



A Facility-Based Cross-Sectional Study on Mothers perceived satisfaction towards the care provided by the health care personnel during labour in Sikkim- Protocol study

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Abstract

Background: Labour is a process by which the fetus, placenta and membrane are expelled from the birth canal. Child birth for the mother is a sentinel life event. Giving birth for the first time is anxiety provoking yet exciting in the lives of most women. The complex physical, psychological and emotional experience of labour affects every woman differently¹. Satisfaction is the one of the most frequently reported outcome measures for quality of care. Assessment of satisfaction with maternity services is crucial, and psychometrically sound measures are needed if this is to inform health practices.

Methods: This is an observational study with facility based Cross-Sectional design aims to test the primary outcomes to assess mothers perceived satisfaction towards the care provided by the health care personnel of Sikkim. The secondary outcome is to compare the variation in mothers perceived satisfaction towards the care provided by the health care personnel within Government and private Hospitals and to find the association between mothers perceived satisfaction with baseline variables. 178 mothers (6 months of data collection period) who underwent Normal vaginal delivery (within 24 hours) in Government and Private Hospitals of Sikkim, can understand and speak either Nepali/English/ Hindi and willing to participate in the study will be recruited in the study through convenience sampling. Mothers who will be admitted in the hospital after home delivery, having intrauterine fetal death, Psychiatric illness and underwent LSCS will be the exclusion criteria. The data will be collected through Semi structured & structured interview-based questionnaire on the basis of objectives and variables under study. The collected data will be analyzed through descriptive and inferential statistics.

Discussion: It is a well-established fact that maternal satisfaction on the provided service could enhance subsequent utilization and compliance with medical treatments. However, there is a limited study regarding the extent of mothers' satisfaction and perception with the care provided during labour by the health care provider in India and Sikkim. Hence, the result of this study will provide evidence regarding mothers Perceived satisfaction towards the care provided by the health care personnel during labour and its determinants.



Introduction:

Every year about 287,000 women die of causes associated with childbirth, 99 percent in developing countries owing to considerable gaps in services, developing countries emphasize on increasing service availability and maintaining acceptable quality standards. Client satisfaction is an essential component of quality of care provided. Satisfaction with care during childbirth is a complex phenomenon consisting of multiple dimensions of satisfaction. The assessment of mothers' satisfaction adds an important "consumer" perspective to evaluations. Feedback from mothers can influence the whole quality improvement agenda within the institution or organization. Mothers who perceive the quality of care as good, are more likely to visit the same hospital again, thereby increasing demand for the service.^{1,2,3}

World Health Organization (WHO) recommended mothers' service satisfaction is assessed to improve the quality and effectiveness of health care. Childbirth is a crucial experience & a positive experience is important to the woman, infant's health and well-being, and mother-infant relationship. Furthermore, it is useful for the care providers to guarantee the best preparation, health service, and support to childbearing women. As the memories and experiences of childbirth remain with the woman throughout her life.^{1,2,4,5}

Attitude of the health care personnel, advice & reassurance given during pregnancy are very important, as it influence the mother during the time of labour. Health care personnel with their skillful observations, advice and assistance with adequate energy will help the mother during labour. Removing fear and anxiety by the health care personnel makes the birth experience of the mother more satisfactory and also increases her pride and self confidence.^{2,3,4}

Mothers' satisfaction is of fundamental importance as a measure of the quality of care because it gives information on the providers' success at meeting those mothers' values and expectations. There are several underlying reasons why patient's satisfaction has become such a ubiquitous concept in health care evaluation. First, the interest in satisfaction is closely linked with the growth of consumerism in public policy. Second, it is regarded as an important indicator of the quality of nursing and medical care. Finally, it is widely used as an outcome measure when evaluating care and the organization of services².

Patient satisfaction studies in India have shown that Doctor-Patient relationship, Nurse-Patient relationship, outcome of treatment, diet and housekeeping services are some of the common determinants affecting patient satisfaction. Satisfaction surveys are the main source of feedback from mothers about health care services and as such they inform purchasing decisions stimulate

proposals to restructure service delivery and can be used to evaluate the effects of policy changes².

A descriptive study to assess the level of satisfaction of patients with nursing care, suggest that out of 269 subject's majority of the subjects 232 (86.2%) were moderately satisfied, 22 (8.2%) subjects were highly satisfied and 15 (5.6%) subjects were uncertain with nursing care³.

With this background information, the investigator felt that there is a need to assess the perceived satisfaction of mothers towards the care provided by the healthcare personnel during labour, as many studies reveal the dissatisfaction of patients in labour. The investigator in her personal experience has also observed various instances of patient's dissatisfaction due to neglect of care, attention, lack of information and reassurance provided by the health care personnel. Also, the studies on satisfaction in India were very limited the investigator considered it timely and appropriate to do a study in this area which in turn will give success to the hospital, improve the quality of care provided by the health care personnel and growth of consumerism. This motivated the investigator to undertake the present study.^{2,3,4,5}

Review literature

A descriptive qualitative study was conducted in Western United States to determine childbearing women's perception of nursing care. 20 low risk primiparous women who had recently given birth to healthy term neonates were selected. Semi structured audio-taped interviews were conducted in the homes of participants using an interview guide. Women reported that giving birth was an extremely significant life event, the nurse's presence, encouragement, continuity of care and knowledge-maintained women's dignity. The participants also expressed appreciation that their emotions, physical comfort and privacy were taken seriously. Individual differences, communication and information from care providers affected women's experiences of control. The results of this study demonstrate the ongoing need for women-centered perinatal care⁴.

A survey was conducted to investigate the sources of dissatisfaction with Hospital care in London. An open-ended questionnaire was used to collect the data. Samples are selected by using random sampling method. Of the 229 informants 138 included some written comment about care in hospital. At least one negative comment was made by 82 (59%) of those making any comment; 44 (55%) rated the care given by doctors as 'excellent or good' and 50 (63%) rated the care given by nurses as 'excellent or good'. The study finding suggest that expressions of dissatisfaction arise from a sense of being 'devalued', 'dehumanized' or 'disempowered' and from situations in



which the 'rules' governing the expected health professional-patient relationships were broken. These findings highlight the importance of respecting the autonomy and dignity of patients and their families such values are central to the palliative care approach, to enhance satisfaction with health care for a patients⁵.

A descriptive study was conducted in medical and surgical ward of Nehru hospital, Chandigarh, to assess the level of satisfaction of patients with nursing care. The pretested interview schedule containing 23 items was used to gather information from 269 subjects. The total scores for the tool ranged from 0-69. The findings of the study suggest that out of 269 subject's majority of the subjects 232 (86.2%) were moderately satisfied, 22 (8.2%) subjects were highly satisfied and 15 (5.6%) subjects were uncertain with nursing care. Analysis of variance showed that there was statistically significant difference between mean satisfaction scores of subjects with dimensions of nursing care under study ($p < 0.05$). These result demands the appropriate administrative response to investigate further and identify the areas of concern which demands improvements³.

A study was conducted in New York to determine pertinent attributes of women's hospital experience related to the delivery of their children and to use open-ended responses from women to develop taxonomy for classifying patient satisfaction in obstetrics by using clinometric methods. 67 obstetric patients were interviewed by asking open ended questions about their satisfaction with care during their postpartum hospital stay. Responses were transcribed, arranged in to distinct groups and organized as taxonomy of patient satisfaction. Results were derived from patient responses were divided in to six main axes related to physicians, nurses, other staffs, special services, hospital attributes and personal focus; a total of 51 individual items were identified related to patient satisfaction. In this study, the clinometric approach to measure patient satisfaction in the postpartum in-patient setting produced a clinically relevant taxonomy and has the advantage of giving results that are clearly understood and comprehensive⁶.

A qualitative descriptive study was conducted in United States to describe contemporary women's postpartum experience, by using grounded theory methodology. Constant comparative analysis of the interview transcripts was concurrent with data collection. Participants were interviewed about their postpartum experiences in participant's homes during the 1st week after child birth and again 1 to 2 weeks later. 32 first time mothers who vaginally delivered a full-term infant were recruited through child birth education classes. The supporting categories were appreciating the body, settling in, and establishing a new family. The participant's postpartum psychosocial development was a continuous process without discrete

stages and phases. With this new theoretical description nurses can develop more effective care for contemporary child bearing women⁷.

Need for the study

At a time when global efforts to reduce maternal mortality have been stepped up, it is important to look at maternal satisfaction and its determinants.³

Evidence on women's perception of and satisfaction with the quality of maternal care help determine other aspects of care that need strengthening in developing country. There is need for more research into maternal satisfaction in developing countries, where safe deliveries remain a major problem and barriers to utilization of institutional deliveries pose a major challenge for health care programs. The interest in satisfaction is closely linked with the growth of consumerism in public policy. It is regarded as an important indicator of the quality of nursing and medical care and widely used as an outcome measure when evaluating care and the organization of services. Investigator in her personal experience has also observed various instances of patient's dissatisfaction due to neglect of care, attention, lack of information and reassurance provided by the health care personnel.^{2,3}

Mothers' satisfaction with childbirth care is a multidimensional construct comprising satisfaction with technical aspects, environmental aspects, and communication and interpersonal aspects. The assessment of mothers' satisfaction adds an important "consumer" perspective to evaluations. Feedback from mothers can influence the whole quality improvement agenda within the institution or organization. Mothers who perceive the quality of care as good, are more likely to visit it again, thereby increasing demand for the service. Maternal health service utilization and neonatal outcome can be considerably enhanced by improving the quality of facility childbirth care.^{3,4,5}

It is a well-established fact that maternal satisfaction on the provided service could enhance subsequent utilization and compliance with medical treatments. However, there is a limited study regarding the extent of mothers' satisfaction and perception with the care provided during labour by the health care provider in India and Sikkim. Hence, this study will provide evidence regarding mothers Perceived satisfaction towards the care provided by the health care personnel during labour and its determinants.^{3,4,5,6}

Objectives

This non- experimental observational research approach study with facility based cross-sectional design aims to assess mothers perceived satisfaction towards the care provided by the health care personnel as measured by structured interview schedule. The



secondary outcome is to compare the variation in mothers perceived satisfaction towards the care provided by the health care personnel within Government and Private Hospitals and find the association between mothers perceived satisfaction with baseline variables.

Hypothesis

H₁: There is a significant association between mother's perceived satisfaction with their base line variables

Operational definitions

1. **Perceived satisfaction:** It refers to the overall assessment of the various positive and negative experiences of the care provided by the health care personnel during labour by the mother which is measured by structured Interview schedule
2. **Mothers:** It refers to the postnatal women who have given birth to the baby within 24 hours by normal vaginal delivery.
3. **Health care personnel:** It refers to Nurses who are in close contact with mothers throughout their stay in the labour ward.
4. **Staff nurse:** In this study, it refers to all the nursing personnel licensed to practice midwifery nursing and are working in the labour ward of hospital in Sikkim
5. **Student nurse:** In this study, it refers to the 3rd year GNM, 3rd year and 4th year BSc nursing students who are posted to the labour ward of hospital during the period of data collection

Methods & Procedures

Source of data: Mothers who are admitted in a postnatal ward after normal delivery in a selected hospital of Sikkim

Research approach: Observational Study

Research Design: Facility based Cross-Sectional design

Setting: The study will be conducted in the maternity ward of all Government hospitals of Sikkim

Population: Mothers who undergo normal vaginal deliveries in a selected hospital at Sikkim

Sample size: 178 Mothers after normal vaginal delivery

Sampling criteria

Inclusion Criteria for sampling

- a. Mothers who delivered in a hospitals of Sikkim
- b. Mothers underwent normal vaginal delivery
- c. Who can understand and speak either Nepali/English/Hindi
- d. Mothers who are willing to participate in the study

Exclusion criteria for Sampling

- a. Mothers who will be admitted in the hospital after home delivery,
- b. Mothers having intrauterine fetal death
- c. Mothers with psychiatric illness
- d. Mothers who underwent LSCS

Sample size calculation:

$$n_o = \frac{Z^2 pq}{l^2}$$

with the desired precision of 5% (95% confidence limits at an allowable error of 5%),

where ,

n_o =desired sample size

Z = the standard normal deviate (set for a 95% CI) = 1.96

p = the prevalence of maternal satisfaction = 0.77

q = 1 - p = 1 - 0.77 = 0.23

level of significance (α) = 5%

absolute allowable error (l) = 0.05

no = $(1.96)^2 * (0.77) * 0.23 / (0.05)^2 = 270.65 = 271$.

For finite population, the sample size can be adjusted by using the following formula

(N = 450 (record of hospital)): $n = no / (1 + (no - 1) / N) = 169.37$.

To reduce non-response rate, additional 5% was taken, so $169.37 + 5\% \text{ of } 169.37 = 8.47$.

Final sample size is $177.82 = 178$

Selection and development of instruments:

- **Tool 1:** Semi structured interview-based questionnaire on the basis of objectives and variables under study
- **Section A:** Baseline proforma: consists of questionnaires related to socio-demographic characteristics of mothers
- **Section B:** consists of obstetric characteristics of mothers
- **Tool 2:** consists of five-point Likert scale to access mothers perceived satisfaction on care provided during labour by health care personnel under four domains of care, that is, health facility-related statements ,interpersonal ,informative and technical aspects of care.

Validity & reliability of the tool: Validation of the tools will be given to experts from the Department of Psychiatry, Department of OBG and Department of OBG Nursing.

Plan for Pilot study/Preliminary work:

Data will be collected among 10% of the main sample size after getting clearance from the Institution Ethical Committee (IEC).



Data Collection Plan

The investigator will obtain written permission from the concerned authority of the institution and from the head of Obstetrics And Gynecological department. Written informed consent will be taken from the subjects. The investigator will administer the structured interview schedule within 24 hours after delivery to assess the perceived satisfaction of mothers towards the care provided by the health care personnel during labour.

Ethical Consideration

1. Ethical Consideration will be obtained from the Institutional Ethics Committee.
2. Patient information sheet will be provided and Informed Consent will be obtained from all the participants.
3. Confidentiality of the participants will be ensured.
4. Participants will be assured that their participation is voluntary and they have the full right to withdraw from the study at any time without any penalty

Intervention Plan

Data for the main study will be collected after getting Administrative approval & permission. Explain and written consent will be obtained from the participants. Investigator will administer the structured interview schedule within 24 hours after delivery to assess the perceived satisfaction of mothers towards the care provided by the health care personnel during labour.

A total of 178 mothers after normal vaginal delivery within 24 hours will be taken as samples within a course of 6 months in different PHC's, district hospitals and tertiary care hospitals of Sikkim namely Pakyong District Hospital, Mangan District Hospital, Primary Health Centre, Soreng, Geyzing District Hospital, Singtam District Hospital, Namchi District Hospital, New STNM Hospital and Central Referral Hospital, Tadong, Gangtok.

The mothers who have delivered in the past 24 hours will be interviewed by the nurses who are serving voluntarily through structured interview schedule with questionnaires related to socio-demographic characteristics, obstetric characteristics and five-point Likert scale to assess mothers perceived satisfaction on care provided during labour by health care personnel under four domains of care, that is, health facility-related statements ,interpersonal aspects of care ,informative aspects of care, and technical aspects of care.

Statistical methods

The author will collect the data and analyzed the same to meet the research objectives. Both descriptive and inferential statistics will be used to establish the

primary analysis of each group before intervention. After collecting the data, it will be analyzed utilizing descriptive statistics for Mean, Percentage, Frequency and Standard Deviation.

The baseline influencing factor with outcome variable will be checked through chi square or fisher exact test. All analysis will be done through SPSS 21software.

Dissemination Plans:

The result and findings of this research will be published in peer reviewed journals of general and specific interest and will be communicated to the other customer of research through oral a poster presentation at several platforms.

Expected outcomes:

The interest in satisfaction is closely linked with the growth of consumerism in public policy. It is regarded as an important indicator of the quality of nursing and medical care and widely used as an outcome measure when evaluating care and the organization of services. Evidence on women's perception of and satisfaction with the quality of maternal care help determine other aspects of care that need strengthening in developing country. There is need for more research into maternal satisfaction in developing countries, where safe deliveries remain a major problem and barriers to utilization of institutional deliveries pose a major challenge for health care programs

Discussions:

Labour is a process by which the fetus, placenta and membrane are expelled from the birth canal. Child birth for the mother is a sentinel life event. Giving birth for the first time is anxiety provoking yet exciting in the lives of most women. The complex physical, psychological and emotional experience of labour affects every woman differently¹.Satisfaction is the one of the most frequently reported outcome measures for quality of care. Assessment of satisfaction with maternity services is crucial, and psychometrically sound measures are needed if this is to inform health practices.^{1,8,9}

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