

ASSESSMENT OF KNOWLEDGE AND FACTORS INFLUENCING LEUCORRHOEA AMONG THE WOMEN OF REPRODUCTIVE AGE GROUP IN SELECTED AREAS OF KAMRUP (RURAL) DISTRICT, ASSAM WITH A VIEW TO DEVELOP AN INFORMATION BOOKLET

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Abstract

Reproductive tract infections (RTIs) in women are becoming major public health problem not only in India but also over the world. The most commonly reported among the women with RTIs is abnormal vaginal discharge or Leucorrhoea. Globally, Leucorrhoea occurs in 1-14% of all the women in the reproductive age group and is responsible for 5-10 million OPD visits per year. The prevalence of excessive vaginal discharge in India is estimated to be 30%. The NFHS -3 results show that 11% of women in India report at least one reproductive health problem related to vaginal discharge. Thus, the need of the study is to investigate the level of knowledge and factors influencing leucorrhoea in the selected rural areas of Kamrup (R). A descriptive study was conducted by using descriptive survey design. Kish and Leslie formula was used to determine sample size of 300 women from the target population in selected villages Simila, Baniyavatha, Kamargaon, NizBekeli, Bhatipara of Boko Kamrup (rural), Assam by using multistage systematic sampling technique. The data collected were analyzed by descriptive and inferential statistics. The findings of the present study clearly suggest that majority of the women had moderate level of knowledge regarding leucorrhoea. Out of 300 women 64 (21.33%) of them had fulfilled the criteria for leucorrhoea. Highest influencing factors of leucorrhoea experienced by women of selected age group is influencing factor 3; (25.39%) women who consumed egg, chicken or beef frequently. There is significant association between knowledge and selected demographic variables such as age, education, occupation and marital status except religion at 0.05 level of significance. While no significant association is found between influencing factor 1 (stress), influencing factor 3 (consumption of egg, chicken, beef,) influencing factor 4 (heavy work for long hour), and influencing factor 5 (vaginal infection) with selected demographic variable i.e age, education, occupation religion and marital status.

Keywords: RTI (Reproductive Tract Infection), RHS (Rapid Household Survey), WHO (World Health Organization), BPHC (Block Primary Health Centre), SDM & HO (Sub Divisional Medical and Health Officer)

INTRODUCTION

Reproductive tract infections (RTIs) in women are becoming major public health problem not only in India but also over the world. There are many symptoms that define the disease (RTI), the most commonly reported among the women is that abnormal vaginal discharge or Leucorrhoea. The term leucorrhoea denotes a thick, whitish vaginal discharge. It is a natural defence mechanism that the vagina uses to maintain its chemical balance as well as preserve the flexibility of vaginal tissue. Normally, the secretion is just enough to lubricate vagina. When vaginal secretion increases more

than normal it causes excoriation & soreness of vulva. If white vaginal discharge is associated with foul smell, it makes embarrassing to the women to get into social gatherings and even in personal affair. The affected woman needs treatment and counseling regarding the problem. If it is not treated in the initial stages, it may become chronic. Various community based studies in developing countries have revealed that this morbidity and general ill health has been endured silently by women, due to various factors like gender inequalities, cultural restrictions, lack of women autonomy, poor awareness, lack of proper infrastructure, and lack of focused counseling services.² A study in India reported higher rates of depression in women attending a gynaecological clinic compared with women attending a general medical clinic. There is evidence from clinical and community studies linking the complaint of vaginal discharge with mental disorders in India. It has been hypothesized that the complaint of vaginal discharge may represent a culturally shaped 'bodily idiom of distress', in which concerns about loss of genital secretions reflect wider issues of social stress. Need of the study : Good reproductive health is a state of complete physical, mental and social well-being in all matters relating to the reproductive system. It implies that people are able to have a satisfying and safe sex life, the capability to reproduce and the freedom to take decision. The reproductive health is a part of sexual and reproductive health and rights. The WHO assessed in 2008 that reproductive and sexual ill-health account for 20% of the global burden of ill health for women and 14% for men. According to a study Prevalence of reproductive tract infection and their determinants in married Women residing in urban slum of North East Delhi , India 2010: A total 43.9% women had symptoms of RTIs. The most frequently reported symptoms include abdominal pain (68.2%), back pain (69.6%), and vaginal discharge (59.3%). As high case load has been found appropriate steps should be taken, since there is a need to conduct further studies to factors predisposing women to the risk of RTIs and STDs . Health services should be improved and more accessible so, that women feel comfortable in seeking treatment and are not deterred by concern over privacy and confidentiality.

METHODOLOGY

Research Approach: The present study aim to assess knowledge and factors influencing leucorrhoea among the women of reproductive age group. In order to achieve the objectives **descriptive quantitative approach** was adopted.

Research design: The research design adopted for the present study was **descriptive survey design**.

Sample and Study setting: the study was conducted among the 300 women from the 5 villages under BOKO PHC, Kamrup (Rural) Assam.

Development of tool

Structured interview schedule were used for data collection. The tool was developed after thorough Review of literature, Discussion with guide, Discussion and consultation with experts in the field of nursing and medicine.

Description of tool

Section I: Demographic Data

The first section of the tool consist of five items to collect data regarding personal and demographic data of the subjects such as age , education , occupation, religion and marital status.

SECTION II: STRUCTURED INTERVIEW SCHEDULE TO ASSESS KNOWLEDGE ON LEUCORRHEA

Structured interview schedule to assess knowledge on leucorrhoea consist of 15 number of multiple choice question (MCQs) with one correct answer. The maximum score is '15' and minimum score is '0'.

Knowledge Category	Score Range
Inadequate knowledge ($< \text{Mean} - \text{SD}$)	3-4
Moderate knowledge (Between $\text{Mean} - \text{SD}$ to $\text{Mean} + \text{SD}$)	5-9
Adequate knowledge $\geq \text{Mean} + \text{SD}$	10-14

Scoring key: Each question contains 2-4 alternative options for but only one answer is correct. So a score of '1' mark is given for each correct answer and 0 for each incorrect answer. The total score are 15.

SECTION III: DIAGNOSTIC CHECKLIST TO IDENTIFY PREVALENCE OF LEUCORRHEA

Leucorrhoea was assessed by using a checklist for the clinical symptoms according to the criterion for leucorrhoea by D C DUTTA¹⁰ ' a text of Gynaecology And Obstetrical nursing ' and supported by the clinical physician.

Leucorrhoea should fulfill the following criteria:

- The excess secretion is evident from persistent vulvar moistness or staining of the undergarment (brownish yellow on drying) or need to wear a vulvar pad.
- It is non-purulent and non offensive.
- It is nonirritant and never causes pruritus.
- It is presented as yellowish or thick curd-like discharge
- It is associated with lower abdominal pain.
- It has foul smell i.e fish-like smelly discharge

Note: if more than 3 criterions are fulfilled then subjects are diagnosed as having leucorrhoea.

SECTION IV: STRUCTURED QUESTIONNAIRE TO ASSESS INFLUENCING FACTORS OF LEUCORRHEA

This section consist of 7 (seven) items to assess the influencing factors of leucorrhoea among the women of selected age group.

Scoring key- Each question contains two option 'yes' and 'no'. Scoring is done as yes -1, no -0 for every factor experienced by the women.

Establishing Content validity of the tool

The content validity of the structured interview schedule was done by 7 expert from medicine and nursing department of the different institutions in Assam . Suggestions and recommendations were accepted and necessary corrections were made in the tool and it was finalized for the study

Data collection procedure

Prior to data collection, formal written permission was obtained from the Joint Director of Health Services Kamrup Rural, Assam. The study was carried out during the month of March 2020 (01- 03-2020 to 24-03-2020) among 300 women of selected villages. The sample was selected by systematic random sampling where every 7th sample from the sampling frame prepared from Voter's list was selected as the sample for the study. Only one sample was taken from each household. If the selected

women is not available at the time of data collection then investigator visited the next household. For each sample, the investigator took twenty to thirty minutes to complete the interview. Average ten to fifteen women were interviewed daily. Prior consent was taken from the participants assuring the anonymity and confidentiality would be maintained throughout the study procedure.

Plan for data analysis

The data collected from subjects were analyzed in terms of objectives of the study by using descriptive and inferential statistics. The analyzed data has been organized and presented in the form of tables, pie diagrams and bar diagrams. The analysis is made by using important parameters like frequency, percentage, chi-square. The plan of data analysis is as follows:

The collected data was coded and transformed into master sheet.

- Frequency and percentage distribution was used for analysis of demographic data.
- Mean, mode and median and standard deviation was computed to assess the knowledge of leucorrhoea.
- Frequency and percentage distribution was used for assessing prevalence of leucorrhoea among the women of reproductive age group in the selected areas of kamrup rural.
- Frequency and percentage was computed for analysis of factors influencing leucorrhoea

Chi square test was computed to find out the association between knowledge and demographic variables like as age, education, marital status, religion and occupation

RESULT

Table 1 : Demographic profile of the women

N=300

Demography		n	(%)
Age	18-23 Yrs	66	22%
	24-32 Yrs	91	30.3%
	33-41 Yrs	82	27.3%
	42-45 Yrs	61	20.3%
Education	Illiterate	44	14.7%
	Primary	113	37.7%
	High School	74	24.7%
	Higher Sec & Above	69	23%
Occupation	Housewife	214	71.3%
	Daily wage	17	5.7%
	Pvt. Employee	18	6%
	Govt. Employee	6	2%
	Student	45	15%
Religion	Hindu	231	77%
	Islam	53	17.7%
	Christina	16	5.3%
Marital Status	Unmarried	59	19.7%
	Married	216	72%
	Divorcee	2	0.7%

	Widow	23	7.7%
	Total	300	100%

Table2: Frequency and percentage distribution of respondent according to knowledge scores Total score = 15

N= 300

Group	Score range	Frequency	Percentage	Mean	SD
Inadequate knowledge	3-4	21	7%	3.71	0.46
Moderate knowledge	5-9	234	78%	6.61	1.23
Adequate knowledge	10-14	45	15%	11.00	1.11
Total	3-14	300	100%	7.07	2.16

Table 3: Frequency and percentage distribution of the women in relation to prevalence of leucorrhoea

N = 300

Prevalence	Frequency	Percentage	95% Confidence Intervals
Absent	236	78.67%	73.68-82.92%
Present	64	21.33%	17.08-26.32%
Total	300		

Table 4: Distribution of women according to influencing factors of Leucorrhoea

n = 64

Sl. No.	Influencing Factors	Frequency	Percentage	95% Confidence Interval
1	Stress	28	21.54%	15.34-29.37%
2	Lack of personal hygiene	23	17.69%	12.09-25.15%
3	Consumption of egg, chicken, beef etc	33	25.39%	18.68-33.5%
4	Heavy work for long hours	30	23.08%	16.67-31.03%
5	Vaginal infection (previous history)	6	4.62%	2.13-9.7%
6	Soiled undergarments	10	7.69%	4.23-13.58%
7	Intrauterine devices	0	0%	0-2.87%
Total			100%	

Table 5 Association between Knowledge of leucorrhoea among women and selected demographic variable.

Age	Knowledge			Total	Chi Sq (X ²)	df	p value	Remarks
	Inadequate	Moderate	Adequate					
18-23 Years	0	48	18	66				

24-32 Years	7	67	17	91	21.153	6	.002**	**Highly significant
33-41 Years	8	67	7	82				
42-45 Years	6	52	3	61				
Total	21	234	45	300				

Education	Knowledge			Total	Chi Sq (X ²)	df	p-value	Remarks
	Inadequate	Moderate	Adequate					
Illiterate	10	34	0	44	103.88	6	<.001*	**Highly Significant
Primary	10	102	1	113				
High School	1	62	11	74				
Higher Sec & Above	0	36	33	69				
Total	21	234	45	300				

Occupation	Knowledge			Total	Chi Sq (X ²)	df	p value	Remark
	Inadequate	Moderate	Adequate					
Housewife	12	183	19	214	91.245	8	<.001*	**Highly Significant
Daily wagee	8	9	0	17				
Pvt. Employee	0	13	5	18				
Govt. Employee	0	1	5	6				
Student	1	28	16	45				
Total	21	234	45	300				

Religion	Knowledge			Total	Chi Sq (X ²)	df	P-value	Remark
	Inadequate	Moderate	Adequate					
Hindu	16	178	37	231	3.198	4	.525 ^{NS}	Not Significant
Islam	5	41	7	53				

Christian	0	15	1	16				
Total	21	234	45	300				

Marital Status	Knowledge			Total	Chi Sq	df	p-value	Remark
	Inadequate	Moderate	Adequate					
Unmarried	1	34	24	59	39.914	6	<.001**	**Highly Significant
Married	18	178	20	216				
Divorcee	0	2	0	2				
Widow	2	20	1	23				
Total	21	234	45	300				

SUMMARY

MAJOR FINDINGS OF THE STUDY

- Age of women: Majority of women (30.3%) in the age group 24-32 years.
- Education of women : Majority of women (37.7%)were primary school passed,
- Occupation of women: Majority (71.3%) were housewife.
- Religion of women : Majority of women (77%) belong to Hindu religion
- Marital status of women : Majority of women (72%) were married,
- Knowledge level : Majority (78%) of women had moderate knowledge on leucorrhoea.
- Prevalence of leucorrhoea: Out of 300 women 64 (21.33%) of them had fulfilled the criteria for leucorrhoea.
- Influencing factors of leucorrhoea: Highest influencing factors of leucorrhoea experienced by women of selected age group is influencing factor 3 ; (25.39%) women who consumed egg , chicken or beef frequently.
- Data analysis shows that there is significant association between knowledge and selected demographic variables such as age, education, occupation and marital status except religion at 0.05 level of significance.

CONCLUSION

After conducting the study the it was found that majority of the women had moderate level of knowledge regarding leucorrhoea.The study result shows that there is significant association between knowledge and demographic variable such age, education, occupation and marital status. Therefore knowledge of leucorrhoea varies in women according to the age group, level of education, type of occupation and marital status. A better understanding of the emotional dimension of symptoms in gross cultural context needs to be addressed. Emphasis is required to be laid on promoting reproductive health education of women at community level starting right from adolescent period

through their reproductive years.

Health workers are recommended to educate women & school-age girls about leucorrhoea and the detail informations about it. Therefore, the educational program about leucorrhoea should be given not only to the school-age girls, but also to the women's in a community.

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