"A COMPARATIVE STUDY TO ASSESS THE EFFECTIVENESS OF SALT SOLUTION WASH VERSUS WARM WATER WASH ON LEUCORRHEA AMONG REPRODUCTIVE AGE WOMEN IN SELECTED HOSPITALS, SALEM DISTRICT"

Indira.P, *Nageswari.R* M.Sc (N) Student, Professor

Vivekanandha College Of Nursing, Elayampalayam.

Abstract

The aim of the study is to assess the effectiveness of salt solution wash and warm water wash on leucorrhea among reproductive age women with their demographic variables with qualitative approach. Experimental group I and group II pre test and post test was adopted for this study. The study was conducted at K. N. Rao Hospital & Sri Devi Hospital, Salem. The sample size was 60 reproductive age women, the purposive sampling technique was used to select the sample. The nature of the study was briefed to participants and consent was obtained.

Keywords:

Effectiveness, Salt Solution, Warm Water, Leucorrhea, Reproductive Age Women

Introduction:

Women are probably dying because they have been denied access to medical treatment in time. Women's health in changing practically every step in time. From womb to the tomb, women are made to pay clearly for their

womanhood and unless some steps are taken to made people appreciate human rights issues related to women's sexual and reproductive health women will continue to die. (Public Health, 2019)

Need For The Study:

According to the WHO, total population in millions 7,795 during 2020, population aged 15 – 64, percent 65.2% in 2018.Global observations show that in developed regions maternal mortality ratio averages at 30 per 100,000 live births, in developing regions the figure is 480 for the same number of live births. Maternal mortality rates are high in many developing countries. According to World Health Organization estimates, about 510,000 maternal deaths about 0.9 percent of total deaths occurred globally. (WHO, 2002)

Objectives of Study:

1.   To assessthe effectiveness of salt solution wash versus warm water wash on leucorrhea among reproductive age women in experimental group I and experimental group II.

2.   To compare the effectiveness of salt solution wash and warm water wash on leucorrhea among reproductive age women in experimental group I and experimental group II.

3.   To associate the post test level of leucorrhea on reproductive age women with the selected demographic variables in experimental group I and experimental group II.

Hypothesis:

H1 - There is a significant difference between the pre and post test level of leucorrhea among reproductive age women in experimental group I and experimental group II. H2 - There is a significant comparison between the post test score of salt solution wash and warm water wash on leucorrhea among reproductive age women in experimental group I and experimental group II. H3 - There is a significant association between the post test level of leucorrhea with their selected demographic variables in experimental group I and experimental group II.

Research Methodology:

Quantitative approach, two group pre and post test research design, the sample for the study consist of 60, Purposive sampling technique was used this study.

Data Collection Procedure

The data collection and intervention was done for a period of 4 weeks. The data was collected on all the days in the morning and evening including Sundays The investigators got permission from the The Managing Director of K N

Rao Hospital, Salem & Sri Devi Hospital, Salem. Subsequently the investigator visited 5-6 women per day and the subjects were selected on the inclusion criteria. Data collection will be done to the convenience and flexible timing at the subject. The investigator was demonstrated the preparations of Salt solution wash. It refers to 2.5 mg of salt powder was added in 250ml of boiled water. For the other group, tolerable warm water wash will be demonstrated. Warm water wash refers to a solution which is made by one litre of water which boiled upto 15minutes and make it tolerable to the skin. Following the procedures, the subjects are assessed for effectiveness after 5 days of intervention for both group and confirmed with itching assessment scale.

Symptoms of leucorrhea

It consist of nine symptoms of leucorrhea. Each question has yes or no options. 'Yes' means give one score, 'No' means Zero score. Based on the score, differentiate the mild, moderate and severe.

S. No	Score	Level of Leucorrhea
1	0 - 3	Mild
2	4 - 6	Moderate
3	7 - 9	Severe

SECTION - A

DISTRIBUTION OF REPRODUCTIVE AGE WOMEN ACCORDING TO THE DEMOGRAPHIC VARIABLES IN EXPERIMENTAL GROUP-I AND GROUP-II

Table 4.1.1 Distribution of reproductive age women according to the demographic variables in Experimental group I and group II

N=60

S.No	Demographic variables	Experimental Group – I (30)		Experimental Group – II (30)	
		F	%	F	%
	Age (years)				
	a. 18-25	7	23	4	13
1	b. 26-33	12	40	13	44
	c. 34-41	8	27	10	33
	d. 42-50	3	10	3	10

2	**Educational status**				
	a. No formal education	3	10	5	16
	b. Primary education	16	54	14	57
	c. High school / higher secondary education	4	13	6	20
	d. Diploma / Graduate	7	23	5	17
3	**Occupation**				
	a. House wife	6	20	8	26
	b. Daily wages	4	13	3	10
	c. Private employee	14	47	15	50
	d. Govt. employee	6	20	4	14
4	**Family monthly income**				
	a. < 5000	2	6	3	10
	b. 5001-10000	6	20	8	27
	c. 10001-20000	12	40	14	46
	d. > 20001	10	34	5	17
5	**Religion**				
	a. Hindu	19	64	21	70
	b. Christian	6	20	4	13
	c. Muslim	5	16	5	17
6	**Marital Status**				
	a. Unmarried	0	0	0	0
	b. Married	26	87	23	76
	c. Divorced	4	13	7	24
	d. Widow	0	0	0	0
7	**Parity**				
	a. No child	4	13	3	10
	b. One	13	44	15	50
	c. Two	6	20	5	17
	d. More than two	7	23	7	23
8	**Type of family**				
	a. Nuclear	16	53	19	63
	b. Joint	8	27	7	24
	c. Extended	6	20	4	13

9	**Place of residence**				
	a. Urban	19	64	18	60
	b. Rural	5	16	8	27
	c. Semi urban	6	20	4	13
10	**Dietary pattern**				
	a. Vegetarian	12	40	9	30
	b. Non vegetarian	18	60	21	70
11	**Mode of delivery**				
	a. Normal delivery	6	20	8	27
	b. LSCS	24	80	22	73
12	**Previous source of knowledge**				
	a. Neighbours	8	27	6	20
	b. Friends and peer groups	6	20	5	26
	c. Health Professionals	12	40	16	54
	d. Media	4	13	3	10

SECTION-B

DISTRIBUTION OF REPRODUCTIVE AGE WOMEN ACCORDING TO THE CLINICAL VARIABLES IN EXPERIMENTAL GROUP-I AND GROUP-II

Table 4.2.0: Distribution of reproductive age women according to the clinical variables in Experimental group I and group II

N=60

S.No	Clinical Variables	Experimental Group – I (30)		Experimental Group – II (30)	
		F	%	F	%
1	**Period of menstruation once in number of days**				
	a. 25-27	13	43	14	46
	b. 28-30	9	30	8	27
	c. > 30	8	27	8	27
	d. Irregular	0	0	0	0

2	Duration				
	a. 1-3 days	13	43	16	53
	b. 4-7 days	14	47	8	27
	c. > 7 days	3	10	6	20
3	Frequency				
	a. Every day present	11	37	14	47
	b. On and off	14	47	13	43
	c. Occasional	5	16	3	10
4	Texture				
	a. Frothy greenish discharge	5	16	6	20
	b. Whitish, curdy discharge	12	40	11	37
	c. Milky discharge ,badodour	6	20	8	37
	d. Watery discharge				
		7	24	5	16
5	Nature				
	a. Wet and stain	5	16	6	20
	b. Stain alone	16	54	19	64
	c. Wet only	9	30	5	16
6	Aggravating factors				
	a. Ovulation	14	46	10	33
	b. Sexual activity	8	27	4	13
	c. Menstrual cycle	8	27	16	54
7	Burning sensation				
	a. No	0	0	0	0
	b. Mild	12	40	14	47
	c. Moderate	13	43	16	53
	d. Severe	5	17	0	0
8	Vaginal itching				
	a. No	2	6	0	0
	b. Mild	6	20	10	33
	c. Moderate	18	60	17	57
	d. Severe	4	14	3	10
9	Fish odour smell				
	a. No	0	0	0	0
	b. Mild	17	57	19	64
	c. Moderate	8	27	8	27

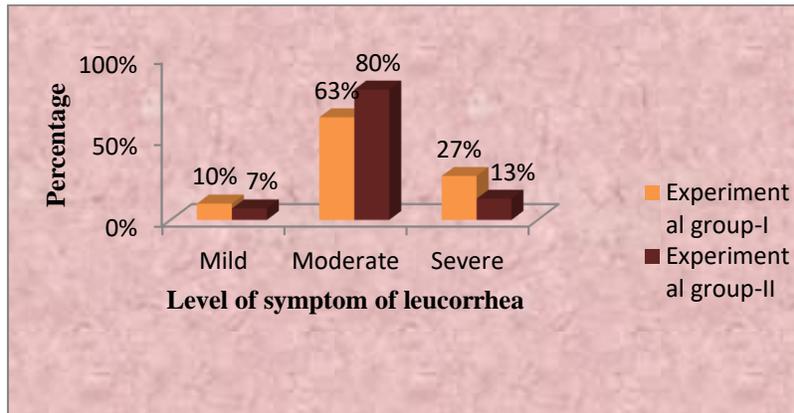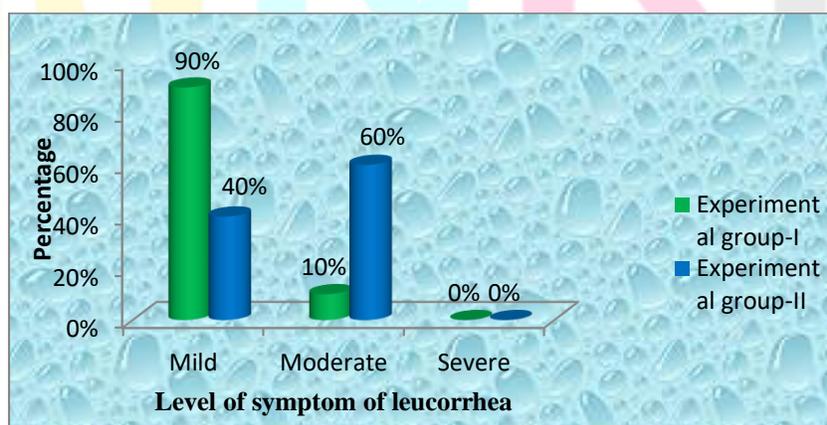|					
	d. Severe	5	16	3	10
10	**Low back pain**				
	a. No	0	0	0	0
	b. Mild	4	13	3	10
	c. Moderate	19	63	21	70
	d. Severe	7	24	6	20
11	**Contraceptive methods adopted**				
	a. Temporary	17	57	21	70
	b. Permanent	9	30	7	23
	c. Not using any method	4	13	2	7
12	**Management**				
	a. Nothing doing	6	20	3	10
	b. Cold water wash	14	47	16	53
	c. Tap water wash	10	33	11	37
13	**Assimilation of secretion**				
	a. Not using anything	0	0	0	0
	b. Cloth	16	53	13	43
	c. Panties	14	47	17	57

SECTION–C

DISTRIBUTION OF REPRODUCTIVE AGE WOMEN ACCORDING TO THE LEVEL OF LEUCORRHEA IN EXPERIMENTAL GROUP-I AND GROUP-II IN PRE TEST

4.3.1 Frequency and percentage distribution of reproductive age group to the level of leucorrhea in experimental group I and group II in pre test

Table 4.3.1 shows that level of leucorrhea in pre test. In experimental group-I, 3 (10%) of them had mild level, 19 (63%) of them had moderate level and 8 (27%) of them had severe level.

In experimental group-II, 2 (7%) of them had mild level, 24 (80%) of them had moderate level and 4 (13%) of them had severe level according to leucorrhea.

DISTRIBUTION OF REPRODUCTIVE AGE WOMEN ACCORDING TO THE LEVEL OF LEUCORRHEA IN EXPERIMENTAL GROUP-I AND GROUP-II IN POST TEST

4.3.2 Frequency and percentage distribution of reproductive age group to the level of leucorrhea in experimental group I and group II in post test

Figure 4.3.2 depicts that level of leucorrhea in post test. In experimental group-I, 27 (90%) of them had mild level, 3 (10%) of them had moderate level and none of them in severe level.

In experimental group-II, 12 (40%) of them had mild level, 18(60%) of them had moderate level none of them in severe level according to leucorrhea.

SECTION-D

COMPARISION OF PRE AND POST TEST SCORES OF SALT SOLUTION WASH ON LEUCORRHEA AMONG REPRODUCTIVE AGE WOMEN IN EXPERIMENTAL GROUP-I AND EXPERIMENTAL GROUP-II

Table 4.4.1 Mean and standard deviation with pre and post test scores of symptom of leucorrhea in experimental group-I and experimental group-II

S. No	Group	Mean		SD	't'
		Pretest	Post test		
1	Experimental group-I	5.47	1.56	1.23	13.54**
2	Experimental group-II	5.63	4.28	2.56	1.893

COMPARISION OF POST TEST SCORE OF WARM WATER WASH ON LEUCORRHEA AMONG REPRODUCTIVE AGE WOMEN IN EXPERIMENTAL GROUP-I AND EXPERIMENTAL GROUP-II

Table 4.4.2 Mean and standard deviation and 't' value of post test score in experimental group I and experimental group II

N = 60

S. No	Group	Mean	SD	't'	Table value
1	Experimental group - I (30)	1.56	1.23	6.512**	1.699
2	Experimental group - II (30)	4.28	2.56		

ASSOCIATION BETWEEN POST TEST SCORES ON LEUCORRHEA AMONG REPRODUCTIVE AGE WOMEN IN EXPERIMENTAL GROUP-I AND EXPERIMENTAL GROUP – II

Table 4.4.3 Association between post test score of Salt solution wash on leucorrhea among reproductive age women in experimental group - I

S. No	Demographic variables	Experimental group - I			Chi square value
		Mild	Moderate	Severe	
1	Age a. 12-25 b. 26-35 c. 36-45 d. > 45	6 10 8 3	1 2 0 0	0 0 0 0	2.43 DF = 3, NS
2	Educational status a. No formal education b. Primary education	3 14	0 2	0 0	6.41 Df = 3, NS

	c. High school / higher secondary education	4	0		
		6	1	0	
	d. Diploma / Graduate			0	
3	**Occupation**				3.46
	a. House wife	6	0	0	Df = 3,
	b. Daily wages	3	1	0	NS
	c. Private employee	13	1	0	
	d. Govt. employee	5	1	0	
4	**Religion**				7.19**
	a. Hindu	18	1	0	Df = 2,
	b. Christian	7	1	0	S
	c. Muslim	5	1	0	
5	**Type of family**				1.89
	a. Nuclear	14	2	0	Df = 2,
	b. Joint	7	1	0	NS
	c. Extended	5	1	0	
6	**Mode of delivery**				5.26**
	a. Normal delivery	5	1	0	Df = 1, S
	b. LSCS	22	2	0	
7	**Previous sources of knowledge**				10.56**
	a. Neighbours	7	1	0	Df = 3,
	b. Friends and peer groups	6	0	0	S
		10	2	0	
	c. Health Professionals	4	0	0	
	d. Media				

Table 4.4.4 Association between post test scores of warm water wash on leucorrhea among reproductive age women in experimental group-II

S. No	Demographic variables	Experimental group-II			Chi square value
		Mild	Moderate	Severe	
1	**Age** a. 12-25 b. 26-35 c. 36-45 d. > 45	2 4 3 3	2 9 7 0	0 0 0 0	4.16 Df = 3, NS
2	**Educational status** a. No formal education b. Primary education c. High school / higher secondary education d. Diploma / Graduate	2 5 2 3	3 9 4 2	0 0 0 0	2.34 Df = 3, NS
3	**Occupation** a. House wife b. Daily wages c. Private employee d. Govt. employee	3 1 5 3	5 2 10 1	0 0 0 0	5.68 Df = 3, NS
4	**Religion** a. Hindu b. Christian c. Muslim	6 3 3	15 1 2	0 0 0	1.56 Df = 2, NS
5	**Type of family** a. Nuclear b. Joint c. Extended	6 5 1	13 2 3	0 0 0	7.12** Df = 2, S
6	**Mode of delivery** a. Normal delivery b. LSCS	3 9	5 13	0 0	1.46 Df = 1, NS
7	**Previous source of knowledge** a. Neighbours	4	2	0	8.56** Df = 3, S

b.Friendsand peer groups	2	3	0	
c. Health Professionals				
d. Media	6	10	0	
	0	3	0	

CONCLUSION

Meeting the needs of the women and family is one of the primary responsibilities of a midwife. Reproductive age women may have difficulties such as arthritis, leucorrhea, muscle weakness etc. Due to leucorrhea, the women may have lower abdominal pain, intense itching, burning micturation, irritability, tiredness etc. So the symptom of leucorrhea is essential one to be reduced. The symptom of leucorrhea can be reduced by using salt solution wash which is cheap and best method and also the preparation of salt solution wash is very easy. The salt is available is all shops and the availability of salt is very easy in all homes. Perineal wash with salt solution is cost effective when comparing to other antiseptic lotions. It may not cause any infection, itching and irritation. This study statistically proves the reduction of symptom of leucorrhea by salt solution wash at 5% significant level.

REFERENCES

BOOKS

1.   Adele, P. (2009). Maternal and child nursing. 5th edition. Philadelphia: Lippincott Williams and Wilkins Publication.

2.   Annamma, J.A. (2012). Comprehensive Textbook of Midwifery and Gynaecological Nursing. 3rd edition. New Delhi: Jaypee Brothers Medical Publishers.

3.   Arulkumaran, S &Alokendu, C. (2008). Essentials of obstetrics and gynaecology. 1st edition. New Delhi: Jaypee Brothers Medical Publishers.

4.   Basavanthappa, B.T. (2007). Nursing Research. New Delhi: Jaypee Publications.

5.   Berry, P.H et al. (2010). Maternal Child Nursing Care. New York: Mosby Publications.

6.   Bhasker, N. (2012). Midwifery and Obstetrical Nursing. Bangalore: Emmess Medical Publications.

JOURNAL

1.   Bandana, S. (2011). The prevalence of various diseases among Ghumantoo tribes of Rajasthan. Indian Journal of Biological Medical Research.

2.   Jolanta, R.G. (2008). Is the mother's bacterial vaginosis with Premature rupture of membrane a significant factor for intrauterine infection of the fetus in preterm labor before 32 weeks of gestation. Indian Journal of Medicine.

NET REFERENCE

1. http://apps.chapter

2. http://blogs.cultural and biochemical/meanings of leucorrhea

3.http://healthstatistics11.org

4. http://humanpapillomavirus_relatedcancers_WHO.reportupdate.co.in

5. http://leucorrhea/17-021