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ORIGINAL RESEARCH PAPER

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Barman TT[1], Das RR[2]

ABSTRACT

Introduction: Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, as so, reproductive health addresses the reproductive processes, functions and system of all stages of life. Unmet needs for reproductive health deprive women of the right to make 'crucial choices about their bodies and futures' affecting family welfare. **Objectives:** *The study was conducted to assess the knowledge and attitude of women regarding reproductive health in selected offices of Guwahati, Assam, to find out the correlation between knowledge and attitude regarding reproductive health among women and to find the association of knowledge and attitude with selected demographic variables.* **Materials and methods:** *A quantitative approach and survey research design were used in this study. The technique adopted was self-reporting technique. Using a non-probability convenient sampling technique, sample size of 100 working women from three selected offices in Guwahati were taken for the study. A structured questionnaire was used to assess knowledge and 3-point Likert scale to assess attitude.* **Results:** *It was found that out of 100, 51% moderately adequate, 28% inadequate and the rest 21% had adequate knowledge and 52% desirable attitude and 48% moderately desirable attitude. There was a moderately positive correlation between knowledge and attitude. Knowledge of the women regarding reproductive health had a significant association with their educational status at 0.05 level of significance. Attitude had a significant association with their education status.* **Conclusion:** *The study reveals that women have moderately adequate knowledge and desirable attitude and also found that there is a positive correlation between knowledge and attitude regarding reproductive health.*

Keywords: *Knowledge; attitude; reproductive tract infection.*

INTRODUCTION

Reproductive health is a crucial part of general health and a central feature of human development.[1] Reproductive health relates to the maintenance of one's reproductive health system and fertility. Its components include birth control, prevention and management of sexually transmitted infections, safe abortion service and prevention and management of infertility. The main focus of the study on reproductive health has been on the two aspects, viz. birth control and prevention and management of sexually transmitted infections.

Most individuals and couples want to plan the timing and spacing of their childbearing and to avoid unintended pregnancies, for a range of social and economic reasons. Besides, unintended pregnancy has a public health impact: Births resulting from unintended or closely spaced pregnancies are associated with adverse maternal and child health outcomes, such as delayed prenatal care, premature birth and negative physical and mental health effects for

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children.[2] Effective contraceptive counselling not only requires accurate knowledge of current contraceptive choices but also a non-judgmental approach woman should be encouraged to talk about intimate family and individual issues. The goal of contraceptive counselling is to ensure that women receive appropriate instruction to take charge of their own reproductive choice. Reproductive tract infections include a variety of bacterial, viral, protozoal, fungal and ectoparasites infections of the lower and upper reproductive tract of both sexes. Reproductive Tract Infection (RTI) pose a threat to women's lives and wellbeing throughout the world. In India, the prevalence of reproductive tract infection is very high due to the silent epidemic. The low status of women in many parts of India makes women suffer in silence or even feel too ashamed to seek treatment. Vaginal discharge is amongst the first 25% reasons to consult doctor, 40% gynaecological OPD attendance is because of RTIS and 16% of gynaecological admissions are due to pelvic inflammatorydisease.[3]The population prevalence of STIs such as syphilis, gonorrhoea, and chlamydia has a range of 0-3.9% in India but the STI burden is much higher among subpopulations practising high-risk behaviour.[4] It is currently estimated that India has 2-3 million individuals infected with HIV, and the primary mode of HIV transmission has been via heterosexual contact. HIV transmission is strongly associated with repeated sexually transmitted infections (STIs) and sexual behaviour. HIV and STIs are linked in that both are transmitted by unprotected sexual behaviour.[5] In the view of the above studies & the magnitude of the problems related to elements of reproductive health that arethe failure of family planning practices and RTI/STD. An analysis of knowledge and attitude regarding reproductive health among women reproductive age group is required. Objectives of this study are (i) to assess the knowledge regarding reproductive health among women in selected offices of Guwahati. (ii) to assess the attitude regarding reproductive health among women in selected offices of Guwahati. (iii) to correlate the knowledge and attitude regarding reproductive health among women in selected offices of Guwahati. (iv) to find out the association of knowledge and attitude regarding reproductive health among women with selected demographic variables viz. age, education, income, marital status, use of contraceptives measures.

MATERIALS AND METHODS

A quantitative approach and survey research design were used in this study. The technique adopted was self-reporting technique.Using non-probability convenient sampling technique, 100 women from three settings Rashtriya Madhyamik Siksha Abhiyan Kahilipara, Agriculture office Khanapara and The North Eastern Development Finance Corporation Ltd, Guwahati were taken for the study. Exclusion criteria were women who cannot read and write English. A structured questionnaire was used to assess knowledge and 3-point Likert scale to assess attitude. The validity of the tool was established in consultation with a guide and from experts in obstetric and gynaecological. The reliability of the tool was 0.8 by Split Half method which was considered to be reliable and adequate. The data was collected from 4th July–30th July 2016.

RESULTS

The **Table 1** depicts that out of 100 samples, majority of 51 (51%) respondents had moderately adequate knowledge, 28 (2%) respondents had inadequate knowledge and 21 (21%) respondents had adequate knowledge. The mean knowledge was 12.7 with a standard deviation of 5.4 and ranges from 2-25.

Table 1 Frequency and percentage distribution of knowledge level regarding reproductive health among women (n=100)

Knowledge	Frequency	Percentage	Mean	SD	Range of scores	Total score
Inadequate (<33%) (<9 marks)	28	28%				
Moderately adequate (33 – 66%) (9 – 17 marks)	51	51%	12.7	5.4	2 – 25	26
Adequate (>66%) (>17 marks)	21%					

Table 2 depicts that out of 100 samples, majority 52 (52%) responded had desirable attitude whereas 48 (48%) respondents moderately desirable attitude. The mean attitude was 29.95 with a standard deviation of 9.33 and ranges from 16-45.

Table 2 Frequency and percentage distribution level of attitude score of the respondents

Attitude	Frequency	Percentage	Mean	Sd	Range of scores	Total score
Undesirable (<33%) (<15 marks)	0	0%	29.95	9.33	16 - 45	45
Moderately desirable (33-66%) (15 - 30 marks)	48	48%				
Desirable (>66%) (>30 marks)	52	52%				

The data represented in **Table 3** shows the correlation between knowledge and attitude of women regarding reproductive health. The correlation was statistically calculated by using Karl Pearson correlation coefficient. The calculated r-value was found to be r = 0.3.

Therefore, there was a moderately positive correlation between knowledge and attitude regarding rep roductive health. Thus, with an increase in knowledge, there is a gradual increase in attitude.

Table 3 Correlation between knowledge and attitude scores of the respondents

Variables	Mean	SD	Correlation coefficient
Knowledge	12.7	5.4	0.3
Attitude	29.95	9.33	

Table 4 Association of knowledge with age, education, marital status and use of contraceptives   (n = 100)

Variables	IA	MA	A	Total	Cal. value	Tab. value	df	Remark
Age group								
18 – 34 years	10	18	7	35	0.03	5.99	2	NS
35 – 50 years	18	33	14	65				
	28	51	21	100				
Educational status								
Under graduate	12	7	11	30	13.64	5.99	2	Sign
Graduate and above	16	44	10	70				
	28	51	21	100				
Marital status								
Unmarried	7	11	7	25	1.11	5.99	2	NS
Married	21	40	14	75				
	28	51	21	100				
Use of contraceptives								
No	22	46	16	84	3.33	5.99	2	NS
Yes	6	5	5	16				
	28	51	21	100				

Note: For calculation purpose, clubbing of the scores were done and chi-square formula is applied.

$$x^2 = \text{P at } 0.05$$

IA- Inadequate, MA- Moderately adequate, NS- Non-significant, df – Degree of freedom.

Table 4 shows that the obtained value (0.03) was less than the tabulated value (5.99) at 0.05 level of significance with df 2. Hence, there is no association between knowledge and age group of respondents.

The table shows that the obtained value (13.64) was more than the tabulated value (5.99) at 0.05 level of significance

with df 2. Hence, there is an association between knowledge and educational status of respondents.

The table shows that the obtained value (1.11) was less than the tabulated value (5.99) at 0.05 level of significance with df 2. Hence, there is no association between knowledge and marital status of respondents.

The table shows that the obtained value (3.33) was less than the tabulated value (5.99) at 0.05 level of significance with df 2. Hence, there is no association between knowledge and use of contraceptives.

Table 5 Association of attitude with age, education, marital status and use of contraceptives   n = 100

Variables	MD	D	Total	Cal. value	Tab. value	Df	Remark
Age group							
18 - 34	19	16	35	0.69	3.84	2	NS
35 - 42	19	20	39				
43 - 50	10	16	26				
	48	52	100				
Educational status							
Under graduate	22	8	30	11	3.84	1	Sign
Graduate and above	26	44	70				
	48	52	100				
Marital status							
Unmarried	12	13	25	0	3.84	1	NS
Married	36	39	75				
	48	52	100				
Use of contraceptives							
No	41	43	84	0.12	3.84	1	NS
Yes	7	9	16				
	48	52	100				

NOTE: For calculation purpose, clubbing of the scores were done and chi-square formula is applied.

$$x^2 = \text{P at } 0.05$$

MA- Moderately adequate, D- Desirable, NS- Non-significant, Sign- Significant, df – Degree of freedom.

Table 5 shows that the obtained value (0.69) was less than the tabulated value (3.84) at 0.05 level of significance with df 1. Hence, there is no association between attitude and age group of respondents. The table shows that the obtained value (11) was more than the tabulated value (3.84) at 0.05 level of significance with df 1. Hence, there is an association between attitude and educational status of respondents. The table shows that the obtained value (0) was less than the tabulated value (3.84) at 0.05 level of significance with df 1. Hence, there is no association between attitude and marital status of

respondents. The table shows that the obtained value (0.12) was less than the tabulated value (3.84) at 0.05 level of significance with df 1. Hence, there is no association between attitude and use of contraceptives.

DISCUSSION

In this study, out of 100, 51 (51%) moderately adequate, 28 (28%) inadequate and the rest 21 (21%) had adequate knowledge and 52 (52%) desirable attitude and 48 (48%) moderately desirable attitude. The mean of knowledge and attitude was (12.7) and (29.95) respectively. There was a moderately positive correlation between knowledge and attitude. Knowledge of the women regarding reproductive health had a significant association with their educational status

at 0.05 level of significance. Attitude had a significant association with their education statusat 0.05 level of significance. The study findings support the study conducted to assess knowledge, attitude, and practice studies on adolescents and youth concerning their reproductive health in India. The objective of the study is to develop a replicable model for the provision of sexual and reproductive health services to college-based youth in Thane district. A self-administered semi-structured questionnaire was used for the survey, which included 800 Male and 700 Female in the age group 15-24 years. The study findings showed students lacked scientific information and misconceptions are widespread on various reproductive health issues.[6] Kibert M (2009), conducted a study to assess the reproductive health knowledge, attitude and practice among high school students in Bihar Dar, Ethiopia. A self-administeredquestionnaire was used and focus group discussions. The study findings showed the students had high-level knowledge of contraceptives and where to obtain contraceptive services; however, level of use was low and that young person engages in sexual relationships at an early age without protection or with unsafe non-conventional methods. The educational level of the respondents was the only demographic variable that had a significant association with sexual experience (p < 0.05). The study concluded that family planning information and services and family life education programme based on the needs and experience of these young people as a potential solution to alleviate their reproductive health problems.[7] Jyoti Vinod (2008), conducted a study to assess the effect of planned teaching programme on knowledge, attitude and practice of adolescents concerning the reproductive health in selected shelter homes in Mumbai, among a population of 60 adolescents in that 30 boys and 30 girls who were selected by convenient sampling technique and data were collected by self-reporting technique. The study findings showed that pre-test knowledge score is 63% and the post-test score is 91% concerning knowledge changed in the adolescence was markedly increase in boys and girls from 23% and 19% to 70% and 83% respectively. The study concluded that teaching programme on reproductive health is effective.[8] Savitri R (2008), conducted a study to determine the effectiveness of health education in improving knowledge regarding reproductive health among adolescent girls of 16-19 years in Udupi district Karnataka. The sample size was 791 girls. Their awareness assessed immediately following the intervention. Chi-square test used for analysis. The study finding showed significant improvement in knowledge after intervention from 14.4% - 68% (p < 0.01) was observed regarding contraception. The study concluded that education intervention program can bring about desirable change in knowledge among girls regarding reproductive health.[9] Anant, Barwal, Singh A (1994), conducted a study to measure the effectiveness of a reproductive health education package in improving the knowledge of adolescent girls aged 15-19 years in Chandigarh. Using a 70-item structured questionnaire the knowledge of 95 adolescents from conventional, 84 from the peer, and 94

from control school were assessed before and one month after the last session. The study finding showed that reproductive health knowledge scores improved significantly after intervention in conventional education (27.28) and peer education group (20.77) in comparison to the controls (3.64). The study concluded that peer education and conventional education strategies were effective in improving the reproductive health knowledge of adolescent girls but peer strategy was less time consuming.[10]

CONCLUSION

The study reveals that women have moderately adequate knowledge and desirable attitude regarding reproductive health.It is also found that there is a positive correlation between knowledge and attitude regarding reproductive health. The investigator has drawn the following implications from the study which is a necessary concern to the field of nursing service, nursing education, nursing administration and nursing research.

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REFERENCES

1. Barnuam B. S. Nursing theory. J of midwifery and women's health 1998;476(64):57-64
2. Basavanthappa B T. Community Health Nursing, 2nd ed, New Delhi: Jaypee brothers medical publishing; 2008. p.359-86.
3. Gupta S.C. Fundamentals of Statistics 6th ed. Delhi: Himalaya Publishing house 1994.p.315-68.
4. A Sharddha, Bharti BM. A surveillance model for sexually transmitted infections in India. Indian J of public health 2015;59(4):286-94.
5. Carpenter L, Kamali A. Independent effects of reported sexually transmitted infections and sexual behavior on HIV-1 prevalence among adult women, men, and teenagers in rural Uganda. The Lancet J 2002; 29(13):174-80.
6. Agarwal Shraddha, Bharti B M. A study to examined Reproductive Health among Married Female in urban slums. J Obstet Gynaecol India 2015;56(3):255-7.
7. Akhter Shaheen. Knowledge, attitude and practical on reproductive health and rights of urban and rural, Bangladesh. J of social science university Dhaka 2016;12(3):483-502.
8. Allen Kabagenyi, Larissa Jennings. A qualitative study of men and women's perceptions regarding barriers to male involvement in contraceptive uptake and reproductive health services in two rural districts in Uganda.Reproductive Health J 2014;11(21):2-9.
9. Becker H. The reproductive health care experiences of women with physical disabilities. Archives of Physical Medicine and Rehabilitation 2015;78(12):26-33
10. Chellan Ramesh. Socio-Demographic Determinants of Reproductive Tract Infection. International J of Research in Medical Sciences 2015;2(1):215-21.