

Effectiveness of Childbirth Education on Childbirth Experiences of Pregnant Women in a Tertiary Hospital, Kerala, South India

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Abstract

Preparing the women for childbirth and to help her go through a successful birth experience is an important role of a nurse midwife. The purpose of the present study is to assess the effectiveness of childbirth education on childbirth experiences of pregnant women in a tertiary hospital, Kerala, South India. A Quasi experimental approach with pretest-posttest control group design was used for the study. The sample consisted of forty primigravid women attending the Obstetric Outpatient department, in the age group of 18-35 years, gestational age of 35 weeks or above and without any complications. The first twenty women were assigned consecutively to the control group and next twenty to control group. Childbirth expectancy was measured using Wijma Delivery Expectancy Questionnaire (Version A) before the intervention in both groups. Women in the experimental group received childbirth education. Childbirth experience was measured using Wijma Delivery Experience Questionnaire (Version B) following childbirth. The finding of the study shows that childbirth expectancy score of the experimental (57.10±15.88) and the control group (58.80±14) was not significantly different before childbirth. Whereas childbirth experience score of experimental group (38.00 ± 11.85) was lower than the control group (65.25 ± 18.85) which was statistically significant at 0.001 level. Results of the present study suggest that childbirth experience of the women can be improved with childbirth education.

Keywords: Child Birth Education; Childbirth Experience; Pregnant Women; Effectiveness.

Introduction

Childbirth is one of the most cherished experiences in a women's life. It is also a period of transition in a women's life which is developmental and follows a multiple sequential pattern from pregnancy to birth to parenthood. Facilitating this transition is an important role of a nurse midwife and this is achieved through childbirth preparation. Childbirth education enhance the awareness of women regarding

childbirth and related events, empowers women to make informed choices in childbirth and to assume responsibility for their health.

Preparation for childbirth traditionally took place in families. The religious and indigenous practices along with traditional customs facilitated this transition to a mother. Now with changes in the societal structure and function and with changes in the health care, this preparation does not happen or often it is inadequate. So it becomes the responsibility

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of the nurse midwife to provide information and counseling to pregnant women. Information on childbirth helps the women to be prepared for childbirth. It may improve their confidence and satisfaction with birth.

Research evidence shows that women have varying levels of satisfaction with childbirth [1,2]. A correlational study conducted among 60 low risk mothers found that personal control was a significant predictor of childbirth satisfaction. In addition, having expectations for labour and delivery met was a significant predictor of satisfaction with own performance with childbirth [3]. A systematic review of satisfaction with childbirth in 137 report identified four relate factors; personal expectations, the amount of support from care givers, the quality of care giver patient relationship and involvement in decision making. Childbirth education programmes are found to be effective in improving the mothers knowledge, outcome and experience with child birth [4,5].

The purpose of the present study is to identify the effectiveness of childbirth education on the childbirth experience of pregnant women attending a selected tertiary care hospital in Kerala, South India. The effectiveness is evaluated by comparing the childbirth expectancy before the intervention and by comparing the childbirth experience following delivery between the experimental and control group.

Methods

A quazi-experimental approach with pretest-posttest control group design was used for the study. Forty pregnant women attending the Obstetric department of a tertiary care centre in Kochi, Kerala was selected for this pilot study. In order to avoid contamination first twenty women were recruited to the control group, followed by the next twenty to the experimental group consecutively. All the primi gravid women who were in the age group of 18 to 35 years, above 34 weeks of gestation, without any complications were recruited till the required sample size was obtained.

The background data and childbirth expectancy were measured on recruitment. The background demographic and clinical data was collected using a semi-structured questionnaire. The childbirth expectancy of the pregnant women was measured before the intervention. Childbirth expectancy is the feelings and thoughts pregnant women may have at the prospect of labour and delivery which was measured by Wijma Delivery Expectancy

Questionnaire (Version A). It is a standardised questionnaire developed by Klass Wijma and has 33 items which has to be rated in a scale ranging from zero to five. Overall score range from zero to 165 and higher score indicate negative experience.

Childbirth education was given to the experimental group following the assessment of childbirth expectancy. The educational session was of 45 minutes duration which included labour process, labour room routines, self-care during labour, breathing exercises, and immediate postnatal and newborn care. The teaching method included lecture, discussion, demonstrations and video presentations.

The childbirth experience following delivery was measured using Wijma Delivery Experience Questionnaire (Version B), for normal delivery/ Caesarean section. The items and scoring are same as Wijma Delivery Expectancy Questionnaire. There was no attrition of samples. The Wijma delivery expectancy/experience questionnaire was translated to Malayalam with the help of language experts. Reliability of the Malayalam version was also established. Reliability and validity of the tool was established prior to data collection using test retest method.

Ethical clearance was obtained from the institutional ethics committee before commencement of the study. The participation in the study was solely based on willingness and they were allowed to withdraw from the study any time they want. The data was analysed using both descriptive and inferential statistical methods.

Results

Background Data

The age of the participants ranged from 19 to 30 years and the mean age of the experimental group was 24.5 years and that of the control group was 25.2 years. The groups were homogenous in terms of age, education, occupation, physical activity and gestational age.

Childbirth Expectancy before Delivery

The childbirth expectancy was positive in six (30%) of the experimental group and four (20%) of the control group, and it was negative in six (30%) of the experimental group and five (25%) of the control group (Figure 1).

The mean childbirth expectancy score between the experimental (57.1 +/-15.8) and control group

(58.8+/-14) were also not different significantly (Table 1).

Childbirth Experience Following before Delivery

Following delivery 15 (75%) of the experimental group had a positive childbirth experience whereas it was four (20%) in the control group. None of the experimental group expressed a negative childbirth experience while in the control group 13(65%) had expressed negative childbirth experience (Figure 1).

The mean childbirth experience score of the experimental group (38+/-11.85) was significantly lower than the control group (65.25+/-18.85) at p <0.001 (Table 1). The childbirth experience became more positive than childbirth expectancy in the experimental group whereas it became more negative in the control group (Figure 2).

There was no significant difference in obstetric outcomes like type of delivery, duration of labour and use of pain medications between the groups.

Table 1: Comparison of childbirth expectancy and childbirth experience between experimental and control group N=40

Groups	Mean	SD	t-value
<i>Childbirth expectancy</i>			
Experimental group	57.1	15.8	0.359
Control group	58.8	14	
<i>Childbirth experience</i>			
Experimental group	38.00	11.85	5.475**
Control group	65.25	18.85	

**p<0.001

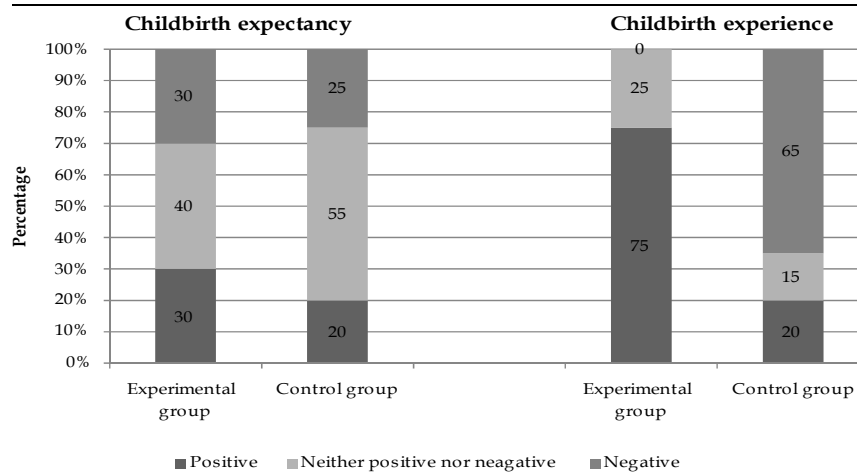


Fig. 1: Distribution of the groups based on childbirth expectancy and childbirth experience

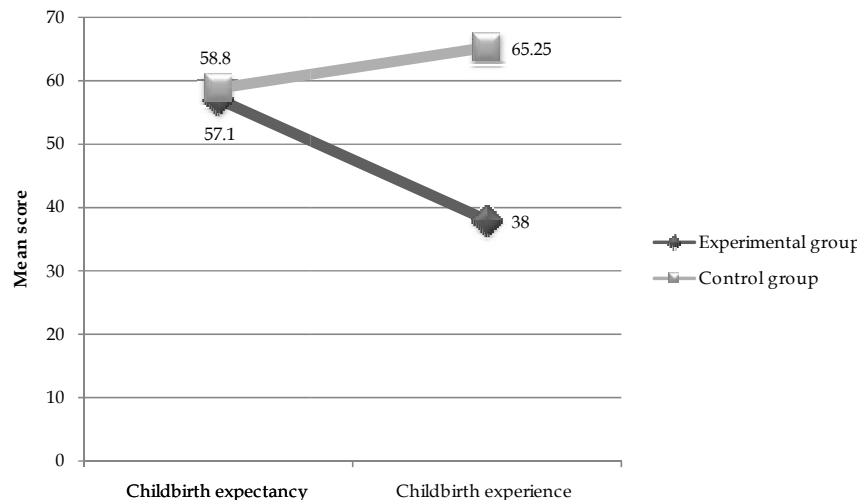


Fig. 2: Line diagram showing the mean childbirth expectancy and childbirth experience score of the groups

Discussion

The findings of the study show that the childbirth education is effective in improving the childbirth experience of the pregnant women. More proportion of women in the experimental group had a positive childbirth experience following delivery. The childbirth experience became more positive than childbirth expectancy in the experimental group whereas it became more negative in the control group. But there was no significant difference in the obstetric outcomes between the groups.

A prospective observational study which evaluated the effect of antenatal education among 616 low-risk pregnant nulliparous women aged 18-42 years found that women who attended antenatal education classes experiences less anxiety than the control group. There was no significant difference in the other outcomes between the group [6]. In the present study also though the intervention improved the childbirth experience, no difference was observed in the obstetric outcomes between the groups.

As the intervention covered labour room routines and self-care to be done along with labour process, the women could gain a realistic expectation of the events during labour. A prospective study conducted among 289 pregnant women found that anxiety in pregnancy was associated with expecting less positive emotion during birth, more negative emotion during birth, less control and less support during birth. Expectations were positively related to the birth experience [7]. In the present study the intervention could have improved the birth experience by contributing to a realistic expectation of birthing.

The childbirth expectancy varied among women from positive, neither positive nor negative to positive. In the women in the experimental group it became more positive with childbirth education. Childbirth education is simple cost-effective intervention which can be used to improve the birth experience of women. The finding of the study highlights the role of nurse midwife in preparation for birthing.

In the present study the childbirth education was delivered after 35 weeks of gestation because of the restriction related to duration of the study period. The intervention would have been more beneficial if it was given in the early third trimester as multiple

sessions. But delivering as a single session was expressed more convenient by many participating pregnant women. The study further recommends replication in a larger sample at different setting to enhance generalization.

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Conflict of Interest: Nil

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