

A Study to Assess the Effectiveness of Verbal Coaching Among Pregnant Women During Labor Process

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Abstract

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Labor is a very crucial process in every woman's life. The second stage of labour is regarded as the climax of the birth by the delivering woman, her partner, and the care provider. However, the provision of skilled care and avoidance of complications during the second stage of labor has been relatively neglected. This study aimed to assess the effectiveness of verbal coaching among pregnant women during labor process. This was a mixed methodology study which consisted of both a quantitative as well as a qualitative aspect. The findings reflect that the respondents of the control group had a longer duration of labor time than the respondents of the experimental group. The study reflected that there was a statistically significant difference in the total duration of labor between the control and experimental group (p -value=0.002). In the qualitative part, the experiences of pregnant mothers during the labor process were assessed. Four themes were generated during this survey which were as follows- a. Sense of autonomy; b. Health care personnel's Behaviour; c. Care Process; d. Needs Fulfilment

Keywords: Labor Process, Effectiveness of Verbal Coaching, Pregnant Mother

Introduction

Normal Labor Process-

Labour is defined as a normal physiological process that expels one or more babies from the maternal uterus through the vaginal canal or through Caesarean Section. The 3 stages of labour are conventionally defined as:

- **First stage:** from the onset of regular painful contractions associated with descent of the presenting part and progressive dilatation of the cervix until the cervix is fully dilated.
- **Second stage:** from full dilatation of the cervix up to the birth of the singleton baby or the last baby in a multiple pregnancy. At the start of the second stage, the foetal presenting part may or may not be fully engaged (meaning that the widest diameter has passed through the pelvic brim), and the woman may or may not have the urge to push.
- **Third stage:** from the birth of the baby until expulsion of the placenta and membranes¹.

Burden of ensuring Safe Labor Process-

Rates of maternal and neonatal mortality in low- and middle-income countries can be more than 10 times higher than in high-income countries.^{1,2} Despite global increases in facility-based deliveries, progress in reducing the rates of these preventable deaths has been slower than expected due to poor quality of care in health facilities and poor adherence to evidence-based practices among birth attendants.³⁻⁷ middle-income countries can be more than 10 times higher than in high-income countries.^{1,2} Despite global increases in facility-based deliveries, progress in reducing the rates of these preventable deaths has been slower than expected due to poor quality of care in health facilities and poor adherence to evidence-based practices among birth attendants².

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Government interventions for Safe Labor Process-

The second stage of labour is regarded as the climax of the birth by the delivering woman, her partner, and the care provider. International health policy and programming have placed emphasis on the first stage of labour, including appropriate use of the partogram and identification of hypertension or sepsis, and have also focused on the third stage of labour with active management (AMTSL). More recently, a concerted effort to reduce perinatal losses has been made through dissemination of skills in neonatal resuscitation. However, the provision of skilled care and avoidance of complications during the second stage of labour have been relatively neglected. These guidelines are intended to strengthen policy and frameworks for care provision to enable providers to attend to women in the second stage of labour in line with current evidence-based recommendations for practice to optimize outcomes for mother and baby. The document is not intended as a formal systematic review of the literature, but aims to identify important clinical, programmatic, and policy issues that require attention.

Good Maternal Outcomes based on Safe Labor Process-

Women who do not receive childbirth education prior to labour may be unaware of options for maintaining comfort during labour. Maternal satisfaction is dependent on more than creating a painless labour and rather is contingent on multiple factors, including maternal control and support of maternal preferences for labour and birth⁷.

Healthcare Personnel role in Safe Labor Process

Nurse theorist Leininger (2001) called caring the essence of nursing. In Bowers' (2002) review of 17 studies of perceived labour support, clients described a caring nurse as calm, warm, and open. Supportive nurses bestowed praise and encouragement upon the client, were concerned, respectful, and competent, and provided a constant presence. Hodnett (2002) found that maternal satisfaction with the birth process was not related to relief of pain but more closely related to the attitudes and behaviours of caregivers. Communicating caring, competence, and advocacy early in the nurse client relationship fosters the development of a trusting relationship through which emotional and physical needs can be met¹.

Significance of the Study

The labor process is a very crucial process in the life of every woman. Since the millennium era, there has been continuous advocacy regarding the domiciliary deliveries and a lot of emphasis has been prophesized on institutional deliveries. In the recent past, the Indian government has been taking many efforts for the same. This, indeed has been very significant which has resulted in the drastic decline of Maternal mortality Rate and led to better mother and child outcomes.

Recent research studies have proved that spontaneous pushing is more beneficial than the directed pushing method (Hassa et al., 2021). But despite the fact, in recent years, there has been a gradual inflation of the cesarean cases in comparison to the normal deliveries (9% increase in 10 years, Roy et al., 2021) thus, making normal delivery a ***“Very costly Health Entity”***.

Declercq et al., (2006), Listening to mothers: Report of the first national U.S. survey of women's childbearing experiences reflected that majority of the women during labor pain appreciated the sense of calm and confidence the nurses provided them during their stay in labor room. There has been a major dearth of studies regarding the effectiveness of nurses providing verbal support to mothers in labor during the delivery process both globally and on a national basis. Thus, there is a dire need to identify this and research needs to be done.

Research Gap

The quality of maternity care in the country has improved in the past few years and various public health initiatives have helped to reduce crucial indicators like Maternal Mortality Ratio and Infant Mortality Rate. The improvement in quality of interface between the mothers and service providers in term of language, behaviour and attitude for ensuring '*Respectful Maternity Care*' would support further enhancement of maternal and new born outcomes¹².

As with all aspects of maternity care in accordance with a rights-based approach, the individual needs of the woman and her companion during the second stage of labour should be taken into consideration, tailoring care to an individual's needs while offering the highest quality, evidence-based care. A particularly important aspect is information and communication that prepares the woman and her labour companion for what to expect during labour and delivery. Special consideration is needed for culturally based birth preferences, especially where these are unusual or a minority within a particular healthcare setting. It is thought that lack of attention to humanistic care and respect for even "mainstream" cultural preferences by maternity care providers is a major barrier to the utilization of health facilities in many countries, as reflected in health surveys that show reasonable uptake of antenatal care but low rates of delivery in health facilities.

As well as providing an attractive and humanistic setting, this approach has the potential to encourage greater utilization of health facilities and there is strong evidence that it reduces the need for medical intervention⁷.

However, evidence-based strategies for improving the quality of care in birth facilities are lacking. Providing training alone can increase knowledge of evidence-based practices but does not necessarily translate into meaningful improvements in quality of care. Consequently, additional strategies are needed to improve the quality of intrapartum and postpartum care¹⁰. Coaching is one strategy to promote birth attendant behaviour change. The coaching process helps individuals use their existing skills, resources, and training to improve their performance and achieve personalized goals¹⁰.

Research Objectives

- To assess the effectiveness of verbal coaching among pregnant women by healthcare providers during labor.
- To compare the effectiveness of verbal coaching among the pregnant women in the control and experimental group.
- To assess the experiences of pregnant women during the labor.

Research Hypotheses

H0: There is no difference in the duration of labour process among pregnant women between the control and the experimental group.

H1: There will be significant difference in the duration of labour process among pregnant women between the control and experimental group due to verbal coaching at $p \leq 0.05$ level.

Research Design- This was a mixed methodology study which had a quantitative as well as a qualitative aspect.

Quantitative Aspect- A true Experimental post-test only research design was used for the study.

Qualitative Aspect- A Survey was conducted to know about the experiences of mothers during the Labor Process.

- **Study Population:** This prospective study was conducted on all pregnant mothers who came for delivery.

- **Study Sample:** The researcher selected the samples by random sampling technique. Respondents were assigned through “Flip a coin “method for data collection to reduce bias.
- **Ethics Review:** Ethical approval for the study was taken from Ethical Committee of the Hospital. Informed Consent was obtained from every study participant.

Data Collection

Both quantitative and qualitative data was collected. Primary Data collection was retrieved from the pregnant mothers who fulfilled the inclusion criteria.

Data Collection Instrument

The tool prepared for the study consisted of three sections.

Section A: Demographic Variables: This section consists of demographic variables like: Age, Level of Education, Per capita Income, Previous Antenatal Check -Up in CHB.

Section B: A true experimental **post-test only** comparison group design was used for this study, in which the participants were randomly assigned into a control group and an experimental group. Both groups received routine labour care as per hospital protocol; however, the experimental group received the additional verbal coaching once the mother was shifted to the labour bed. The researcher selected the pregnant women for her study based on fulfilment of the criteria.

As the pregnant woman came to the labor room, all of them were provided the routine labor care as per the hospital protocol. Once the pregnant woman was shifted to the labor bed (when her cervical dilatation was 4cms); the mother belonging to the experimental group was provided a structured verbal coaching by the researcher. The pregnant woman belonging to the control group on being shifted to the labor bed did not receive any verbal coaching intervention. After the verbal coaching, the duration of labor in both the groups was recorded and analyzed.

Section C: A separate survey was conducted where the respondents from the experimental group were asked to share their experiences during the entire labor process. This qualitative survey consisted of two parts as follows-

PART A- This consist of the socio-demographic variables of the study respondents.

The following characteristics were taken into consideration as follows-

- Age
- Level of education
- Previous Antenatal check -up in CHB
- Per capita Income

PART B- This consists of a topic guide which comprised of an open-ended question. The topic guide was given to all the participants during the study. The participants were interviewed based on the question of the topic guide and then analysed accordingly.

Results and Discussion

In the study, the data was collected from 60 respondents (30 in each group) who were chosen using simple random sampling method and who consented to participate in the study ensuring that the inclusion criteria were fulfilled.

The researcher found that majority of the respondents (30%) in the control group had a total labor duration of 91-100 minutes while majority (36.7%) of them from experimental group had a total labor of 81-90 minutes only (see Figure 1). This reflects that duration of labor pain is reduced by the help of verbal coaching given to mothers during labor which was contrary to the findings of Sampsel et al (2012).

Table 1: Distribution of study respondents based on socio- demographic variables

Socio-Demographic Variables	Control group (n=30)		Experimental group (n=30)	
	No.	%	No.	%
A. Level of Education				
1.Under Graduate	17	56.7	14	46.7
2. Graduate	13	43.3	16	53.3
B. Per capita Income				
<=5000	4	13.3	8	26.7
5001-10,000	11	36.7	12	40
10,001-15,000	6	20	7	23.4
15,001-20,000	4	13.3	1	3.3
20,001-25,000	1	3.3	1	3.3
>=25,000	4	13.4	1	3.3
C. Previous Antenatal check-up in CHB				
1.Yes	22	73.3	22	73.3
2. No	8	26.7	8	26.7

The study highlighted a statistically significant difference ($p=0.002$) regarding the total duration of labour. The control group had a duration of 98.6 minutes while the experimental group was only 87 minutes (see Table 2). This indicated that was a significant difference in the duration of labour among mothers who received the verbal coaching.

The data were tabulated and analyzed using descriptive and inferential statistics. The study findings revealed that majority of the respondents (56.7%) were undergraduates in the control group while 53.3% were graduates in the experimental group. Both the groups had equal respondents (73.3%) who had previous antenatal check up in the hospital.

In the qualitative aspect, a total of 6 participants were involved in the study. Majority (66.8%) of them belonged to the age group of 21-30 years with the mean age of 26.6 years. The respondents were selected randomly from the experimental group and were interviewed individually to enumerate on their experiences regarding the labour process. A total of 4 themes were generated during this survey.

1. **Sense of Autonomy** - 66.7% of the respondents reflected that they gained a “huge sense of Autonomy” which increased their confidence level and helped them to gain better control over their own self which made them feel independent of themselves. This finding was similar to the study conducted by Hassan.E.H . et al (2021) where 100% of the samples felt they were able to exhibit adequate control over their own self.
2. **Health care personnel’s behaviour** - During the survey, 66.7% of the samples stated that they felt the medical team had been very courteous in their behaviour towards them. This was in line with the study conducted by Hassan et al(2021) where 74% of the mothers agreed that the medical professional’s taking care of them were very caring and compassionate.
3. **Care Process** - All the respondents in the survey agreed that the care process was above mediocre level.
4. **Needs Fulfilment** - The study respondents had mixed feelings where 33.3% of them felt that during the night shifts the staffs were not prompt in addressing their needs which could be probably due to the scarcity of the proportion of nurses at night shift

Limitations of the Study

- The data collection period was conducted over a period of four weeks.
- The study was conducted in a secondary level health care facility.
- The number of respondents for the entire study was only 60 with 30 samples each in the control and the experimental group.

Conclusion and Implications

Patient safety is an attribute to all the health care systems and it is very essential that they should develop systematic approaches towards the recognition of adverse events and prevention of future occurrences. The physical presence of a healthcare provider is defined by Jackson (2004). As being with the client rather than performing tasks on the client and as complete physical, emotional, psychological and spiritual engagement between the nurse and client. So, it is imperative for healthcare professionals to ensure their “Physical Presence” to be well established among the patients and especially among expectant mothers who already are in a state of so much of uncertainty and anxiety regarding the labor process and its outcomes.

All health care personnel and nursing personnel, in specific who spend the maximum time in coordination and providing care to patients, are highly responsible in strengthening the safety web of patient care and ensuring a safe and happy motherhood. As per Chazal, “*the ring always believes that the finger lives for it*”. Similarly, the patient believes that the medical team care for them and “*do them no harm*”. Thus, they should have the urge to update their knowledge, inculcate a positive and patient attitude regarding the labor process and incorporate it into practice to promote patient safety and safe motherhood practices.

This effort of highlighting the existing knowledge and attitude of the nursing personnel regarding patient safety may be a very small step, but it will surely encourage the administrators to work on it and improvise the health care delivery system to promote patient safety.

Implications

Intrapartum nurses need time to develop into expert caregivers. It takes time, most likely more than 5 years, in a consistent setting to develop expertise. Hanson (1998) found that nurse-midwives who spent time reading professional journals used the most effective positions for second stage labor¹.

Designing and implementing a certificate on program in labour support would lend importance and credibility to this discipline. Kardong-Edgren (2001) stated that this type of certification should be required just as certification in electronic foetal monitoring is required. For the program to be comprehensive, it should include a workshop with opportunities for hands-on practice of each LSB, a training manual, and an exit examination.

Further studies need to be conducted on how Delivery of appropriate and respectful care to each pregnant woman would not only go a long way in reducing mortality and morbidity for the woman and new-born but also help in improved cognitive development of the baby ^{4,10}.

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