealed that video clip intervention related to birthing process is effective in enhancing the behaviour of primigravid women during first stage of labour.

Women have been giving birth since the dawn of time. Childbirth is a normal physiological process which requires no special skill or energy. Remind women in labour that millions of strong women have given birth to babies naturally and peacefully. They will then simply rest in the strength of all those women who have delivered before them. This suggestion merely reminds of what they already know deep in their heart (i.e.) childbirth is meant to be a beautiful sacred experience. Indian women for long, stood as examples to women worldwide for giving birth naturally and easily.

Videos can provide excellent supplements serving as instant reminders that childbirth is no supernatural process. The media depicts labour with screaming, wriggling of feet, etc. Most of the less privileged population believes in what they watch and try imitating the same without bothering the actual fact. Thus by imitating, women tend to get exhausted and loose energy. Like the saying goes "A thorn needs another thorn to be removed", the researcher opted video clip intervention related to birthing process to help women gain confidence that they can give birth without havoc and conserve energy for a right purpose when it is actually required during the later stages of labour.

In addition, the researcher during her clinical experience witnessed that many women routinely ask, "But will I be able to do it?" as though natural, comfortable birthing requires some special talent they lack!

Operational definitions

Video clip Intervention: refers to pre-recorded scenes of Normal Vaginal Delivery collected and edited by the researcher, shown to primigravid women who have mild labour pain (less than 3 contractions in 30 minutes lasting for 10-30 seconds), less than 3 cm cervical dilatation with 100 percent cervical effacement (consent from the source taken).

Behavioural Response: refers to positive or negative responses of the mother as per the 70 items in the Structured Observational Checklist such as grinding of teeth, loud cry, active breathing, following directions, clenching of fists, writhing with contractions etc.

Objectives

The objectives of the study were :

- ❑ To determine the effectiveness of video clip intervention on behavioural responses of primigravid women in both the groups.
- ❑ To associate the behavioural response scores and baseline characteristics of primigravid women.

Hypotheses

At 0.05 level of significance

H₁: There is a statistically significant difference in the behavioural response scores of primigravid women between two groups as measured using Structured Observational Checklist.

H₂: There is a statistically significant association between the behavioral response scores of primigravid women and baseline characteristics.

Conceptual Framework

The study adopted a conceptual framework based on

Assistant Professor, St Philomena's College of Nursing, Campbell Road, Viveknagar PO, Bangalore - 560047

Review of Literature

A descriptive-cum-correlational study was conducted to describe first time mothers' satisfaction with labour and childbirth information received in Malawi. The sample consisted of 150 first time mothers who had given birth to live, full term infants within eight weeks of the postpartum period. The findings analysed quantitatively indicated that first time mothers were not satisfied with the amount of labour and childbirth information given in the hospital settings and that the information given in the community was culturally based and mainly comprised superstitious beliefs and taboos.

A descriptive study was conducted to assess the nursing support and behavioural responses of the women in labour in a selected hospital at Mangalore. A sample of 30 parturient women were selected using convenient sampling technique. The investigator used two different structured observation checklists to assess the nursing support and behavioural response of women. The study revealed that the nursing support to the women in labour was satisfactory (70%) and behavioural responses of the women after receiving the nursing support was satisfactory. The final result showed that there was a positive correlation between nursing support and behavioural responses ($r=0.71$, $p<0.05$).

Thus above studies depict that, there exists a need to provide an instant reinforcement, so the researcher used video-clips to ensure every woman's childbirth is a positive and pleasant experience.

Methodology

An evaluative approach with quasi-experimental time-series, control group post-test only design, was adopted for the study. Non-probability consecutive sampling technique was used to select 30 primigravid women (15 each in control and experimental group) admitted in a selected hospital, Udupi. The study included primigravid women between 38-40 weeks and primigravid women during their first stage of labour. High risk pregnant women were excluded.

Data collection tool: The finally validated tool (Karl Pearson's correlation coefficient=0.822) consisted of Section A: Baseline Characteristics Profile and Section B: Structured Observational checklist consisting of 70 items distributed under three distinct areas: (a)

Behaviour during contractions (b) Behaviour in between contractions and (c) Manifestation of participation. The maximum possible score was 350.

Data collection procedure: The researcher obtained ethical clearance from the institutional ethical committee and permission was sought from the authorities of the concerned hospital authorities. Informed consent was obtained from the subjects under study. The video clips related to the birthing process were shown individually to the primigravid women in the experimental group during their first stage of labour. The role of video clip as an instant re-enforcement was made known to them. The behavioural responses of the primigravid women in the experimental and control group were observed using the Structured Observational Checklist five times with a 75 minute interval in-between.

Results and Discussion

Most of the primigravid women were between 21 and 25 years of age (53.3% in experimental and 66.6% in control group), had high school education (46.7% in experimental and 40% in control group), were home makers (60% in experimental and 80% in control group), were Hindu (53.3% in experimental and 66.7% in the control group), had monthly income of Rs. 5001-7000 (40% in experimental and 53.3% in control group), were from nuclear families (53.3% in experimental group), belonged to joint family (60% in control group), had spontaneous labour (46.7% in experimental group and 80% in control group) and all (100%) the study subjects received previous information regarding labour. Table 1 shows area-wise behavioural response scores of women in the two groups.

Table 1: Area-wise behavioural response scores of primigravid women in the first stage of labour in the experimental and control group (n=30)

Area	Group	Mean	Standard deviation	Mean %	Mean difference	't' value
During uterine contractions	Experimental group	127.27	7.056	84.84	55.93	24.34*
	Control group	71.33	5.420	47.56		
Between contractions	Experimental group	70.53	2.997	88.17	42.93	39.24*
	Control group	27.60	2.995	34.50		
Manifestation of participation	Experimental group	96.27	3.575	80.22	52.06	32.61*
	Control group	44.20	5.046	36.83		

*Significant at 0.05 level, $p>0.05$

Table 2: Overall behavioural response scores of primigravid women in the first stage of labour in experimental and control group (n=30)

Group	Maximum score	Mean	Standard deviation	Mean %	Mean difference	't' value
Experimental group	350	294.07	8.163	84.02	150.93	51.68*
Control group		143.13	7.827	40.90		

*Significant at 0.05 level, $p>0.05$

The overall mean behavioural scores were 143.13 and 294.07 (maximum score-350) in control group and experimental group respectively. The area-wise unpaired 't' test computed showed statistically significant difference between the two groups (Table 2): i.e. Behavior during contraction ($t_{28}=24.34$), Behavior in-between contractions ($t_{28}=39.24$) and manifestation of participation ($t_{28}=32.61$). The overall computed $t_{28}=51.68$ was found to be greater than the table value (Table 2).

Fischer exact test computed showed no association between the baseline characteristics and the behavioural scores in both the groups. An outstanding difference was seen with regard to behavioural responses during uterine contractions where almost all the women of the experimental group (100%) did not cry and did not roll on bed.

Thus the statistically computed results suggested that video clip intervention related to birthing process is effective in improving the behavioural responses of primigravid women in labour

The findings of the study are consistent with those of a quasi-experimental control group designed study which was conducted to assess the effectiveness of antenatal exercises on behavioural responses during first stage of labour and outcome of labour in a selected hospital at Karkala. The results showed that there was significant difference in behavioural responses, between the experimental (planned teaching strategy) and control groups. The study concluded that the planned teaching strategy was effective. The present study used the video clips regarding birthing process as an "intervention" than a "teaching strategy".

Nursing Implications

Nursing Education: It is right and appropriate to inculcate novel, non-pharmacologic measures like video clip intervention in nursing curriculum. Emphasis on therapeutic patient communication and patient education systems must be laid down from the foundational years of novice nurses. The midwifery students must understand that labour is a normal physiological process and convey the same to the patients they encounter in the practical settings. The role of videos as an effective health educational aid must be made known to the students along with routine patient care.

Nursing Practice: Nurses know deep in heart that labour is a natural process which does not require any special skill. As a mother feeds her baby showing surroundings, a nurse can show other women labouring through a video clip, which would help women to gather guts to deliver in a much more satisfied way.

Nursing Research: Those inclined to nursing research

need to relate the present health care system and its status in the nursing profession. The video clip intervention, relatively a natural process requiring no foreign skill, can be subjected to numerous research techniques to make it a non-pharmacologic, non-invasive, cost effective measure in improving adaptations of childbearing women.

Nursing Administration: In today's modern world many old things remain unnoticed and undervalued. One such measure that remained undervalued is the strength of millions of women who gave birth normally. Nurse administrators should bring new changes in the profession which shall be welcome for the values it presents. The nurse leaders can encourage practical nurses to use available media for the goodness of patients.

Limitations: The study was limited to 30 primigravid women only which limits the generalisation of the study findings.

Recommendations

A similar study can be conducted on larger sample or on multiparous women to know differences of pain intensity. A comparative study could be conducted incorporating non-pharmacologic measures. A descriptive study can be conducted to determine the knowledge and attitude of healthcare professionals towards complementary therapies in labour.

Conclusion

Visualising the video clip related to birthing process during the commencing minutes of labour gives every woman a remembrance that all women in the world give birth the same way. The study proved video clip intervention to be effective.

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