Research Article

A Descriptive Study to Assess the Knowledge Regarding Natural Birthing among Women from Selected Areas of Pune City, in a View to Prepare an Information Booklet

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Abstract

Background: Natural birthing is a physiological process that emphasizes spontaneous onset and progression of labour with minimal medical interventions, where clinically appropriate. It promotes maternal participation in childbirth decisions, supports early mother–infant bonding, and encourages a positive childbirth experience. Adequate knowledge regarding natural birthing enables women to make informed decisions about childbirth and understand the importance of antenatal preparation, labour management, breathing and relaxation techniques, pain management, and postnatal care. However, misconceptions, fear of labour pain, inadequate awareness, and limited access to reliable information may influence women's knowledge and preferences regarding natural childbirth. Therefore, assessing women's knowledge is essential for identifying educational needs and developing appropriate health education materials.

Aim: To assess the knowledge regarding natural birthing among women in selected areas of Pune City, with a view to preparing an information booklet.

Objectives: To assess the level of knowledge regarding natural birthing among women, determine the association between knowledge scores and selected demographic variables, and prepare an information booklet based on identified knowledge needs.

Materials and Methods: The study adopts a quantitative research approach with a non-experimental descriptive research design. Women residing in selected areas of Pune City will constitute the study population. Participants will be selected using a non-probability purposive sampling technique. Data will be collected using a structured knowledge questionnaire consisting of demographic information and questions related to the concept, benefits, stages, preparation, and management of natural birthing. The collected data will be analyzed using descriptive statistics, including frequency, percentage, mean, and standard deviation. Inferential statistics, such as the Chi-square test, will be used to determine the association between knowledge levels and selected demographic variables at a 0.05 level of significance.

Expected Outcomes: The study is expected to identify the existing level of knowledge and major knowledge gaps regarding natural birthing among women. The findings will provide a basis for developing a comprehensive information booklet covering essential aspects of natural childbirth, including preparation for labour, supportive care, non-pharmacological pain management, benefits, limitations, and circumstances requiring medical intervention.

Conclusion: The study aims to provide valuable information regarding women's awareness of natural birthing and support the development of an educational booklet to improve maternal health literacy. The findings may assist nursing professionals and other healthcare providers in planning appropriate maternal health education and promoting informed childbirth decisions.

Keywords: Natural Birthing, Knowledge, Women, Descriptive Study, Information Booklet, Maternal Health, Pune City.

Introduction

Childbirth is one of the most profound and transformative experiences in a woman's life. Throughout human history, the process of giving birth has been a natural physiological event, intimately connected to the cultural, emotional, and social fabric of communities. In recent decades, however, the medicalisation of childbirth has dramatically altered this experience, particularly in developing countries like India. The World Health Organization (WHO) defines a positive childbirth experience as one that fulfils or exceeds women's prior personal and sociocultural beliefs and expectations, and maintains the health of both mother and baby.

Natural birthing also referred to as physiological or normal delivery is defined as the process of childbirth that occurs spontaneously, with minimal medical intervention, allowing the woman to labour and deliver guided by her own body's instincts and rhythms. It encompasses unmedicated vaginal delivery, water birthing, breathing techniques, positional freedom during labour, and the presence of continuous emotional support such as midwifery and doula care. [1] The WHO (2018) explicitly recommends that healthy women with uncomplicated pregnancies should be supported for physiological labour and birth, and that routine interventions should be avoided unless clinically indicated.[1]

India, as a nation with deep-rooted traditional birthing customs, stands at a crossroads. On one hand, ancient practices such as the role of the 'dai' (traditional birth attendant), herbal remedies, and

culturally embedded postpartum rituals have long supported natural childbirth. On the other hand, rapid

urbanization and the expansion of private healthcare facilities have fostered a perception that medicalized or operative deliveries are safer a perception that has contributed to an exponential rise in Caesarean section (C-section) rates, particularly in cities like Pune.[2]

According to the WHO, the ideal rate for Caesarean sections should be between 10–15% of all births. However, data from the National Family Health Survey (NFHS-5, 2019–21) indicate that in Maharashtra, approximately 26.8% of institutional deliveries are conducted through Caesarean sections, significantly exceeding this threshold. In private hospitals in cities like Pune, rates have been reported to be even higher, raising concerns about unnecessary surgical interventions and associated maternal morbidity.[3]

Need for the Study

Natural birthing is a physiological process that plays a significant role in promoting maternal and neonatal health. It encourages minimal unnecessary medical interventions, early mother–infant bonding, faster maternal recovery, and a positive childbirth experience. However, increasing medicalization of childbirth, fear of labour pain, misconceptions, and inadequate awareness regarding natural birthing have influenced women's preferences for different modes of delivery.

The increasing rate of Caesarean section deliveries has become a major maternal healthcare concern. According to the National Family Health Survey (NFHS-5, 2019–2021), the Caesarean section rate in India was 21.5%, while Maharashtra reported 25.4%. These findings highlight the importance of creating awareness regarding childbirth options and promoting informed decision-making among women.

Various research studies have revealed that women often possess inadequate or moderate knowledge regarding natural birthing, including its benefits, stages of labour, preparation techniques, and pain management methods. Lack of reliable information, dependence on family members, cultural beliefs, and fear of complications may contribute to misconceptions regarding childbirth. Therefore, appropriate health education is essential to improve women's understanding and confidence in making childbirth-related decisions.

Nurses and other healthcare professionals play a crucial role in providing antenatal education, counselling, and guidance regarding safe childbirth practices. An information booklet can serve as
an effective educational resource by providing simple, accurate, and easily understandable information about natural birthing.

Hence, the present study is undertaken to assess the existing knowledge regarding natural birthing among women residing in selected areas of Pune City and identify their educational needs. Based on the findings, an information booklet will be prepared to enhance awareness, address misconceptions, and encourage informed decisions regarding childbirth. The study may contribute to maternal health education and promote safe, respectful, and evidence-based childbirth practices in the community.

Aim of the Study

To assess the knowledge regarding natural birthing among women in selected areas of Pune City and to prepare an information booklet.

Objectives of the Study

1) To assess the knowledge regarding natural birthing among women in selected areas of Pune City.
2) To associate the finding with selected demographic variable.
3) To prepare an information booklet on natural birthing in selected areas of Pune City.

Research Methodology

Research approach and design: Quantitative research approach with a descriptive research design.

Research setting and sample: Selected areas of Pune City; 300 women aged 18–35 years selected by non-probability purposive sampling.

Inclusion criteria: Women residing in selected areas of Pune City, aged 18–35 years, who could read and understand English or Marathi. Women who were actively ill were excluded.

Data collection tool: Section A contained demographic variables: age, education, occupation, marital status, parity, previous mode of delivery, place of last delivery and source of information regarding childbirth. Section B comprised 20 self-structured knowledge questions on natural birthing. Scoring: 0–8 poor, 9–17 average and 18–20 good knowledge.

Validity and reliability: Content validity was obtained from experts. The test–retest reliability was calculated using Karl Pearson's correlation, with r = +0.8314.

Pilot study: A pilot study was conducted among 30 women (10% of the sample). The questionnaire was found clear and understandable, and no major modifications were required.

Ethical considerations and analysis: Institutional ethical permission and participants' written informed

consent were obtained. Anonymity and confidentiality were ensured. Data were analysed with descriptive statistics and chi-square tests of association.

Result

The sample consisted of 300 women residing in selected areas of Pune City. The data were analysed under demographic characteristics, assessment of knowledge regarding natural birthing, and association with selected demographic variables.

Table 1. Distribution of knowledge regarding natural birthing among women (N = 300).

Knowledge level	Frequency	Percentage
Poor (0–8)	57	19%
Average (9–17)	231	77%
Good (18–20)	12	4%
Total	300	100%

The assessment of knowledge regarding natural birthing among women from selected areas of Pune City revealed variation in the level of awareness among the participants. According to the findings, the majority of women (77%) had average knowledge regarding natural birthing, scoring between 9–17 on the knowledge assessment scale. This indicates that most women had a moderate understanding of natural birthing practices. This was followed by 19% of women who had poor knowledge (scores between 0–8), indicating that a considerable proportion of participants lacked adequate awareness regarding natural birthing and its benefits. Only 4% of women demonstrated good knowledge (scores between 18–20), showing that a very small number of participants had a high level of understanding regarding natural birthing.

The mean knowledge score was 11.5 with a standard deviation of 2.93, indicating that the overall knowledge level among women was average, with some variation in responses. These findings highlight the need to prepare an information booklet on natural birthing to improve awareness and enhance knowledge among women in the selected areas.

Table 2. Association between knowledge level and selected demographic variables (N = 300).

Variable	Chi-square	Reported p-value	Interpretation
Age	2.929	0.818	**Not significant**
Education	7.87	0.248	**Not significant**
Occupation	3.082	0.798	**Not significant**
Marital status	0.895	0.925	**Not significant**
Parity	4.146	0.657	**Not significant**
Previousmode of delivery	1.145	0.564	**Not significant**
Place of last delivery	0.508	>0.998	**Not significant**
Source of information	2.625	0.993	**Not significant**

Overall, the findings indicate that none of the selected demographic variables showed a statistically significant association with knowledge levels regarding natural birthing among women in the selected areas of Pune City.

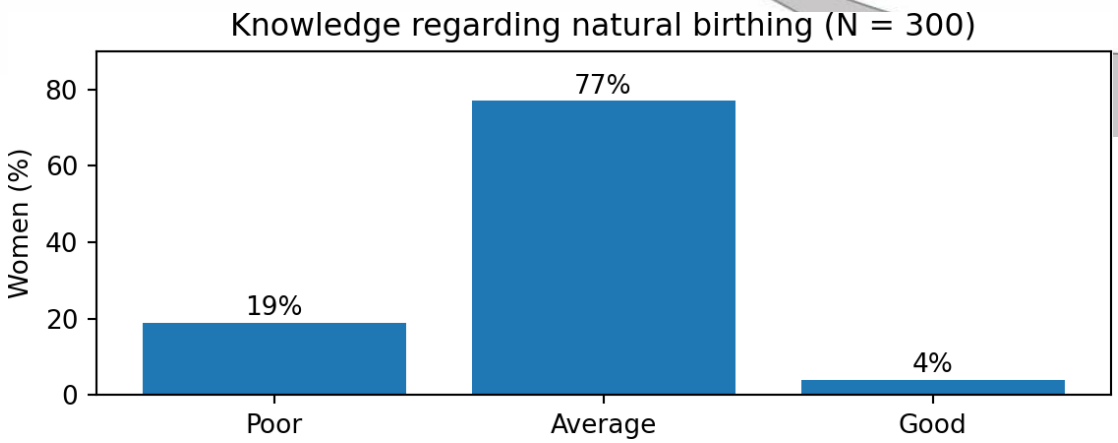


Figure 1. Distribution of knowledge categories among women (source: original study data).

Discussion

The findings of the present study were compared with those of **Sangeeta Chauhan et al. (2024),** who conducted a descriptive study in Dehradun, Uttarakhand, to assess knowledge and practice regarding birth preparedness among 100 antenatal women. Their findings revealed that 51% of participants had good knowledge, 27% had average knowledge, and 22% had very good knowledge. In contrast, the present study conducted among 300 women in selected areas of Pune City revealed that 77% had average knowledge, 19% had poor knowledge, and only 4% had good knowledge regarding natural birthing. These findings indicate comparatively lower knowledge levels among women in the present study. The difference may be related to variations in educational background, access to maternal healthcare information, and previous exposure to antenatal education. Both studies emphasize the importance of health education in improving maternal awareness and childbirth preparedness.

Similarly, the present findings were compared with a study conducted by **Bharti Satish Weljale (2021)** in the tribal areas of Bhandardara. This descriptive cross-sectional study assessed awareness and perception regarding the birthing process among 100 pregnant women. The study reported an overall mean awareness score of 42.82%, indicating limited knowledge regarding childbirth. Although the present study found that most participants had average knowledge, the findings cannot be directly compared numerically because the studies used different knowledge measures. Nevertheless, both studies identified important educational needs concerning childbirth awareness.

The findings suggest that women require accessible, reliable, and culturally appropriate information regarding natural birthing, its benefits, labour preparation, pain management, and possible complications. Therefore, the present study supports the preparation of an information booklet to address identified knowledge gaps, promote maternal health literacy, and facilitate informed decision-making regarding safe childbirth practices. The effectiveness of the proposed booklet would require evaluation through further research.

Conclusion

The present study concluded that women residing in selected areas of Pune City had predominantly average knowledge regarding natural birthing. Among the 300 participants, the majority (77%) demonstrated average knowledge, while 19% had poor knowledge and only 4% possessed good knowledge. These findings indicate that women's awareness regarding natural birthing remains inadequate and requires improvement through appropriate health education and awareness programmes.

The study also revealed that there was no statistically significant association between knowledge levels and selected demographic variables, suggesting that knowledge gaps were observed across different demographic categories. Inadequate awareness regarding the benefits of natural childbirth, stages of labour, preparation for delivery, and pain management techniques may influence women's understanding and decision-making regarding childbirth.

The findings emphasize the importance of providing accurate, reliable, and easily understandable information to women through structured educational materials. An information booklet regarding natural birthing can serve as a valuable educational resource to address identified knowledge gaps and promote maternal health awareness.

Thus, the study highlights the significant role of nurses and healthcare professionals in educating women about safe childbirth practices. The findings provide a foundation for developing appropriate educational

strategies to improve knowledge, reduce misconceptions, and encourage informed decision-making regarding natural birthing among women in the community.

Conflict of Interest

The authors certify that they have no involvement in any organization or entity with any financial or non-financial interest in the subject matter or materials discussed in this paper.

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