A Descriptive study to assess the knowledge regarding Antenatal care among BSC Nursing students of selected Nursing Colleges of Udaipur City with a view to develop an information Booklet

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1.4 ABSTRACT:-

Maternal mortality is unacceptably high globally. About 800 women die from pregnancy or childbirth related complications around the world every day. In 2010, 287 000 women died during and following pregnancy and childbirth. Almost all of these deaths occurred in low-resource settings, and most could have been prevented. The maternal mortality ratio in developing countries is 240 per 100 000 births versus 16 per 100 000 in developed countries. Analysis of the important causes of maternal mortality reveals that most of them are preventable. . To reduce MMR which can be preventable antenatal care is a effective and low cost strategy as prevention is always better than cure. As Nurses are the major health care providers in community settings if their knowledge is enhanced it can contribute effectively to achieve the goal of reduction of maternal and infant mortality rate.

Researcher felt the need to conduct a study assessing knowledge of B.Sc Nursing students regarding antenatal care as today's student nurses are future nurses rendering their services in community.

1.5 Keywords

ANC: Ante Natal Care; IMR: Infant Mortality Rate; MMR: Maternal Mortality Rate; NFHS: National Family Health Survey; WHO: World Health Organization; MDG: Millennium Development Goal; RCH: Reproductive and Child Health.

1.6 INTRODUCTION

"Maternal health is nation's wealth;There is chance for the welfare of the world only when the condition of women improves. It is not possible for a bird to fly with only one wing."

-Swami Vivekananda

Pregnancy and Child birth are special events in women`s lives and indeed in the lives of their families. This can be a time of great hope and joyful anticipation. The primary aim of antenatal care is to achieve, at the end of pregnancy, a healthy mother and healthy baby. The quality of care is more important than the quantity. Pregnancy requires specialized care generally agreed to preventive activity**.**

 In India, women of the child–bearing age (15 to 44 years) constitute 22.2 percent. By virtue of their numbers, mothers and children are the major consumers of health services, of whatever form.

They are at risk of morbidity and mortality during pregnancy, labour and the puerperium, and which are largely preventable and

controllable through maternal care. Maternal health is a basic requirement of fetal health and favorable outcome of pregnancy. According to Times of India (Mar 7,2013) New Delhi, a news was their regarding more Indian new born die on 1ˢᵗ day than in other country which is according to state of the world's Mother's 2013 report. Every year 29% of global children death is in India because of complications as so cited with pre-term birth, hygiene and maternal health.

 Maternal mortality is unacceptably high. About 800 women die from pregnancy or childbirth related complications around the world every day. According to WHO (2011) in 2010, 287 000 women died globally during and following pregnancy and childbirth. Almost all of these deaths occurred in low-resource settings, and most could have been prevented. According to experts, risk of maternal mortality rate (MMR) in Rajasthan is eight times higher than other states due to complications during pregnancy period. More over according to Times of India, (May 7, 2013), Jaipur a news was there on miles to go in maternal mortality rate which stated that 2015 deadline of millennium development goal is fastest approaching but the achievement in reducing MMR to desired level is far away.

We see that present MMR of Rajasthan is 388 and IMR is 63, which is really worrying Statistics. Udaipur is a tribal belt where MMR has reduced in recent years but not upto the required level. What are the factors which are not allowing us the meet the desired level.

As today's student nurses are tomorrow staff nurses who can contribute themselves more in the field of treatment, "Educating these students and creating awareness in helping them to learn more about antenatal care will bring about positive outcomes in the future health indicators our country and quality of care rendered to the community.

As if famous saying "Right practice is the safest investment towards hazard-free care" and right practice comes from right education.

Education is the first- line defence in the present-day world with all its revolutions. The expanding knowledge in many fields with its modifying effect on the curriculum and the advancing technologies with their effect on the instructional process leave no choice to education but to review its practices and to make the major changes necessary for today's world.

Researcher felt the need to conduct a study on assessing knowledge of BSc Nursing students regarding antenatal care as today's student nurses are future nurses. As is evident knowledge is power enhancing student nurses knowledge will enhance quality of care in the coming future. As Nurses are the major health care providers in community settings if their knowledge is enhanced it can contribute effectively to achieve the goal of reduction of maternal and infant mortality rate.

OBJECTIVES

1. To assess the knowledge regarding Antenatal care among BSc Nursing students of selected Nursing Colleges of Udaipur City.

2. To find the association between selected socio demographic variables and knowledge scores of BSc nursing students regarding Antenatal care.

3. To Develop and distribute an information booklet on Antenatal care

DELIMITATIONS OF THE STUDY:

The study is limited to:

1. BSc Nursing students of class IIIrd year and IVth year who have antenatal care in their course of study.

2. BSc Nursing students who are willing to participate in the study.

3. Student present during the study

CONCEPTUAL FRAME-WORK:

The conceptual frame-work for this study is based on System Model. Given by Edwig Won Bertonioffy in 1968.

1.7 METHODOLOGY AND TECHNIQUES USED:

RESEARCH APPROACH

Descriptive survey approach was selected to collect the data in from selected colleges.

RESEARCH DESIGN

The research design selected for the study was descriptive survey.

SETTING OF THE STUDY

The study was conducted in selected BSc Nursing colleges of Udaipur City within 15 km radius of the city. There are 20 BSc Nursing colleges which have III and IV th year students .Out of which 3 were selected.

POPULATION

The target population of the present study comprises the BSc Nursing students of classes IIIrd Year and IVth year.

SAMPLING

The sample for the present study comprised of BSc Nursing students of classes IIIrd Year and

IVth year from selected BSc Nursing Colleges of Udaipur City.

SAMPLE SIZE

In the study, 120 BSc Nursing students were selected as sample from the total population, to assess the knowledge regarding Antenatal care.

SAMPLING TECHNIQUE

In this study the convenient purposive random sampling was done for selection of colleges. BSc Nursing colleges of Udaipur City were selected for the study. 120 students were selected randomly by selecting every 3rd students available in the class.

TOOL FOR THE STUDY

A self administered questionnaire comprising of multiple choice questions was prepared by the researcher to assess the knowledge of the BSc Nursing students regarding Antenatal care in three phases:-

- Planning for tool development

- Establishment of content validity

- Establishment of reliability

Ethical Consideration:-

The ethical consideration was kept by the researcher during the study by :-

1. Getting Prior permission to conduct the study from concerned authority.
2. Getting informed consent from the respondents.

The research approach used for the study was descriptive survey approach. In this study simple random sampling was done for selection of colleges and random sampling was done for selection of 120 samples. Three nursing colleges

were selected within 15 km radius of Udaipur city.

A self administered questionnaire comprising of multiple choice questions to assess the knowledge of the B.Sc. Nursing students and an information booklet was prepared by the researcher. The tool and information booklet was given to the experts for content validation and edited by language experts. Data was collected analyzed and interpreted using descriptive and inferential statistics.

DATA ANALYSIS:-

The Data was analyzed with the help of descriptive and inferential statistics based on the objectives of the study. Percentage, mean, median, and standard deviation was used in descriptive statistics to describe the demographic variables and knowledge of the respondents. In inferential statistics, ANNOVA was used to test significance of   mean differences of knowledge scores with selected variables, and Z test was used to test the significance.

DATA COLLECTION PROCESS

The data was collected between 3.9.13 to 14.9.13. The investigator first introduced herself to the students and explained the purpose of the study and ensured that confidentiality if the respondents will be kept. The consent was obtained. A self administered questionnaire was distributed to each third student selected randomly and necessary instructions to fill the questionnaire were given to them. The students were asked to fill the questionnaire freely and frankly. After filling of the questionnaire the respondents returned the questionnaire to the investigator. At the end the students and the administration was thanked for their cooperation.

Information booklet regarding Antenatal care after data analysis, review of literature and findings of the study was developed and distributed to the students and a copy was kept in their library for future reference.

1.8 CASE STUDY:- Nil

1.9 Results and Discussion

The study focused on assessing the knowledge of B.sc nursing students regarding Antenatal care.

The finding of the study were discussed under the following headings:-

- Finding related to socio demographic characteristics of respondents.

- Finding regarding overall knowledge result regarding Antenatal care among B.sc students

- Finding regarding area wise knowledge scores regarding Antenatal care among B.Sc. nursing students.

- Finding regarding association between selected socio demographic variables and knowledge level regarding Antenatal care among B.sc. nursing students.

Finding related to selected socio demographic variables of respondents:-

- Maximum respondents 55(45.83%) were in the age group 20-21 yr, 29(24.17%) were from >21yrs age group, 19(15.83%) were in age group 18-19 yrs,17(14.17%) were from the age group 19-20 yrs and no respondents were in age group of 17-18 yrs.

- Maximum respondents 76 (63.33%) were male and 44 respondents (36.67) were female.

- Majority of Respondents 69(57.50%) were in

III year and 51(42.50%) were in IV year.

- Majority of Respondents 75(62.50%) were from rural area and 45 (37.50%) were from urban area.

- Majority of the respondents 115(95.83%) have heard abut Antenatal care and 5(4.17%) have not heard about Antenatal care.

- Majority of the respondents 66(55.00%) have heard about Antenatal care from other sources like classroom, 26(21.67%) from TV, 15(12.50) from newspaper, 8(6.67%) from posters, 5(4.17%) from radio.

- Majority of the respondents 95(79.17%) had

not attended any training programme and 25(20.83%) had attended training programme on Antenatal care.

Finding regarding overall knowledge result regarding ANC among B.Sc. students:-

In overall knowledge result majority of the B.Sc. Nursing knowledge regarding Antenatal Care is very less. Most of the respondents 97(80.83%) scored less than 45% that is they had low level knowledge, 19 (15.83%) had moderate knowledge with scores between 45-60% and only 4 (3.33%) respondents scored more than 60% i.e. high level of knowledge regarding Antenatal care.

N=120

Knowledge Level	N	%
High	4	3.33
Moderate	19	15.83
Low	97	80.83
Total	**120**	**100.00**

Table 1.1 Depicts that overall knowledge of B.Sc. Nursing student regarding Antenatal Care is very less most of respondents 97(80.83%) scored less than 45% that is they had low level knowledge, 19 (15.83%) had moderate knowledge with scores between 45-60% and only 4 (3.33%) respondents scored more than 60% i.e. high level of knowledge regarding Antenatal care.
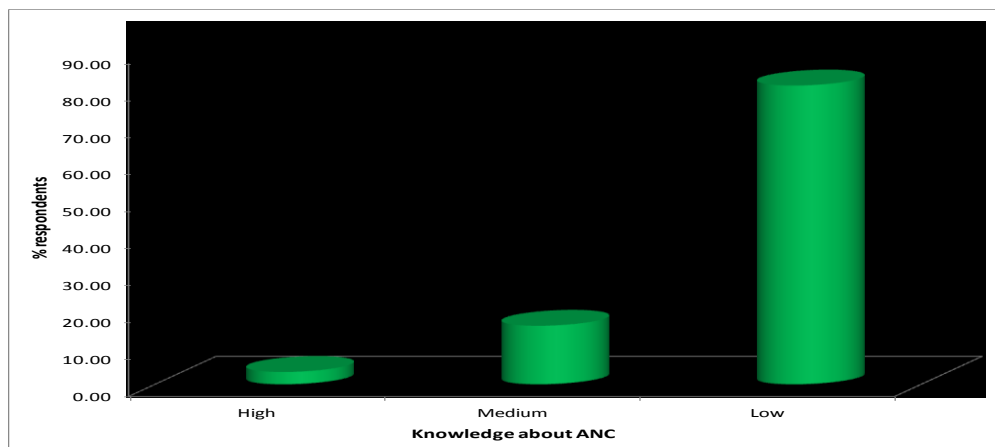

Figure 1.1 **Graphical representation of overall knowledge of respondents**

Finding regarding area wise knowledge scores regarding Antenatal care among B.Sc. nursing students

- In comparison of knowledge among B.Sc. Nursing students regarding different areas of Antenatal care the findings showed that the knowledge of students is very low in each area ,but amongst them knowledge was highest in the area of Antenatal advice 49.17% ,knowledge regarding general concepts and antenatal visits was 41.88%,knowledge regarding intervention was 40.83%,regarding antenatal checkup was 32.56% and least knowledge was found in the area of identification of high risk pregnancy that is 25.17%.

N=120

Area	N	Mean	SD	F	df	Result
General Concepts and Antenatal Visits	120	41.88	26.76			
Antenatal Checkup	120	32.56	13.28			
Intervention	120	40.83	33.04	15.731	4, 595	***
Identification of high risk pregnancy	120	25.17	20.66			
Antenatal Advice	120	49.17	29.16			

Table 1.2 depicts the comparison of knowledge regarding different areas of Antenatal care .The knowledge of students is very low in each area ,but amongst them knowledge was highest in the area of Antenatal advice 49.17% ,knowledge regarding general concepts and antenatal visits was 41.88%,knowledge regarding intervention was 40.83%,regarding antenatal checkup was 32.56% and least knowledge was found in the area of identification of high risk pregnancy that is 25.17%.The test applied was significant with F=15.73,df=4,595 P<0.001.
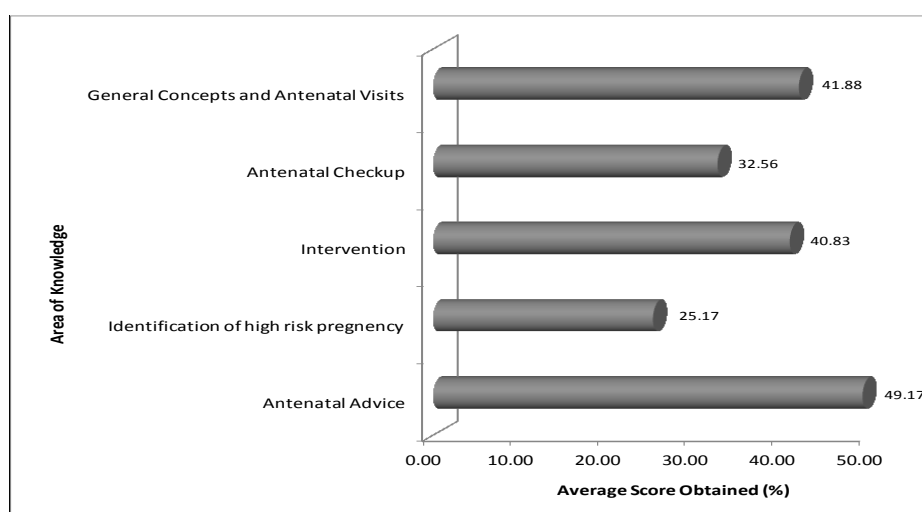

Figure 1.2 Comparison of knowledge level of different areas of Antenatal care

Finding regarding association between selected socio demographic variables and knowledge level regarding Antenatal care among B.Sc. nursing students:-

- There was a significant difference in knowledge scores between B.Sc Nursing students of different age group. knowledge regarding Antenatal care was high in the age of >21 years, as compared to the age group of 18-19 years 19-20 years and 20-21 yrs. The least scorer were the students between 18-19 years age group.

- No significant difference was found among respondents of opposite genders as far as knowledge level regarding antenatal care is concerned. The knowledge level was slightly high among male respondents as compare to female respondents.

- The knowledge level was found significant ally different among B.Sc. Nsg. student of different class (z=-3.06, p<0.04). The knowledge level was high in students of IV year.

- Shows no significant difference was found among respondents living in Rural or Urban area as far as knowledge level regarding ante natal care is concerned (z=0.28, p>0.05) The knowledge level was slightly low among respondents living in rural areas as compare to respondents in urban area.

- There is no significant difference in knowledge of B.Sc Nursing students regarding antenatal care with whether they have heard about ante natal care or not. Table shows that B.Sc Nursing students who have not heard about ante natal care has slightly higher knowledge than who have heard about it.

- There was a significant difference in knowledge level of B.Sc Nursing.

Students with type of source of information regarding antenatal care (38.95%) of students who had higher knowledge level where using other sources of information like classes books etc. The Knowledge level was higher among students using news papers, posters, and T.V regarding ante natal care low among Radio user.

- There was no significant difference in knowledge level among B.Sc Nursing students and training programme attended or not. The knowledge level was almost same in both the groups who have attended or not attended training programmed on Antenatal Care.

1.10 Conclusion and Recommendations

The overall knowledge level regarding Antenatal care was very less. Most of the respondents 97 (80.83%) scored less than 45% marks. Areas wise knowledge depicted that the knowledge of students is very low in each area, but amongst them knowledge was highest in the area of Antenatal advice 49.17%, knowledge regarding general concepts and antenatal visits was 41.88%, knowledge regarding intervention was 40.83%, regarding antenatal checkup was 32.56% and least knowledge was found in the area of identification of high risk pregnancy that is 25.17%. There was significant association of knowledge scores with selected socio demographic variable like age, class, sources of information

`The knowledge of B.Sc. nursing students regarding various area of Antenatal care was very less specially regarding management of high risk pregnancy. As these students are the future health care providers intensified measures to improve their knowledge level regarding Antenatal care by use of innovative teaching strategies, conduction of more researches on the basis of the findings. The

information booklet developed by the researcher will be helpful in enhancing the

On the basis of the study the following conclusions were drawn:

- The knowledge of B.Sc. nursing students regarding Ante Natal care was very less.

- The area wise knowledge level also depicts that there is knowledge deficit in various areas of Antenatal care. Mainly the knowledge regarding identification of high risk pregnancy was very less

There is significant association of knowledge scores with selected socio demographic variable like age, class, sources of information but no significant association was found in relation to gender, area of residence, have they heard about Antenatal care or training programmmes attended .

On the basis of the findings from this, the following recommendations are given for future research:-

(i) A similar study can be replicated on a large sample, in order to validate the findings and make generalizations.

(ii) An experimental study can be conducted to find out the effectiveness of a new teaching strategy regarding Antenatal care.

(iii)A study can be replicated on ANM'S, LHV and Staff Nurses in order to find out their knowledge level with which they are rendering their services.

(iv)A comparative study can be conducted between GNM students and B.Sc. Nursing students.

1.12 REFERENCES

BOOKS

[1.]Baswanthapa B.T. (2006). Community Health Nursing. 2nd edition. New Delhi. Jaypee Brothers.

knowledge of B.Sc. Nursing Student regarding antenatal care.

[2.]Burns Nancy, Grove K., Susane, (1993). The practice of Nursing Research-Conduct, Critique and Utilization. 2ndedition. Philadelphia (US): WB Saunders Company.

[3.]Garrett. E. Henry. (2007). Statistics in Psychology and education. 1st edition. New Delhi. Paragon International Publishers.

[4.]Gulani K.K. (2006). Community Health Nursing- Principles and practice. Ist Edition. New Delhi. Kumar Publishing House.

[5.]Garrett. E. Henry (2007). Statistics in Psychology and education. 1st edition, New Delhi. Paragon International Publishers.

[6.]Mahajan B.K. Methods in Biostatistics. (2006). 6th edition, New Delh., Jaypee brothers Medical Publishers (P) Ltd.

[7.]Negi K.S. (2008). Biostatistics. 2nd edition. New Delhi. AITBS Publishers India.

[8.]Neeraja KP. (2007). Textbook of Nursing Education. New Delhi. Jaypee brothers Medical publishers (p) Ltd.

[9.]Park. K. (2009). Preventive and social medicine. 20th edition. Jabalpur. M/S Banarsidas Bhanot Publishers.

[10.]   Park. E. Marilyn. (2009). Nursing Theories and nursing Practice. 2nd edition. New Delhi. Jaypee brothers Medical publishers (p) Ltd.

[11.]   Perry Pottter. (2008). Fundamentals of Nursing. 6th edition. St. Louis, Missouri. Mosby an imprint of Elsevier.

[12.]   Polit FD, Hungler P.B. (1999). Nursing Research –Principles and methods.

6th edition. Philadelphia (US): Lippincott Company.

[13.] Stephanie's. (2006). Principles and Practice of Nursing.6th edition. Indore. N.R brothers.

[14.] Swarnkar Keshav. (2004). Community Health Nursing.1st edition. Indore: N.R. Publishers.

[15.] TNAI. (2005). A Community health Nursing Manual. New Delhi: The trained nurses association of India.

[16.] Trecee EW, Trecee JW. (1982). Elements of Research in nursing. 2nd edition. London. Mosby company.

[17.]   JOURNALS

[18.] Danpradite P. (2003).To Study and Compare the Knowledge about Antenatal Care Nursing before and after Being Practiced at Antenatal Care Clinic. Medical journal (1):27-60

[19.] Experts. (2012).Making sense of development,d-sector.org.23-25.

[20.] Iyengar Sharad D,Kirti Iyengar and Vikram Gupta.(2009)Maternal health a case study in Rajasthan Population and Nutriton.vol.2.271-291.

[21.] Iyengar Sharad. (2009, Jul-Sep). Indian J Public Health.;53(3):177-82.

[22.] Joshi HS,et al.(2006,Jul-Dec). Refresher Training on Maternal and Child Health for Urban Community Health Volunteers: Assessing Knowledge and Skills. *Internet Journal of Medical Update*;1(2):18-24.

[23.] KCA, Bajracharyak. (2013, Jan). J Nepal Health Res Counc.; 11(23):98-101.

[24.] Khan N, Pradhan MR. (Jun,2013). Identifying factors associated with maternal deaths in Jharkhand, India: a verbal autopsy study J Health Popul Nutr. (2):262-71.

[25.] Newpan Snwaru BI.(2013,July).Indian J. Community Med38(3):152-6:10.4103/0970 0218.116351.

[26.] Patel.A. et.al. (2013, Jun 3). Int J Gynaecol Obstet. Aug; 122(2):164-8. doi: 10.1016/j.ijgo.2013.03. 022.

[27.] Rathore D, Gosawami, et al. (2013, Aug). Hu Li Za Zhi.60(4):76-85. doi: 10.6224/JN.60.3.76.

[28.] Singh Padam, Yadav, RJ. (2009, July –Sep). Indian Journal of Public Health: 53(3):177-82

[29.] Spector et al. (2012, June). J Health Popul Nutr.; 30(2):226-40.

WEB SITES

1. www.cochrane.com
2. www. Google.com
3. www.popcouncil.org/horizons/ surveys.html
4. www.pubmed.com
5. http://timesof India.indiatimes.com/topic/Udaipur-divisions-records.
6. http://www.unicef.org/India/ ICOCOAR2011.finalreport.
7. http://www.who.int/gho/mdg/maternal healthsituation_trends_maternal mortality.