A study to evaluate the effectiveness of structured teaching programme on knowledge regarding water birth among 3rd year GNM students at selected nursing school at Ramanagara

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Abstract

Hypothesis
H1: There will be a significant difference between pre-test and post-test knowledge score regarding water birth among 3rd year GNM students.
H2: There will be a significant association between pre-test knowledge score with selected demographic variables of 3rd year GNM students regarding water birth.

Methods: A pre-experimental approach was used for this study. The study was carried out in selected nursing schools in Ramanagara. The research design was pre-experimental one group pretest post test Research Design. The sample comprised of 100 3rd year GNM Major findings and results. The pre-test mean percentage knowledge score was shows that highest mean of subject is 10.56 with standard deviation is 2.1039 and mean percentage of 35.20% obtained for knowledge on 3rd year GNM students and the post test study shows that highest mean of subject is 10.56 with standard deviation is 2.1039 and mean percentage of 35.20% obtained for knowledge on students, knowledge regarding water birth. The association of Paired t Test is accepted because a calculated value is 48.1171 and df is 99, hence it is more than calculated value. So Null hypothesis is rejected and Research hypothesis is accepted.

The $\chi^2$ value computed between the pre-test level of knowledge with selected socio-demographic variables. Variables of age ($\chi^2 = 0.01$), Religion ($\chi^2 = 0.07$), Variables of Occupation of Father ($\chi^2 = 0.15$), Variables of occupation of mother ($\chi^2 = 0.03$), type of family ($\chi^2 = 0$), 01, Variables of monthly income of family ($\chi^2 = 0.12$), Variables of source of information of water birth ($\chi^2 = 0.03$), were found to be not significant at 0.05 level. Thus it can be interpreted that there is no significant association between pre-test levels of knowledge of 3rd year.

Conclusion: The above table shows the pre-test score level of knowledge of mothers, in which 50 (50.0%) were had poor knowledge, 48 (48.0%) were had good knowledge, and 02 (02.0%) were had Excellent knowledge water birth among nursing students. The above table shows the post-test score level of knowledge of mothers, in which 93 (93.0%) were had Excellent knowledge, 04 (04.0%) were had had poor knowledge, and 03 (03.0%) were had good knowledge water birth among nursing students.

Implications of the study: The findings of the study can be used in the following areas of nursing profession

Keywords: Structured teaching programme, GNM students, Ramanagara

Introduction

The right to health requires countries to invest in maternal, reproductive and child health. Progress in maternal and child health depends on improvements in a range of areas both within and beyond the health sector. A woman’s childbirth experience is vitally important and her birthing memories endure. Major factors that influence the quality of this experience include personal expectations, the quality and amount of support she receives the quality of the caregiver-patient relationship.1 Childbirth is an intense event and strong emotions both positive and negative canbe brought to the surface. Childbirth is a divine process and women should be supported during labour.2 Water birth is childbirth that occurs in water. Proponents believe water birth results in a more relaxed, less painful experience that promotes a midwife-led model of care. 3 Child birth is a crucial moment in a women’s life, she becomes a mother and though the end result is rewarding the process of labor is painful,
which we believe it is a curse to the womankind because of the first women sin otherwise whichis called the original sin.

Water birth is the process of giving birth in a tub of warm water. Some women choose to labour in the water and get out for delivery. Other women decide to stay in the water for the delivery as well. The theory behind water birth is the since the baby has already been in the amniotic fluid sac for nine months, birthing in a similar environment is gentle for the baby and less stressful for the mother.

Water birth should always occur under the supervision of a health care provider as it has many potential benefits to both mother and baby like. Water is soothing, contouring, relaxing in the later stages of labor, the water seem to increase the woman’s energy and lower high blood pressure and provides a sense of privacy which release inhibitions, anxiety and fear and besides water birth, eases the stress of the birth providing reassured and security to the baby by creating a similar environment as the amniotic sac. The theory behind water birth is that the baby has been in the amniotic sac for 3 months and birthing into a similar environment is gentler for the baby and less stressful for the mother11. Water birth still remains a controversial birthing method due to large part to the lack of studies performed. Critics argue that because water aspiration is always a potential difficulties which underwater birth are contamination of the bath water with feces expelled with pushing effort during the 2nd stage of labor, aspiration of bath water by a fetus which could lead to pneumonia and maternal chilling when she leaves the water. Advise women choosing this method that research on the safety and wisdom of the method is ongoing10. A Water Birth eases stress of birth for baby by providing environment similar to amniotic sac and there are 4 main factors like increased levels of prostaglandin E2 in placenta, mild hypoxia during birth, hypertonic nature of lung fluid and dive reflex which prevents the baby from inhaling water at the time of birth 8. According to Dr. Rosenthal’s an article from “The female patient. Water birth is an important that information on water birth is conveyed to all nursing students in a form they can understand and in a culturally sensitive fashion, to quality services. Teacher has to manager and supervisors of students training in caring for women who wishes to have a water birth and in order to increase choice for quality care.

Objectives of the study
- Assess the pre-test knowledge scores regarding water birth among 3rd year GNM students at selected nursing school at Ramanagara.
- Evaluate the effectiveness of structured teaching programme on water birth among 3 rd year GNM students at selected nursing school at Ramanagara.
- Determine an association between the pre-test knowledge score on water birth among 3rd year GNM students and selected demographic variables.

Methodology
Research approach
Evaluative Research Approach Was Considered

Research design
The research design selected for the study was pre experimental one group pre test, post test design.

Research variables
1. Dependent variable A dependent variable is the response behaviour or outcome that the researcher wants to predict or explain. In this study the knowledge regarding water birth among 3rd year GNM students
2. Independent variable an independent variable is a stimulus or activity that is manipulated or varied by the researcher to create an effect on dependent variable.
3. Socio-Demographic variables The socio- demographic variable in the study were age, gender, type of family, religion, place of residence, previous source of knowledge regarding water birth

Settings of the study
The study was conducted in selected nursing school at Ramanagara. The setting was chosen on the basis of feasibility in terms of availability of the 3rd year GNM students. Population of the study:

Target population
According to Talbot a target population is the population under study, the population to which the researcher wants to generalize the research findings. The target population of this study comprised of 3rd year GNM students at selected nursing school Sample and.

Sample size
The study sample size was 100

Sampling technique
The investigator selected the 100 3rd year GNM students at selected nursing school at Ramanagara by using of Purposive sampling sample technique Sampling criteria The criteria for sample selection are mainly depicted under two heading, which includes the Inclusion criteria and exclusive criteria.

Inclusive criteria: → 3 rd year GNM students who are willing to participate in the study. → 3rd year GNM students who are available at the time of data collection.

Exclusive criteria: 1. Student who are not willing to participate in this study. 2. Students those who are on leave or sick on the day of data collection.

Development and selection of the tool
Data collection tool or instruments are the vehicle that could best to obtain the data pertinent to the study and at the time adds to the body of knowledge in the discipline. 55 The instrument used for this study was self-administered knowledge questionnaire to assess the knowledge regarding water birth among 3rd year GNM students. The following sources were used for the development of the tool: Review of literature: It was done from books, journals, and published and unpublished research studies. Preparation of blue print Consultation and discussion with nursing experts. Personal experience and discussion with teachers.

Description of the tool
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**Content of blue print**

A blue print was prepared as prior to the construction of the self administered knowledge questionnaire on assessment of knowledge regarding water birth. The items consists in the structured teaching programme are General aspects, Meaning of water birth, Indications and contra-indications of water birth, Advantages of water birth, Prerequisites for water birth, Procedure and management of water birth, Immediate care of new born after water birth. Development of criteria checklist: A criteria checklist was prepared to develop structured teaching.

**Reliability of the tool**

The reliability of the tool is computed by using Spearman Brown’s prophecy formula, where “r” value obtained was 0.950 which showed that the tool was highly reliable and valid.

**Plan for data analysis**

Data analysis is a systemic organization and synthesis of research data and testing of research hypothesis using those data. The data obtained was analyzed in terms of objectives of the study using descriptive and inferential statistics. The plan of data analysis is as follows:

- Organization of data in master sheet/computer.
- Computation of inferential statistics such as frequencies and percentage for the analysis of socio-demographic data.

Computation of differential statistics such as mean, standard deviation for pre test and post test knowledge scores.
- Paired, t” test was used to test the significant difference in the pre test and post test knowledge scores.

- Chi – square test is used to find the association between the knowledge scores and with selected socio-demographic variables. The level of significance would be set at p≤0.05 levels to test the significance of difference

**Results**

This chapter deals with analysis and interpretation of information collected through self-administered knowledge questionnaire 100 for 3rd year GNM students in selected nursing schools in Ramanagara. The present study was designed to assess the effectiveness of structured teaching programme on knowledge regarding water birth among 3rd year GNM students at selected nursing school at Ramanagara. Collected data were coded, organized, analyzed and interpreted using descriptive and inferential statistics

**Organization of findings**

The data collected from the 3rd year GNM students has been organized and presented under the following headings

- **Section I:** Frequency and percentage distribution of the socio-demographic variables.
- **Section II:** Analysis of pre-test and post-test knowledge scores of 3rd year GNM students regarding water birth.
- **Section III:** Analysis of effectiveness of structured teaching programme regarding water birth.
- **Section IV:** Analysis of association between the pre-test level of knowledge with selected socio-demographic variables

**Section I:** Distribution of the 3rd year GNM students according to sociodemographic

With regard to age of students, maximum number of subjects 85 (85.0%) were in the age group of 20 to 21 years, 15 (15.0%) were in the age group of 20 to 21.

**Graph 1:** Percentage distribution of according to age of students
Table 1: Percentage distribution according to types of family

<table>
<thead>
<tr>
<th>SL No</th>
<th>Family</th>
<th>Percentage</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nuclear Family</td>
<td>85</td>
<td>85</td>
</tr>
<tr>
<td>2</td>
<td>Joint Family</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

Section II: Analysis of pretest and post-test knowledge scores of 3rd year gnm students regarding water birth.
Table 2: area wise assessment of pre-test knowledge score of 3rd year GNM students regarding water birth.

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Max</th>
<th>Range</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>SD</th>
<th>Mean Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge Regarding Water Birth Among Third Year GNM Student</td>
<td>30</td>
<td>16TO17</td>
<td>10.56</td>
<td>10</td>
<td>10</td>
<td>2.1039</td>
<td>35.20%</td>
</tr>
</tbody>
</table>

Above table represents the maximum score, range score, mean, standard deviation and mean percentage aspects of knowledge water birth among 3rd year GNM students. This study shows that highest mean of subject is 10.56 with standard deviation is 2.1039 and mean percentage of 35.20% obtained for knowledge on 3rd year GNM.

Table 3: Classification of respondents based on level of knowledge.

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Level of Score</th>
<th>Pre test Score</th>
<th>Post test Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Frequency</td>
<td>Percentage</td>
</tr>
<tr>
<td>1</td>
<td>Poor 0 to 10</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>2</td>
<td>Good 11 to 15</td>
<td>48</td>
<td>48</td>
</tr>
<tr>
<td>3</td>
<td>Excellent 1b to 30</td>
<td>02</td>
<td>02</td>
</tr>
</tbody>
</table>

Graph 5: The level of knowledge score comparison between pre and post-test

Graph 6: Percentage distribution of according to sources of information

References
1. Nehanegi CJ. Water birth for safe, less painful child delivery, Merinews; c2018.
3. Nehanegi CJ. Water birth for safe, less painful child delivery, Merinews; c2008 Jul 11
5. Preparing for Water birth, URL: http://www.waterbirthpreparation.htm
7. The big splash, URL: http://www.gulfmanorammaonline.com
10. Water Birth: The Benefits And Risks,
https://americanpregnancy.org/labor-and-birth/water-birth/


32. Sally,et al.,; Study on knowledge regarding alternative birthing methods among staff nurses working in department of Obstetrics and gynecology; c2015. USA, URL://www.americanpregnancy.com


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