

A Study to Assess the Knowledge Regarding Post Natal Complications among the Nurses Working in Selected Primary Health Centres in Sangli District

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Running Title: "Knowledge regarding post natal complications among the nurses working in selected primary health centres"

Abstract: A study was conducted "to assess the knowledge regarding postnatal complications among the nurses working in selected Primary Health Centres in Sangli district." **Objectives:** 1) To assess the knowledge regarding postnatal complications among nurses working in selected Primary Health centres, in Sangli district. 2) To find out association between knowledge score regarding postnatal complications with selected demographic variables. **Material and Methods:** This exploratory study was used to evaluate the knowledge on postnatal complications among nurses working in selected Primary Health Centres. The researcher prepared a structured knowledge questionnaire as the tool for the study. The study adopted Health Belief Model to assess the knowledge regarding postnatal complications among the nurses working in selected Primary Health Centres in Sangli district. **Result:** The data shows that, there were 37.5% nurses from 21-30 years, 29.2% nurses were from 31-40 years age group and 33.3% nurses from the group 40 years and above; and 120 female nurses were participated in the study; 95.8% nurses were ANM's and 4.2 % nurses were GNM; in experience 25.8% nurses were having 1-5 years experience, 41.7% nurses 6-10 years and 32.5% nurses were 10 years and above experience. The data analysis shows that, 2.5 % nurses had poor knowledge score, 9.2 % nurses had average knowledge score, 79.2 % nurses had good knowledge score and 9.2 % nurses had excellent knowledge score regarding postnatal complications.

Keywords: Assess, Knowledge, Nurses, Postnatal Complications

1. Introduction

A postnatal period starts soon after the birth of a child and the mother's body returning to its non-pregnant state. The immediate postnatal period is commonly used to refer to the first six weeks following childbirth. The postnatal period is precious but most critical and yet the most neglected phase. Therefore the most maternal and newborn deaths occur during the postnatal period.

Assumption

A researcher assumes that, nurses working in selected Primary Health Centre's and sub-centre's have some knowledge regarding the postnatal complications.

Delimitations

- 1) The study was delimited to the nurses who are working at the selected Primary Health Centre.
- 2) The period of data collection was limited for study it was only 4 weeks.

2. Material and Methods

Research Approach: Quantitative approach was used for the study.

Research Design: Research design is the plan, structure and strategy of investigation for answering the research question. It is the overall blueprint, the researcher select to carry out their study. Non-experimental-exploratory research design was used for the study.

Setting: A setting refers to the area where the study is conducted. The setting for this study was the selected Primary Health Centres of Sangli district which includes, Yelavi, Aarag, Bhose, Erandoli, Kawathepiran, Khanderajuri, Mhaishal, Nandre, Bhilwadi, Kundal, Aashta, Bagani, Mangle, Kameri, Petha, Kasegaon, Kuralap, Nerle, Shirala.

Population: The target population in the present study included Nurses who are working at Primary Health Centre.

Sample: The subset of population in the present study included Nurses who are working at selected Primary Health Centre in Sangli district.

Sampling Criteria

a) Inclusion Criteria

Willing to participate in the study.

b) Exclusion Criteria

Nurses who are not present at the time of study.

Sample Size: The total sample size in this study was 120 and it was calculated by power analysis.

Sampling Technique

The simple random sampling technique was used by the researcher. (Simple random sampling technique was used to choose Primary Health Centres from Sangli district and samples were taken by as per the availability).

Data Collection Tool

The specific questions of tool by the data collection translate the research objectives and achieves research objectives. To achieve this purpose, each question must convey to the respondent the idea or group of ideas required by the research objectives. An instrument in research refers to the tool or equipment used for data collection.

For the preparation of the tool the following steps were used:

- 1) Review of literature was done in the area related to knowledge of postnatal complications among nurses.
- 2) Opinion and suggestions were taken from the experts, which helped in determining the important areas to be included.

The researcher prepared a structured knowledge questionnaire as the tool for the study. The structured knowledge questionnaire included two sections:

Section I: Demographic Variables

It was used to collect the baseline information of the client like Age, Sex, Qualification, Experience.

Section II: It includes the 24 structured knowledge questionnaires on postnatal complications.

The knowledge was assessed by 24 structured knowledge questionnaire; each correct answer was given a score 'one' and wrong answer given 'zero' score. The total knowledge score was plotted on the scale of four: 0-8 poor, 9-14 average, 15-20 good, 21-24 excellent.

Validity: To ensure the content validity of the knowledge questionnaire, the investigator given the tool to 25 experts from different departments. There were some corrections which were made and the final tool was prepared.

Ethical Consideration: Research proposal with data collection tool were presented in front of ethical committee for getting permission which were taken from concerned authority. The name of the participant and data were kept confidential. The participation in the study was voluntary.

Reliability: The reliability was done at Primary Health Centre, Bhilwadi on 18-8-2016 to 19-8-2016. The reliability of the tool was determined by administering the structured knowledge questionnaire to 12 nurses by split half method. The Karl spearman's correlation coefficient formula used for estimation of reliability. The knowledge questionnaire score was 0.83, which is greater than required/theoretical value (0.75 to 0.80) thus the tool was found reliable.

Procedure of Data Collection

A prior permission was obtained from the District Health Officer, ZP Sangli for conducting the study. The data collection began from 23 -8-2016 to 10-9-2016.

Tool:

Section- I: Demographic Performa,

Section-II: 24 Structured knowledge questionnaire on postnatal complications.

The purpose of the study was explained to the nurses. The nurses were asked to fill the consent and on the same day nurses were administered structured knowledge questionnaire. The sheets were collected at the end of 30 minutes. The data was entered in sheets for analysis.

Plan for Data Analysis: The data was analyzed in the term of objective of the study using descriptive and inferential statistics. The plan for data analysis was developed under the guidance of guide and statistician. Data were analyzed in accordance with the objectives of the study. Analysis of data was done by following method as per the objectives, frequency and percentage used to assess knowledge and Fisher's formula used to find out the association between knowledge score and selected demographic variables.

Pilot Study: Pilot study was done under the selected Primary Health Centres in Sangli district by achieving prior permission was taken from District Health Officer, ZP Sangli to conduct the pilot study. It was conducted from 20-8-2016 to 22-8-2016, on 12 nurses from selected Primary Health Centres in Sangli district. The purpose of conducting the pilot study was to find out the feasibility and practicability of the study. A Structured knowledge Questionnaire was used to assess the knowledge regarding postnatal complications. The purpose of the study was explained to each subject and informed consent was obtained prior to the pilot study. Confidentiality was assured to all the subjects. The data was collected. The study was found to be feasible and practicable.

3. Results and Discussion

Analysis and interpretation of the data is the most important phase of research process, which involves the computation of the certain measures along with searching for patterns of relationship that exists among data groups. Data collection is followed by the analysis and interpretation of data, where collected data are analysed and interpreted in accordance with study objectives. It includes compilation, editing, coding, classification and presentation of data. This chapter deals with the organization and analysis of data and its interpretation of data collected from 120 nurses working in selected Primary Health centres in Sangli district. The present study has been undertaken to assess the knowledge regarding postnatal complications among nurses working in selected Primary Health centres in Sangli district. The data collected was analyzed as per the objectives of the study.

4. Analysis of the Data

Based on the above objectives the following sections were made for analysis,

- **Section I** - Frequency and percentage distribution of selected demographic variables.
- **Section II**- Frequency and percentage distribution of knowledge score.
- **Section III**- Association between knowledge score and selected demographic variables.

Section –I

Table 1: Frequency and Percentage distribution of selected demographic variables, n=120

Sr. No.	Demographic Variables		Frequency (f)	Percentage (%)
1.	Age in years	21-30 years	45	37.5 %
		31-40 years	35	29.2 %
		40 years and above	40	33.3 %
2.	Sex	Male	0	0
		Female	120	100%
3.	Education	ANM	115	95.8 %
		GNM	05	4.2 %
4.	Experience	1-5 years	31	25.8 %
		6-10 years	50	41.7 %
		10 years and above	39	32.5 %

The above table shows that, there were 37.5% nurses from 21-30 years, 29.2% nurses were from 31-40 years age group and 33.3% nurses from the group 40 years and above; and 120 female nurses were participated in the study; 95.8% nurses were ANM's and 4.2 % nurses were GNM; in experience 25.8% nurses were having 1-5 years experience, 41.7% nurses 6-10 years and 32.5% nurses were 10 years and above experience.

Section II

Table 2: Frequency and Percentage distribution of knowledge score, n=120

Knowledge Score	Frequency (f)	Percentage (%)
Poor (0-8)	3	2.5 %
Average (9-14)	11	9.2 %
Good (15-20)	95	79.2 %
Excellent (21-24)	11	9.2 %

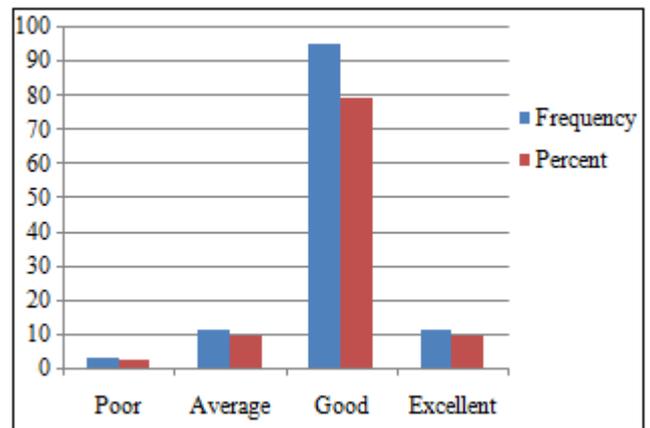


Figure 1: Frequency and percentage distribution of knowledge score

The above table shows that, 2.5 % nurses had poor knowledge score, 9.2 % nurses had average knowledge score, 79.2 % nurses had good knowledge score and 9.2 % nurses had excellent knowledge score regarding postnatal complications.

Section-III

Table 3: Association between Knowledge score and selected Demographic variable, n=120

Sr. No.	Demographic Variable	Knowledge Score				Fisher's Exact test calculated value	p-value	Remark
		Poor	Average	Good	Excellent			
1.	Age	21-30 years	1	6	35	10.718	0.059	No significant association
		31-40 years	1	3	31			
		41 years and above	1	2	29			
2.	Education	ANM	3	11	92	4.928	0.19	No significant association
		GNM	0	0	3			
3.	Experience	1-5 years	1	3	25	9.767	0.507	No significant association
		6-10 years	1	5	32			
		10 years and above	1	3	38			

The table shows that, there is no significant association between knowledge score with any selected demographic variable.

*Sex-As there were all female nurses were in study, so fishers exact test was not done. The female nurses had 3, 11, 95 and 11 knowledge score as poor, average, good and excellent knowledge score respectively.

5. Discussion

This study was conducted to evaluate the knowledge regarding postnatal complications in selected Primary Health Centres, in Sangli district. This chapter presents a summary of the study, the conclusion drawn and its implications for

nursing. It clarifies the limitations of the study and suggests recommendations for the future research.

Finding of the study based on the objectives of the study.

Objectives were as follow:

- 1) To assess the knowledge regarding postnatal complications among nurses working in Primary Health centres in Sangli district.
- 2) To find out association between knowledge score with selected demographic variables.

6. Findings of the Study

The findings of the study were based on the objectives of the study.

Section I-Demographic variables:

Age: It was found that 37.5% nurses belong to the age group 21-30 years, 29.2% nurses belongs to age group 31-40 years and 33.3% nurses belongs to age group 40 years and above.

Sex: It was found that 100% nurses were female.

Education: It was found that 95.8% nurses were ANM's and 4.2% nurses were GNM's.

Experience: It was found that 25.8 % nurses had 1-5 years experience, 32.5% nurses had 6-10 years experience and 41.7% nurses had 10 years and above experience.

The previous study showed that, a descriptive study to assess knowledge on on postnatal care among postnatal mothers. To select the postnatal mothers the Non probability purposive sampling technique was used. One hundred ninety six postnatal mothers were interviewed face to face using structured questionnaires. Most of the respondents 79(40.31%) belongs to 22-25 age groups and the mean age was 24.12 years. Majority of the respondents 182(92.86%) were Hindu. All the respondents were literate. Out of 196, 146(74.48%) of the respondents, got information from friends and family. The most of respondents 123 (62.76%) had average level of knowledge on postnatal care. The nurses had highest knowledge in the area of danger sign of postnatal mothers and newborn and the lowest knowledge in the areas of family planning. The overall mean percentage was 64.34. There was significant association in level of knowledge with selected demographic variables; i.e. occupation ($\chi^2=5.008$) and education level ($\chi^2=48.75$). Mothers had moderate level of knowledge about postnatal care. Awareness program is required to improve maternal knowledge on postnatal care.¹⁵

Section II- Frequency and percentage distribution of knowledge score.

It was found that, 2.5% nurses had poor knowledge score, 9.2% nurses had average knowledge score, 79.2% nurses had good knowledge score and 9.2% nurses had excellent knowledge score regarding postnatal knowledge score. The previous study showed that, a study to assess the knowledge and practice of Nurse Midwives of management and prevention of postpartum haemorrhage. It is a cross-sectional descriptive study. The findings revealed that, participants have long experience varies from 11 to 30 years but only 30% of them received in service training about PPH. The nurse/midwives generally had good knowledge about post partum haemorrhage was (78%). Their knowledge about assessment and management, sign, prevention and definition, types, common causes were (84.2, 82.5, 82 and 81.3%) respectively less knowledge about complication and risk factors of PPH were 73.5 and 64.2% respectively. A practical aspect of nurse/ midwives regarding prevention of PPH was (69.6%). The study

showed that nurse/midwives had good knowledge regarding PPH prevention and management with satisfactory practice regarding prevention of PPH. The need for continuous in-service training to updates nurse midwives knowledge and practice regarding management and prevention of PPH.²⁰

Section III- Association between the knowledge score selected demographic variables:

- Age:** It was found that there is no significant association between the knowledge score with age as the fisher's exact test value is 0.059.
- Sex:** It was found that as there were only female nurses so there is no significant association between the knowledge score with sex.
- Education:** It was found that there is no significant association between the knowledge score with education as the fisher's exact test value is 0.19.
- Experience:** It was found that there is no significant association between the knowledge score with experience as the fisher's exact test value is 0.057.

7. Implications

The implication of the study could be discussed under four broad areas, namely nursing education, nursing administration and nursing research.

1) Nursing Education

Nursing education prepares the nurse through basic nursing course for effective delivery of nursing services in hospital and community setup. The education plays important role in imparting knowledge, providing learning experiences, develop skills as a professional nurse. Nurse can educate postnatal mothers regarding postnatal complications its clinical manifestations, treatment and prevention. She may suggest the topic like postnatal complications to be included in the in-service educations. The nurse educator can make the health personnel aware through in-service education and educate nurses about the postnatal complications.

2) Nursing Administration

Health education can save many lives. She may plan and conduct regular in- service education for the staff nurses. The educational approach is a major means today to achieve changes in life practices through organizing various camps and seminars. The result though slow, is enduring and sufficient time should be allowed to have the desired change. Therefore the nurse administrator should invest more budget in preparing pamphlets, self instructional module, informational booklet, to educate the mothers and family members. All these efforts are for prevention of postnatal complications.

3) Nursing Research

To increase the knowledge level of nurses the nursing discipline, nursing research should be undertaken. Research is urgently required to develop new and improved methods for effective steps to bring awareness about postnatal complications. The results of the present study have opened up new avenue for further studies. The specific areas for research are recommended under the heading of recommendations. The findings of the study suggest that

there is a need to impart knowledge regarding postnatal complications among nurses. Many such research projects can be conducted in near futures which are specified in recommendation. There is need to give education in simple and concise form considering the language and background of the community this would help in disseminating proper knowledge among the nurses through the in-service programme.

8. Recommendations

- 1) A similar study can be conducted on a large population for better generalization of findings.
- 2) A similar study can be done in different setting.
- 3) A similar study can be implemented by using planned health teaching programme.
- 4) A similar study can be implemented by using pamphlets, both in English and local languages, which will help in to improve the maternal health and newborn health.

9. Conclusion

This study was aimed to assess the knowledge regarding postnatal complications among nurses working in selected Primary Health centres in Sangli district.

This study shows that, there were 37.5% nurses from 21-30 years, 29.2% nurses were from 31-40 years age group and 33.3% nurses from the group 40 years and above; and 120 female nurses were participated in the study; 95.8% nurses were ANM's and 4.2 % nurses were GNM; in experience 25.8% nurses were having 1-5 years experience, 41.7% nurses 6-10 years and 32.5% nurses were 10 years and above experience.

The knowledge score 2.5 %, 9.2 %, 79.2 % and 9.2% nurses had poor, average, good and excellent knowledge score respectively regarding postnatal complications. This study shows that, there is no significant association between knowledge score with selected demographic variable.

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