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A Study on the Effectiveness of Structured Teaching Programme on the Knowledge of Water Birth

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ABSTRACT

Child birth is always challenging. It is not a small thing to bring a new soul into the world and not a small thing to suffer so that another may have life. Instead of more Natural birth has always allowed for a woman to keep her power and her strength for the birth. Water birth allows less pain and less suffering and nurtures one's belief in oneself. So, this study aimed at assessing and giving knowledge on water birth among staff nurses. The Research Design selected for the study was Pre-experimental one group pre test and post test design. The study was conducted on 60 staff nurses in maternity wards of selected hospitals using convenience sampling technique. The Pilot study was conducted on 14 staff nurses. Reliability of tool was computed by using Karl Pearson formula. The reliability of the tool was 0.96.On the first day pre-test was taken by using structured knowledge questionnaire followed by structured teaching programme. After one week of structured teaching programme post test was taken.In pre- test majority of staff nurses 58 (97%) had poor knowledge, and 2(3%) had average knowledge. But in the post test it was observed that most of staff nurses 35(58.33%) had good knowledge, and 25(41.66%) staff nurses had average knowledge. From this score it can be clearly concluded that staff nurses had inadequate knowledge regarding water birth before administration of structured teaching programme.

Keywords: *Effectiveness, Structured teaching programme, Staff nurses, Water birth*

BACKGROUND OF THE STUDY

People never sing… except in the bathroom. Birthing women also make their natural sounds next to running bath water. There is something about the power of water. People are drawn to water, spas, and sacred streams. Women in labor are drawn to water, too.[1]
Michel Odent, *MD*

Water birth is often called as "Gentle birth". During water birth mother gives birth under water in a birthing tub. She may also spend part of her labor in a tub. Special tub is larger and deeper than a regular bath tub and it allows mother to try a variety of positions during labor and delivery. Baby emerges into warm water before being brought out to take a first breath of air.80 percent of pregnancies in the world are normal and these mothers can have underwater deliveries. The birth of your baby is one of the most important events of your entire life. It will have for reaching consequences that effects your most intimate family relationships for many years to come .water birth is a gift that lasts a life time it can optimize your birth & create your own personal miracle of love and empowerment safe, gentle, joyous water birth is available to you now what could be more important.[2]The death of a woman while pregnant or within 42 days of delivery, miscarriage or termination of pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from the accidental or incidental causes is defined as maternal death.[4] India accounts 20% of the world's maternal deaths. The maternal mortality ratio is incredibly high in India, that is 450 maternal deaths per 100,000 live births.[5] Every year about 78,000 mothers die in childbirth and from complications of pregnancy in India, according to UNICEF. So the goal given to India is reduce the maternal deaths to 109 per 100,000 live births by the year 2015.[6] To avoid the complications during delivery,

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hydrotherapy is used from the ancient times in western countries.. The water birth is a form of hydrotherapy used for the safe and easy labour and delivery. By practicing the water birth we can reduce the maternal morbidity and achieve the goal given by UNICEF.Water birthing was introduced into the United States during the early 1980s, when Erik Sidenbladh's book pioneered the practice of water birth in the U.S. By the 1990s, many people in the United States were exploring the practices of water births as a gentler alternative to traditional methods. Monadnock Community Hospital in Peterborough, New Hampshire, began offering water births in 1991 and became the first U.S. hospital to develop a protocol for water birthing. By 2005, more than 300 U.S.hospitals had adopted Monadnock's protocol or developed their own protocols.[9]Already popular in the West, water birth in India is emerging as a promising alternative to painful old delivery methods. It's relatively painless, needs minimal medical intervention, fewer episiotomies and experienced less discomfort. It is an ideal medium to bring a child into the world.In Delhi, Phoenix Hospital has a facility for water birth. Charlotte Walter, 36, a British woman, was the first to give birth by this method at this hospital. Two months later, Veronica Bertolini, an Italian woman, delivered a baby girl in water. The Beauty of giving birth in water is that it empowers women to take charge .Birth is totally natural. There is no induction, no pain medication of any kind, no IV lines, and no episiotomies. The woman gives birth in zero gravity.[10]A woman should be encouraged to use the labor pool whenever she wants. Some mothers find a bath in early labor useful for its calming effect and to determine if labor has actually started. If contractions are strong and regular, no matter how dilated the cervix is, a bath might be in order to help the mother to relax enough to facilitate dilation. Water should be monitored at a temperature that is comfortable for the mother, usually between 95-100 degrees Fahrenheit. Water temperature should not exceed 101degrees Fahrenheit, as it could lead to an increase in the mother's body temperature, which could cause the baby's heart rate to increase.[3]There are many benefits to giving birth in the water. Water relaxes the pelvic floor muscles.Water minimizes pain so effectively that for most women other pain control methods are no longer needed. All midwives should read, observe, and keep up to date on water births .In India lack of awareness is one of the main factors which affects the promotion of water birth. Researcher concludes that primarily there is a need to assess the knowledge of staff nurses regarding water birth, based on this findings further actions can be taken to improve their existing knowledge and developing skills, so that all midwifes will be confident regarding water birth and efficient enough to educate the people which in turn helps to promote water birth successfully

Statement of Problem

A Pre-experimental study on the effectiveness of structured Teaching Programme on the knowledge of water birth among staff nurses working in maternity wards of selected hospitals in Jalandhar city, Punjab 2012

Objectives

1) To assess the pretest knowledge of Water birth among staff nurses.
2) To plan and implement structured teaching program on knowledge of Water birth among staff nurses.
3) To assess the post test knowledge of water birth among staff nurses.
4) To compare the pre-test and post-test knowledge of water birth among staff nurses.
5) To find out the association between the knowledge of water birth among staff nurses with the selected socio-demographic variables.

Research Hypothesis

H_1 : There will be a significant difference between the mean knowledge score of staff nurses in pre-test and post-test.

Null Hypothesis

H_0 :There will not be any significant difference between the mean knowledge score of staff nurses in pre-test and post-test.

MATERIAL AND METHOD

Conceptual framework for this study was developed on the basis of general systems theory given by Ludwig Von Bertalanffy (1968). The research approach adopted is Quanitative.Pre-experimental one group pre-test and

post test only design was used to assess the effectiveness of structured teaching programme on the knowledge of Water birth among staff nurses working in maternity wards in selected hospitals of Jalandhar city.

One group pre-test post test design was used in present study.

O1 ⟶ X ⟶ O2

O1: Pre-test

X: Structured teaching programme

O2: Post test

The Independent variables included in study are:Structured teaching Programme and dependent Variable is knowledge of Water birth among Staff nurses. After extensive review of literature a self structured questionnaire was prepared to assess the knowledge of water birth among staff nurses. The tool was given for validity to experts. As per their guidance amendments were made.Structured teaching programme was prepared for giving teaching on water birth to staff nurses.The tool was framed into two parts:

Part I: This part consist of 6 items for obtaining the information about the demographic data of the sample such as Age, educational status, Experience, religion, job setting and mass media exposure.

Part II- This part consisted of 30 items in multiple choice question formats to assess the knowledge of water birth among staff nurses. Score 1 (one) was given to correct response and 0 (zero) to incorrect response. So the maximum score was 30 and minimum possible score was 0.Criterion measurement for assessment of knowledge is as follows:

Sample's Level of Knowledge

Level of Knowledge	Score Range
Good	26-30
Average	16-25
Below Average	0 – 15

The study was conducted in the well reputed selected hospitals (Government & Private) of Jalandhar city. The total of 60 staff nurses working in maternity wards were comprised of the sample of the study. The convenience sampling technique was used for the selection of sample. Study approval was taken from Ethical committee of SGL college of Nursing,Jalandhar.Informed written consent had been taken from the study subjects. Pretest knowledge was assessed by giving structured knowledge questionnaire. After 7days of teaching post test was taken to assess the effectiveness of the tool.

FINDINGS OF STUDY

The analysis of data was done in accordance with objectives of the study. Analysis was done in the following sections:

Section A: Description of Socio demographic variables of study samples.

Section B: Analysis of pre-test knowledge score

Section C: Analysis of post test knowledge score

Section D: Comparison of pre test and post test mean knowledge scores

Table 1: Frequency and percentage distribution of pre test knowledge score on water birth among staff nurses N=60

Level of knowledge	Percentage	Score	Knowledge Score	
			(n)	(%
Good	>83%	26- 30	0	0
Average	>50 to 83 %	16 - 25	2	3%
Below average	≤50%	0- 15	58	97%

Maximum=30

Minimum=0

Table 1 depicts that in pre test majority of the staff nurses 58 (97%) had below average knowledge, and 2(3%) had average knowledge. No one had good knowledge of water birth.

Table 2 Frequency and percentage distribution of post test knowledge of water birth among staff nurses.

N=60

POST TEST KNOWLEDGE SCORE							
Level of knowledge		**Percentage**		**Score**		**Knowledge Score**	
						(n)	%age
Good		>83%		26- 30		35	58.33%
Average		>50 to83 %		16 – 25		25	41.66%
Below average		≤50%		0- 15		0	0 %

Maximum=30

Minimum=0

Table 2 depicts that after the administration of structured teaching programme the mean knowledge score move upward from below average towards good that was 35(88.33%) staff nurses having good knowledge score and 25(41.66%) staff nurse had average knowledge in post test. No one had below average knowledge score.

Table 3 Comparison of pre test and post test mean knowledge score of water birth among staff nurses

N = 60

	Pre Test and Post Test mean knowledge score				
	Frequency(n)	**Mean**	**S.D.**	**Variance**	**t – value**
Pre test	60	11.65	2.26	5.14	36.919*
Post test	60	25.96	1.97	3.88	

Maximum=30 *S-Significant at ($p<0.05$) level

Minimum=0

Table 3 depicts that mean knowledge score of post test was higher i.e. 25.96 than pre test that was 11.65.The mean knowledge score of post test was higher than the pre test.t_{cal} 36.919 which was more than the 't' value that was 1.96 at 5% level of significance. This means that after the administration of structured teaching programme there was increase in knowledge of staff nurses of water birth.

H_0 rejected as t_{cal} 36.919 > 1.96 at 5% level of significance. Thus H_1 is accepted. So, it was interpreted that structured teaching programme was quite useful in providing knowledge on water birth among staff nurses in the selected hospitals of Jalandhar.

CONCLUSION

Findings of this study reveal that staff nurses who are going to be responsible for the care of the patients have poor knowledge on water birth and there is a dire need to conduct health education programme, to increase the knowledge of the staff nurses. This study has proved that the staff nurses had a remarkable increase in the knowledge on water birth when compared to the previous knowledge, prior to the administration of the planned teaching programme. Thus for the future there is a need to improve the knowledge and awareness by conducting the health programmes.

Ethical Clearance- Taken from Ethical committee of SGL College of Nursing Jalandhar.

Source of Funding- Self

Conflict of Interest- NIL

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