Effect of Implementation of Holistic Nursing Interventions on Quality Nursing Care in Labour Room

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Key words

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Abstract

Maternal and child health is a crucial component of the healthcare system in any country, and providing quality nursing care during childbirth is an essential part of ensuring good health outcomes for both the mother and the baby. This study aims to explore the effects of implementing holistic nursing interventions on the quality of nursing care in the labor room of a selected hospital in Kerala. The study design used was quasi-experimental pretest-posttest design. The study was conducted in the labour room of Baby memorial hospital in Kerala. Total enumeration sampling was used for subject selection and the study included all registered nurses (24 nurses) who were working in the labour room of Baby memorial hospital. Data collected using a structured questionnaire to assess the knowledge about holistic nursing interventions and an observation checklist to assess the quality care in labour. The result indicated that there was a significant difference in the mean knowledge score (t=15.000, p< 0.001) in the pretest and post test among nurses in labour room and also there was significant difference in quality care in labour room (t=77.097, p< 0.001) before and after implementation of HNI in labour room.

Introduction

Maternal and child health is a crucial component of the healthcare system in any country, and providing quality nursing care during childbirth is an essential part of ensuring good health outcomes for both the mother and the baby. The hospital's labour room is a critical area where nursing interventions are vital in ensuring safe and comfortable delivery. However, nursing professionals may only sometimes have the necessary skills and knowledge to provide holistic care to their patients.

The labor room is a unique healthcare setting requiring specialized nursing care to manage labor and childbirth's physiological and psychological aspects. The laboring woman may experience pain, anxiety, fear, and other challenges that require skilled nursing care to alleviate and manage effectively. Holistic nursing interventions, which focus on addressing the individual's physical, emotional, psychosocial, and spiritual needs, can be valuable in providing comprehensive care in the labor room.

Kerala, a southern state in India, is known for its high-quality healthcare services and is home to numerous hospitals that provide maternity care. However, there is limited research on the impact of holistic nursing interventions on the quality of nursing care in the labor room in Kerala. This study explores the effects of implementing holistic nursing interventions on the quality of nursing care in the labor room of a selected hospital in Kerala.

Methodology The study design used was a Quasi-experimental pretest-posttest design. The study was conducted in the labour room of Baby memorial hospital in Kerala. Total enumeration sampling was used for subject selection, and the study included all registered nurses (24 nurses) working in the labour room of Baby memorial hospital. Data was collected using a structured questionnaire and an observation checklist.The data were collected by questionnaire to assess the nurses' knowledge of holistic nursing interventions. The investigator used the observation checklist to assess the quality of nursing care provided in the labour room.

Holistic nursing interventions (HNI)

HNI includes a group of systematically planned activities to strengthen the nursing care rendered during the intrapartum period and ensure quality intrapartum care. It consisted of equipping nurses to render HNI, preparing women to undergo labour, and providing audio analgesia (music therapy) during labour.

Preparation of nurses included small group (2 to 3) teaching regarding concepts of the holistic model of health care, holistic nursing practice, and the components of holistic intrapartum care. HNI was imparted through lecture cum discussion using power points for 45 minutes duration. A questionnaire would assess nurses' knowledge regarding HNI before and after the session. The investigator supported and guided nurses to provide holistic intrapartum nursing care. Holistic intrapartum nursing care consists of instruction or information to clients, a comfortable environment, comforts and pain relief measures, maternal and foetal monitoring, communication and advocacy, emotional support, mother-newborn bonding, collaborative practice and teamwork, culture sensitivity and spirituality, and general care. Using an observation checklist, the investigator periodically observed nurses' activities to ensure their competence in HNI. When the observation checklist score was consistently more than 80 percent, the nurses were considered competent to provide HNI.

Preparation of women to undergo labour process included the provision of a self-instructional booklet regarding the preparation of labour for self-learning at the time of admission for labour which helped to orient women regarding preparation for labour process, newborn care, common procedures performed in labour room and self-directed relaxation techniques during labour . Clarification of doubts of women, if any, had been done through telephone.

Audio analgesia consisted of 10 music tracts, which were the combination of seven tracks from Indian instrumental music under the ragas – Kalavathi, Durga, Darbari, and Hansadhwani and three tracks of *Western instrumental music which is soothing and relaxing and had been used in many studies*

Data collection process

The data collection period was from 15/1/2020 to 16/7/2020.

After getting informed consent from nurses working in the labour room, the study initiated the observation of nursing care delivery using an observation checklist. Forty observations, each of 2 hours duration in two months, were done to assess the quality of nursing care during the intrapartum period. A simple random sampling of days of 2 months was done to select the days of observation.

Then nurses' knowledge regarding the HNI was pre-tested using a knowledge questionnaire. After pre-testing, the nurses in the labour room were given teaching on HNI. Post-test was given after the teaching session to identify the effectiveness of teaching. It took two weeks to complete the sessions. After the knowledge assessment, the investigator supported and guided nurses to provide holistic intrapartum nursing care in the labour room for three months. The investigator used an observation

checklist to monitor the quality of care in labour room.   HNI was implemented by staff nurses for expectant mothers. After three months, the post-test on quality care in the labour room was assessed using an observation checklist (40 observations were done in two months by simple random sampling of days over two months).

Ethical consideration

The institutional ethical committee of Baby memorial hospital approved the study on 5th May 2017 as per order number BMH/Aca/IEC/333(1)/2016. Subjects were informed about the purpose of the research and obtained voluntary informed consent.

Result

The study was conducted on 24 nurses. Socio-personal characteristics of subjects showed that the highest percentage (41.2%) of subjects were in the age group 26- 30 years. More than half (58.3%) of the subjects had undergone a B.Sc nursing programme. The highest percentage of subjects had (41.7%) 4 to 6 years of experience in labour room.

The knowledge score of nurses in the labour room regarding HNI indicated that during the pre-test, the highest percentage of subjects (58%) were in the good category. But after a structured teaching programme, 100 percent of the subjects scored excellent (Table 1). The mean knowledge score (17.00± 00.0) in the post-test was higher than the mean (11.38±1.84) in the pre-test. There was a significant difference in the mean knowledge score (t=15.000, p< 0.001) in the pre-test and post-test among nurses in labour room. The differences in knowledge scores indicate that a structured teaching programme was effective in improving the knowledge of nurses regarding HNI among nurses (Table 2).

The quality of care in labour room was assessed using an observation checklist. There were 40 observations before and after the implementation of HNI in labour room. The data in figure1 indicated that before the implementation of HNI, 97.5 percent of the observation checklist score on quality care in labour room was poor. After implementing HNI,   there was a 100 percent excellent score in quality care in the labour room. There was a significant difference in quality care in labour room (t=77.097, p< 0.001) before and after the implementation of HNI in labour room (Table 3).

Table1:   Frequency and percentage distribution of knowledge score of nurses regarding HNI

Grading	Score	Pretest (n=24)		Post test (n=24)	
		Frequency	Percentage	Frequency	Percentage
Poor	<10	3	13	-	-
Good	10-12	14	58	-	-
Excellent	13-17	7	29	24	100

Table 2: Significance of difference in the mean knowledge score regarding HNI in pre-test and post-test among nurses in labour room

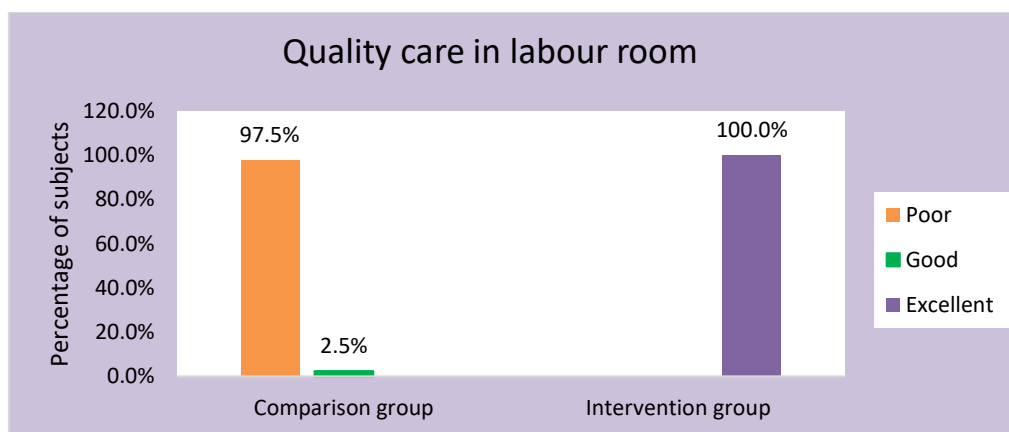| Knowledge Assessment (n=24)	Mean	SD	Mean difference	Paired 't' value	p-value
Pre-test	11.38	1.84	5.62	15.000	<0.001***
Post-test	17.00	0			

*** Significant at 0.001 level

Figure 1 Distribution of scores of observation checklist to assess the quality of care

Table 3: Significance of difference in the mean observation checklist score on quality care in labour room before and after implementation of HNI

$(n_1= 40, n_2= 40)$

	Mean	SD	Mean difference	Independent 't' value	p-value
Before HNI	48.98	2.06	30.82	77.097	<0.001***
After HNI	79.80	1.47			

*** Significant at 0.001 level

Discussion

Implementing holistic nursing interventions in the labor room of a selected hospital in Kerala can positively impact the quality of nursing care provided during childbirth. Holistic nursing care encompasses a comprehensive approach that addresses the laboring woman's physical, emotional, psychosocial, and spiritual needs to promote overall well-being and optimal health outcomes.

Quality nursing care is essential for providing safe and satisfactory childbirth experiences to women and their newborns. The labor room is a critical area of a healthcare facility where a woman undergoes the process of childbirth. The quality of care provided in the labor room greatly influences maternal and neonatal outcomes. WHOs recommendation on intrapartum care for a positive childbirth experience has given a framework for quality care for maternal and newborn health. It indicated that effective communication, respect, emotional support, physical resources, and competent human recourses were the fundamental aspect of quality care for better maternal and newborn outcomes[1]. Therefore, it is essential to provide evidence-based nursing care that focuses on holistic interventions to ensure the well-being of the mother and newborn. The present study showed that implementing HNI impacts quality care in the labour room. When laboring women receive care that addresses their physical, emotional, psychosocial, and spiritual needs, they are more likely to feel satisfied with their childbirth experience. In childbirth, satisfaction can result in positive feedback, increased trust in the nursing staff, and improved patient-provider relationships, which are essential for quality nursing care. The qualitative study on defining quality of care during childbirth from the perspective of women also indicated that individualized care and human and physical resources were the main aspects of quality care[2]. The same finding was there in another study. It concludes that holistic quality care to mothers during labour ensures better maternal satisfaction and a positive experience for women during labour[3]. Further study on maternal satisfaction regarding the quality of nursing care during labour and delivery indicated that good interpersonal relationships, client involvement in the caring process, and good physical setup were the main components of quality care[4]. A study on patient satisfaction with quality nursing care also supported the present study. The study showed that the concern and caring of nurses positively influenced patient satisfaction and indicated that nurses should put greater interest in the information-giving process[5]. A systematic review and meta-analysis explored the determining factors of client satisfaction. It showed that respectful maternal care, privacy, free service charge, and promptness of care were the crucial factors for quality care and maternal satisfaction[6].

Holistic nursing interventions, such as relaxation techniques, breathing exercises, and massage, can help reduce pain and discomfort during labor through better pain control, improved comfort, and a more positive birth experience for the woman. Holistic nursing care can address the emotional needs of

laboring women, providing emotional support, active listening, counseling, and reassurance, thereby reducing anxiety and fear, promoting relaxation, and creating a calming environment in the labor room, leading to improved emotional well-being. Holistic nursing care emphasizes individualized care and shared decision-making, resulting in improved communication between the nursing staff and the laboring woman, leading to better understanding and collaboration. Holistic nursing care also prioritizes patient education, providing clear and understandable information about the labor process, interventions, and postpartum care. Thereby empowering the woman and her family to make informed choices and actively participate in their care, improving patient outcomes.

Holistic nursing interventions can contribute to successful breastfeeding initiation and bonding between the mother and newborn, thereby improving maternal-infant bonding, increasing breastfeeding rates, and better newborn health outcomes.

The nursing staff's well-being and job satisfaction are crucial for quality care. Holistic nursing care emphasizes self-care and self-awareness among nursing professionals, promoting a positive work environment and addressing their emotional and psychosocial needs to improve staff well-being, reduce burnout, and increase job satisfaction, ultimately contributing to better nursing care.

However, there may be challenges in implementing holistic nursing care in the labor room. These may include limited resources, time constraints, cultural or religious factors, and resistance to change. Overcoming these challenges may require nursing staff education and training, addressing resource limitations, promoting a culture of holistic care within the healthcare setting, and involving key stakeholders in the implementation process. Further research and efforts to promote holistic nursing care in maternity settings can contribute to improved quality of care for laboring women and newborns in Kerala and beyond

Conclusion: The study on the effect of implementing holistic nursing interventions on quality nursing care in the labour room indicated that HNI positively influenced quality care in the labour room.

Funding

Conflict of interest

The author has declared no conflict of interest.

Reference

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