



RESEARCH ARTICLE

COMPARISON OF ATTITUDE REGARDING OBSTETRICAL PALPATION AMONG STUDENT NURSE MIDWIVES STUDYING MIDWIFERY NURSING AT SIKKIM

^{1,*}Barkha Devi, ²Dr. Bidita Khandelwal and ³Mridula Das

¹Ph.D Scholar, Sikkim Manipal College of Nursing, Sikkim Manipal University, India

²Professor & Head, Department of Medicine, Sikkim Manipal Institute of Medical Sciences, India

³Principal, Sikkim Manipal College of Nursing, Sikkim Manipal University, India

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ABSTRACT

Introduction: A maternal death is widely regarded as one of life's most tragic outcomes. There is a cruel irony in the death of a woman who is engaged in the act of creating life, and her death is an incomparable loss for any children who are left behind. Such deaths are almost entirely preventable given proper medical surveillance and intervention, and as such maternal mortality is often viewed as a sentinel indicator of the quality of a health care delivery system. Thus future nurses' attitudes towards Obstetrical palpation are important to research and understand, especially in a country with a high prevalence of maternal death.

Objectives: The purpose of this study is to assess the attitude of student nurse midwives towards obstetrical palpation at selected nursing institute of, Sikkim. Hence the present study was planned to assess and compare the attitude towards obstetrical palpation among nursing students from different nursing programme.

Methods: A Non experimental survey approach with descriptive comparative research design was used to assess the attitude of student nurse midwives towards obstetrical palpation at Sikkim Manipal College of Nursing, Vinayaka Mission College of Nursing and School of Nursing, STNM hospital Gangtok, Sikkim, India. Data were collected using structured attitude scale for which validity and reliability was ensured. Purposive sampling technique was used to select 92 student nurse midwives who were currently undergoing 3rd yr GNM, 3rd yr B.Sc. Nursing, 4th year B.Sc. Nursing and 1st year PBBSc nursing programme, attended regular classes on obstetrical palpation, available at the time of data collection and willing to participate.

Results: The findings revealed that the overall attitude score was found high among the students nurse midwives. In terms of level of attitude score between different nursing programme, 94.1% PBBSc nursing students, were having favorable attitude towards obstetrical palpation as compared to other programme, the reason might be higher side of their age and previous experience. The findings also reveals that the obtained chi square value for students exposure to mass media related to obstetrical palpation (5.478*, P<0.05) and total midwifery hours attended (6.765*, P<0.05) was found significant.

Conclusions: The great majority of the students were agreed upon the areas of obstetrical palpation. The attitude of students nurse can be influenced by the information received through other sources on antenatal examination as well as the total number of theory hours attended in Midwifery subject. 39% still performed obstetrical palpation less than ten times throughout the year with quiet a good number of allotted clinical hours. Hence, although the attitude towards obstetrical palpation was favorable, but some weakness still exist which posed as hindrance to its performance.

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INTRODUCTION

Pregnancy is a creative and productive period in the life of a woman. It is one of the vital events, which needs special care from conception to postnatal period. The joyful experience of the pregnancy is not always joyful. (Scaria et al., 2013) The objective of prenatal care is to assure that every pregnancy

culminates in the delivery of a healthy baby without impairing the health of the mother. It is also focused to prevent or detect at the earliest and to treat any untoward complications that may arise during pregnancy. (Mohsen and El-Abbassy, 2015) Most women pass through the period with specific assessment, supportive measures and encouragement. Life threatening conditions place the woman and fetus at risk for significant mortality and morbidity. (Abraham, 2015) Maternal and neonatal deaths have been a worldwide problem for years. Millennium Development Goal number 5 was specifically aimed at 75 per cent reduction in maternal mortality from its

*Corresponding author: Barkha Devi,

Ph.D Scholar, Sikkim Manipal College of Nursing, Sikkim Manipal University, India.

1990 level by 2015 (WHO 2013). Provision of quality obstetric care is regarded as an important component of maternal health which assists in the reduction of maternal and neonatal death rates. An attitude is an essential element of competency. Improving the quality of obstetric care by ensuring optimum attitudes of nurse-midwives caring for women is one of the strategies for achieving this target. Investigating the attitudes of nurse-midwives related to obstetric care could contribute to evidence-based improvement of obstetric practices. (WHO 2013; World Health Organization, 2010; Millenium development goals-India country report, 2015) Attitude is described as a tendency to respond in a consistently favorable or unfavorable manner towards a specific topic, concept or idea. Attitude does not automatically predict a specific behaviour, but does tell us about a certain amount of affect towards the object in question. Nursing students need to have the appropriate attitudes that will lead to positive patient outcomes. Attitudes therefore tend to affect clinical care and outcome. (World Health Organization, 2010; Ojong *et al.*, 2015) By investigating the attitudes of nursing and midwifery students' in relation to obstetrical palpation during antenatal period in selected institution of Gangtok, Sikkim, the extent of deficit in attitude will be identified. The study will help to gather evidence-based information for interventions aimed at improving quality of obstetric palpation performed by nursing and midwifery students' in Gangtok, Sikkim. This might lead to improvements in obstetric care.

Need for study

Puri (2011), investigated the competency of obstetric care providers on safe motherhood knowledge, obstetric practice and attitude towards patients and their training approach. The study results showed that a majority of providers' performance on knowledge was worst in antenatal care, labour and obstetric complications. Improving knowledge, skills and practices of obstetric providers is an essential step in improving the quality of emergency obstetric care but unless it is compounded by good attitude one cannot assure about the right knowledge and correct practice. However, incompetence and negative attitudes of staff were reportedly having a negative influence on patients' decisions to undergo abdominal examination. (My Mak *et al.*, 2013) Cham *et al.* (2005) in their research study investigated the reasons for low levels of institutional deliveries in a district in Zimbabwe. The results showed that women's lack of confidence with the nurses' competence was one of the reasons for low levels of institutional deliveries. Furthermore, the same study done by Mugweni, Ehlers and Roos (2008) revealed that the majority of women were unhappy with many characteristics of nursing care provided during pregnancy. Furthermore, the study shows that interaction with healthcare workers was one of the major barriers to the utilization of any healthcare services including obstetric care. Healthcare workers were perceived as being uncaring, lacking empathy, exposing women to shame and restricting expression of feelings. (Priyadharshini and Gowri, 2015; Mbada *et al.*, 2014; Muzeya, 2015) Few studies have focused on the knowledge of midwives and nursing students towards obstetrical palpation, but none of the studies have been found which measure the attitude of nursing students towards obstetrical palpation, although most of these studies have focused on nurses' and other health care providers attitudes. Therefore, it is important to survey the

attitudes of nursing and midwifery students towards obstetrical palpation during antenatal period. Unfortunately, no comprehensive study has been conducted on the attitudes of midwifery and nursing students' attitude towards obstetrical palpation. Considering the fact that these students are young educated individuals, who can influence others' attitudes via counseling, hence this study, is designed to assess the attitudes of these students as important sources of information.

Problem statement

Comparison of attitude regarding obstetrical palpation among student nurse midwives studying midwifery nursing at selected nursing institution, East Sikkim.

Objectives

1. To identify student nurse midwives attitude towards obstetrical palpation in terms of
 - Overall attitude score on obstetrical palpation
 - Level of attitude score on obstetrical palpation
 - Different attitude statements regarding obstetrical palpation
2. To compare the attitude towards obstetrical palpation among GNM, PBBSc. and B Sc. student in terms of
 - Overall attitude score among different category of student nurse midwives
 - Level of attitude score among different category of student nurse midwives
3. To find out the association between selected socio demographic variables with attitude scores of student nurse midwives towards obstetrical palpation.

Hypothesis

H₁: There is association between student nurse midwives attitudes towards obstetrical palpation with selected variables.

MATERIALS AND METHODS

Non experimental survey approach with descriptive comparative research design was used to assess the attitude of student nurse midwives in terms of their different nursing programme. The research was conducted in two nursing college and one school of nursing at East Sikkim. Among the three nursing institution at Gangtok city, Sikkim, the present study was conducted at all the three nursing institution that is two college of nursing and one school of nursing. Purposive sampling technique was used at the nursing institution then subjects were selected and were explained about the study and the related purposes and their informed consents were obtained. 92 student nurse midwives who were currently undergoing 3rd yr GNM, 3rd yr B.Sc. Nursing, 4th year B.Sc. Nursing and 1st year PBBSc nursing programme, attended regular classes on obstetrical palpation, available at the time of data collection and willing to participate were enrolled.

Instrument: The data was collected through structured attitude scale and record review. Ethical consideration was taken from concerned authority that is Institutional Review Committee of Sikkim Manipal University. Written consent was taken from the respondent prior to the administration of the

questionnaire. The finding was presented for both descriptive and inferential statistics. The study was carried out by using a structured attitude scale. It consists of 3 sections:

Section-I: This consists of socio demographic data such as Age in years , Nursing programme currently undergoing, type of institution, previous experience in attending any classes or demonstration on obstetrical palpation, exposure to media related to obstetrical palpation, clinical posting in OBG ward currently, experience in taking care of antenatal mother, number of times performed obstetrical palpation.

Section II: This consists of question on educational profile such as total midwifery hours allotted in theory and clinical as per nursing programme curriculum and total midwifery hours attended in theory class and clinical till now as per class attendance register and clinical attendance register through record review.

Section-III: It consists of a 4 point likert scale on attitude of student nurse midwives regarding obstetrical palpation. Total items in the scale were 21 items and the responses were “strongly agree”, “agree”, “disagree”, “strongly disagree”. The total score is 84.

The structured attitude scale on obstetrical palpation was given to 5 experts from Department of Obstetrics and Gynecology, Obstetrics and Gynecological nursing and Community Health Nursing. The experts were chosen based on their clinical experience, expertise and interest in the problem area. The reliability of the structured attitude scale was tested by Cronbach’s Alpha test and Socio demographic profile by Intrarater method.

Among which 43.4% of participants received information on obstetrical palpation through video. Nearly 56.4 % of participants were having the clinical posting in OBG ward at the time of data collection. 100% of the participants had provided care to the antenatal women (Table 1).

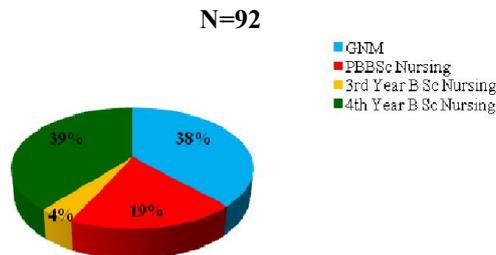


Figure 1. Student midwives/nurses in terms of different nursing programme

The data shows that 39% of the participants were currently undergoing 4th year B Sc. nursing programme, whereas 38% of the participants undergoing GNM programme, 19 % were undergoing PBBSc nursing programme and 4% were undergoing 3rd year B Sc. Nursing programme (Figure 1).

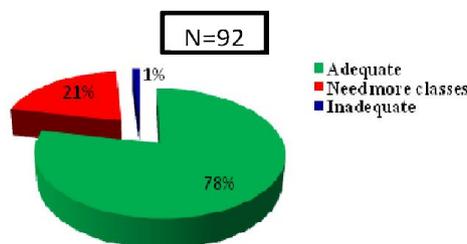


Figure 2. Student midwives/nurses according to their opinion about classes and demonstration on obstetrical palpation

Table 1. Distribution of student nurse midwives in terms of their Socio- demographic data. N=92

S.No.	Demographic Variables	Student Nurse Midwives	
		f	%
1.	Age (in years)		
	1.1 18-20	9	9.78
	1.2 21-23	67	72.8
2.	Name of the institute		
	2.1 Nursing training center, STNM Hospital	19	21
	2.2 Vinayka school/College of Nursing	28	30
3.	Do you attend classes or demonstration on obstetrical palpation		
	3.1 Yes	92	100
	3.2 No	-	-
4.	Do you have any exposure to mass media related to obstetrical palpation		
	4.1 Yes		
	4.2 No	40	43.4
	4.1.1 If yes, then specify the type of mass media.....	52	56.5
	4.1.1.1 Video	40	100
5.	Do you have clinical posting in OBG ward currently		
	5.1 Yes	51	56.4
6.	Any previous experience in taking care of antenatal mother		
	6.1 Yes	92	100
	6.2 No	-	-

Among the 92 participants, 72.8 % of the participants belonged to the age group of 21-23 years. 40% of the participants were selected from Sikkim Manipal College of nursing. 100% have attended classes and demonstration on obstetrical palpation.

The data shows that majority of the participants (78%) felt that the classes and demonstration on obstetrical palpation were adequate whereas 21% expressed that they require few more classes and demonstration on obstetrical palpation (Figure 2).

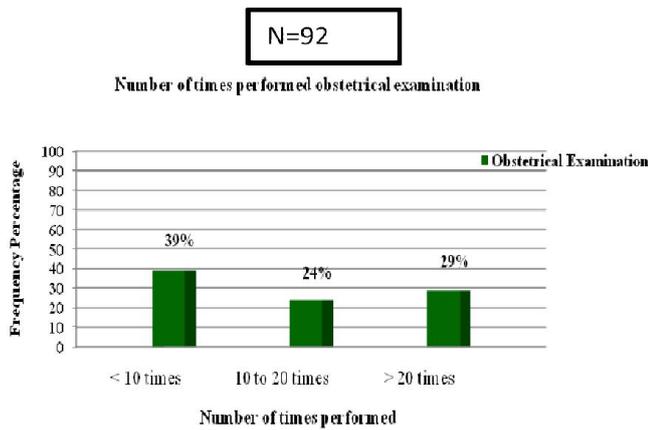


Figure 3. Student midwives nurses in terms of their perception towards the classes or demonstration on obstetrical palpation

Regarding the number of times performed antenatal examination only 29% of the participants had performed antenatal examination more than twenty times whereas majority (39%) of the participants performed it less than ten times (Figure 3).

Table 2. Frequency and Percentage distribution of student nurse midwives in terms of their education profile through record review N=92

S.No.	Educational profile through record review	Student Nurse Midwives	
		f	%
1.	Total midwifery hours attended in theory class till now as per class attendance register	5	5.43
	1.1 <50% of theory hour	12	13
	1.2 50-80% of theory hour	75	81.5
	1.3 >80% of theory hour		
2.	Total midwifery clinical hours attended till now as per clinical attendance register	1	1.08
	2.1 <50% of theory hour	11	11.95
	2.150-80% of theory hour	80	86.95
	2.2 >80% of theory hour		

Almost 81.5 % of the participants had attended theory classes more than eighty percent whereas 13 % attended less than 80% hour in theory classes. In terms of attending clinical hours, nearly 86 % of the participants had attended more than eighty percent in midwifery clinical (Table 2).

III. Findings related to assessment of students nurse midwives attitude towards obstetrical palpation

Among 92 participants, 68 participants strongly agreed that the primary purpose of obstetrical palpation is to rule out high risk pregnancy along with safe confinement, 58 strongly believed that pregnant women should be registered even if she comes late for antenatal check-up, 62 strongly agreed that when student are posted in community field they should encourage pregnant women to do antenatal registration, and almost high percentage of participants strongly agreed (84) that they encouraged every antenatal women for institutional delivery (Table 3).

Among 92 participants, 59 participants strongly agreed that before obstetrical palpation proper instruction for should be

given, 80 participants agreed that women privacy and comfortable position should be provide before obstetrical palpation, 71 participants agreed that all antenatal women should be instructed to empty their bladder before obstetrical palpation, but only 35 participants agreed that all antenatal women should be accompanied with female members for any obstetrical procedure (Table 4).

Among 92 participants, 31 participants were disagreed that obstetrical palpation should be performed only when women reached to third trimester, 55 participants agreed that inspection should be performed prior to palpation and auscultation, whereas 65 participants,65 participants agreed that palpation should not be done when uterus is contracting, 49 agreed that all health members should respect the cultural values at all procedure, and 49 participants agreed that women’s choice for mode of delivery should be respected (Table 5).

Among 92 participants, nearly 76 participants agreed that examiners hand should be warmed up before touching pregnant abdomen, 59 participants felt that palpation should be gentle, whereas only 41 participants agreed that if hands were diverge in first pelvic grip then pawlic grip should not be performed, 55 participants agreed that mothers pulse should be checked along with fetal heart sound, and 73 participants agreed that fetal heart sound should be checked for complete one minute during auscultation (Table 6).

The data shows that 56 participants agreed that all women to be reported about the findings observed during obstetrical palpation, and same number of participants believed that maintenance of records helped in continuity of care (Table 7).

The data reveals that the total attitude score of GNM students regarding obstetrical palpation was 2562 (n=35) with the mean of 73.2 (87.10%), for PBBSc nursing it was 1264(n=17) with the mean of 74.3 (88.5%). Whereas the score was slightly at higher side in terms of b sc nursing students with total score of 3007 (n=40) with the mean of 75.17 (94.9%).The standard deviations for attitude score among the BSc nursing students was also high which shows the scores were deviated among the B Sc nursing students as compared to the other groups (Table 8).

When comparing the level of attitude score between different nursing programme, it was found that among seventeen PBBSc nursing students, 16 (94.1%) were having favorable attitude towards obstetrical palpation whereas only one students (5.9%) was found to have unfavorable attitude towards obstetrical palpation. The data also reveals that out of thirty five GNM students, 28 (80%) had favorable attitude towards obstetrical palpation where as only seven students (20%) had unfavorable attitude towards obstetrical palpation. Out of 40 B Sc nursing students, 33 (82.5%) showed favorable attitude towards obstetrical palpation whereas seven students (17.5%) had unfavorable attitude towards obstetrical palpation. Thus the data showed that participants from PBBSc nursing were having more favorable attitude as compared to other programme, the reason might be higher side of their age and previous experience (Table 9).

**Table 3. Assessment of attitude towards purpose of antenatal examination among student nurse midwives
N=92**

Attitude Score	Strongly Agree			Agree			Disagree			Strongly Disagree		
	f	Score	%	f	Score	%	f	Score	%	f	Score	%
1.I believe the primary purpose of obstetrical palpation is to rule out high risk pregnancy with safe confinement among pregnant mothers	68	271	73.9	20	60	21.7	2	4	2.1	2	2	2.1
2.I believe that a pregnant women should be registered even if she comes late for antenatal check-up	58	232	63	29	87	31.5	2	4	2.1	3	3	3.2
3.I encourage pregnant women to do antenatal registration when I have community posting.	62	248	67.3	24	72	26	3	6	3.2	3	3	3.2
4.I encourage every antenatal women for institutional delivery	84	336	91.3	6	18	6.5	1	2	1.08	1	1	1.08

**Table 4. Assessment of attitude towards instruction of obstetrical palpation among student nurse midwives
N=92**

Attitude Score	Strongly Agree			Agree			Disagree			Strongly Disagree		
	f	Score	%	f	Score	%	f	Score	%	f	Score	%
1.I make effort to give proper instruction before obstetrical palpation	59	236	64.1	32	96	34.7	0	0	0	1	1	1.08
2.I respect the women privacy and provide comfortable position before obstetrical palpation begins	80	320	86.9	12	36	13	0	0	0	0	0	0
3.I instructed all antenatal women to empty their bladder before obstetrical palpation	71	284	77.1	19	57	20.6	2	4	2.1	1	1	1.08
4.I prefer antenatal women to be accompanied by female members during obstetrical palpation	35	140	38	45	135	48.9	7	14	7.6	5	5	5.4

**Table 5. Assessment of attitude towards preparation of antenatal mother among student nurse midwives
N=92**

Attitude Score	Strongly Agree			Agree			Disagree			Strongly Disagree		
	f	Score	%	f	Score	%	f	Score	%	f	Score	%
1.I encourage pregnant women only in third trimester should be checked for obstetrical palpation	18	72	19.5	43	129	46.7	22	44	23.9	9	9	9.78
2.I believe inspection should be performed prior to palpation and auscultation	55	220	59.7	27	81	29.3	9	18	9.7	1	1	1.08
3.I prefer not to do palpation when uterus is contracting	65	260	70.6	23	69	25	3	6	3.2	1	1	1.08
4.I believe in any obstetrical procedure the health members should respect the cultural values of the client	49	196	53.2	37	111	40.2	5	10	5.4	1	1	1.08
5.I believe that all health members should respect the women's' choice for mode of delivery	49	196	53.2	32	96	34.7	5	10	5.4	7	7	7.6

**Table 6. Assessment of attitude towards obstetrical palpation among student nurse midwives
N=92**

Attitude Score	Strongly Agree			Agree			Disagree			Strongly Disagree		
	f	Score	%	f	Score	%	f	Score	%	f	Score	%
1.I prefer hand to be warmed up before touching pregnant abdomen	76	304	82.6	16	48	17.3	0	0	0	0	0	0
2.I feel palpation should be done gently to avoid discomfort to the pregnant women	59	236	64.1	32	96	34.7	1	2	1.08	0	0	0
3.If hands diverge in first pelvic grip I prefer not to do pawlic grip	41	164	44.5	35	105	38	14	28	15.2	2	2	2.1
4.I believe mothers pulse should be checked simultaneously while listening to the fetal heart sound	55	219	59.7	32	96	34.7	4	8	4.3	1	1	1.08
5.I believe that fetal heart sound should be checked for complete one minute during auscultation	73	292	79.3	19	57	20.6	0	0	0	0	0	0

**Table 7. Assessment of attitude towards nurse's responsibility in obstetrical palpation among student nurse midwives
N=92**

Attitude Score	Strongly Agree			Agree			Disagree			Strongly Disagree		
	f	Score	%	f	Score	%	f	Score	%	f	Score	%
1.I believe women should be told of the findings observed during obstetrical palpation	30	120	32.6	56	168	60.8	4	8	4.3	1	1	1.08
2.I believe recording the findings will help to maintain the continuity of care	30	120	32.6	56	168	60.8	4	8	4.3	1	1	1.08

Table 8. Findings related to overall attitude score towards obstetrical palpation in terms of different nursing programme N=92

Types of nursing Programme	Attitude Score on obstetrical Palpation				
	Score	%	Mean	Median	Standard deviation
General nursing and midwifery, n=35	2562	87.10	73.2	73	5.36
PBBSc. Nursing=17	1264	88.5	74.3	76	5.73
B Sc.Nursing,n=40	3007	94.9	75.17	77	6.67

Table 9. Findings related to level of attitude score towards obstetrical palpation in terms of different nursing programme N=92

Types of nursing Programme	Attitude Score on obstetrical palpation			
	Favorable Attitude		Unfavorable Attitude	
	Mean ± SD	%	Mean ± SD	%
General nursing and midwifery, n=35	n=28 74.96±4.4	80%	n=7 66.14±1.777	20%
PBBSc. Nursing, n =17	n=16 75.5±2.92	94.11%	n=1 55	5.9%
B Sc.Nursing, n=40	n=33 77.54±4.35	82.5%	n=7 64±3.41	17.5%

Table 10. Association between attitude towards obstetrical palpation among student nurse midwives with selected variables N=92

S. No.	Selected Variables	Attitude Score				
		Adequate	Inadequate	df	χ^2	P-value
1	Age (in years)					
1.1	18-20	5	4	2	1.95	P>0.05
1.2	21-23	32	36			
1.3	23 and above	10	5			
2	Nursing programme currently undergoing					
2.1	GNM	13	22	2	4.346	P>0.05
2.2	PBBSc. Nursing	10	7			
2.3	B Sc Nursing	24	16			
4.	Do you have any exposure to mass media related to obstetrical palpation					
	Yes					
4.1	No	26	14	1	5.478*	P<0.05
4.2		21	31			
5.	Do you have clinical posting in OBG ward currently					
	Yes	30				
5.1						
5.2	No	17	22	1	2.05	P>0.05
			23			
6.	How many times you have performed antenatal examination					
	< 10 times					
6.1	10 to 20 times	16	23	2	4.57	P>0.05
6.2	> 20 times	11	12			
6.3		20	10			
7.	Total midwifery hours attended in theory class till now as per class attendance register					
	<50% of theory hour					
	50-80% of theory hour					
7.1	>80% of theory hour	0	5	2	6.765*	P<0.05
7.2		5	7			
7.3		43	32			
8.	Total midwifery clinical hours attended till now as per clinical attendance register					
	<50% of theory hour	0	1			
8.1						
8.2	50-80% of theory hour	7	4	2	1.78	P>0.05
8.3	>80% of theory hour	40	40			

The data reveals that the obtained chi square value for age (1.95), nursing programme currently undergoing (4.34), clinical posting in OBG ward (2.05), number of times performed obstetrical palpation (4.57) and total midwifery clinical hours attended (1.78) was not found statistically significant at 0.05 level of significance, therefore the attitude of student nurse midwives was found to be independent of

their age, type of nursing programme undergoing currently, having OBG ward posting, number of times performed obstetrical palpation and clinical hours attended. The table also reveals that the obtained chi square value for students exposure to mass media related to obstetrical palpation (5.478*, P<0.05) and total midwifery hours attended (6.765, P<0.05) was significant at 0.05 level of significance. Student nurse

midwives who received information on obstetrical palpation from other sources had scored higher in attitude scale as compared to those who were not exposed to any mass media on obstetrical palpation. The data also reveals that attitude score was higher among those students who had attended maximum hours in theory of Midwifery as compared to those who had less attendance in theory. Hence there was a significant difference found in the attitude of student nurse midwives with their exposure to the mass media and number of hours they attended midwifery hours (Table 10).

DISCUSSION

This study identifies the attitude of student nurse midwives towards obstetrical palpation at selected nursing institution of Sikkim. This study examined the attitude of different nursing students belonging to different programme and to what extent the socio-demographic characteristics of students affected their attitudes towards obstetrical palpation. The findings of the present study show that the attitude towards obstetrical palpation among students nurse midwives was found to be higher in terms of different nursing programme. It was also found that only 16.3 % of the participants had unfavorable attitude towards obstetrical palpation out of 92(83.7%) students nurse midwives. The data also shows that attitude score at all the area of obstetrical palpation among different category of student nurse midwives were also found favorable. The findings of the present study was consistent with the findings of the study conducted by Fungai (Muzeya, 2015), who assess the knowledge, attitudes and practices of nurse-midwives related to obstetric care at Thaba-Tseka, Lesotho and found that nurse-midwives had positive attitudes towards obstetric care practices with mean score for attitudes was 23.4(86.7%) against a possible score of 27(SD 3.02). The table also reveals that the obtained chi square value for students exposed to mass media related to obstetrical palpation (5.478*, $P < 0.05$) was significant at 0.05 level of significance. Student nurse midwives who received information on obstetrical palpation from other sources had scored higher in attitude scale as compared to those who had not exposed to any mass media on obstetrical palpation. Ruchi Puri conducted a survey among 83 obstetric care providers to assess their knowledge, attitudes and practices in Bugesera District, Rwanda to determine their demographic characteristics, competency in Safe Motherhood knowledge, obstetric practices, and attitudes towards patients and training approaches and found that maximum health care providers view additional education and training received and information through other sources were very useful in reducing maternal mortality.

Recommendation

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 Obstetrical palpation.

Conclusion

The great majority of the students agreed upon the areas of obstetrical palpation. The attitude of students nurse can be

influenced by the information received through other sources on antenatal examination as well as the total number of theory hours attended in Midwifery subject. 39% still performed obstetrical palpation less than ten times throughout the year with quiet a good number of allotted clinical hours. Hence, although the attitude towards obstetrical palpation was favorable, but some weakness still exist which posed as hindrance to its performance.

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Declarations

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Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

- Abraham SC. 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. *International Journal of Research*, March 2015; Vol.2 (3):518-26. Retrieved from <http://internationaljournalofresearch.org/>
- Cham, M, Sundby, J. & Vangen, S. 2005. Maternal mortality in the rural Gambia, a qualitative study on access to emergency obstetric care. *Reproductive Health*, 2 (3):1-8.
- Mbada CE , Adebayo OE, Adeyemi AB, Olujide OO, Arije OO, Dada OO, Akinwande OA. 2014. Knowledge and Attitude of Nigerian Pregnant Women towards Antenatal Exercise: A Cross-Sectional Survey. *ISRN Obstetrics and Gynecology*, Vol 2014:1-8.
- Millenium development goals-India country report 2015. Report from Ministry of Statistics and Programme Implementation .Government of India. www.mospi.nic.in.
- Mohsen MM, El-Abbassy AA. OSCE tool for Improving B. Sc. Nursing Students' Antenatal Examination. *Journal of Nursing and Health Science*. Nov. -Dec. 2015; Vol4(6).
- Mugweni, E, Ehlers, VJ and Roos, JH. 2008. Factors contributing to low institutional deliveries in the Marondera district of Zimbabwe. *Curationis*, 31(2):5-13.
- Muzeya F. Knowledge, attitudes and practices of nurse-midwives related to obstetric care at Thaba-Tseka district in Lesotho. Online publish thesis for the degree of Master of Public Health at the University of South Africa. June 2015. www.google.com.
- My Mak C, Wong H S. 2000. Assessing Women in Pregnancy and Labour: Is it better to palpate? A Perspective from Midwives. Hong Kong. *Journal of Gynaecology Obstetrics and Midwifery*, 1(2):86-95. Accessed November 29, 2013.
- Ojong IN, Uga AL, Chiotu CN. Knowledge and attitude of pregnant women towards focused ante natal care services in university of calabar teaching hospital, calabar, cross river state, Nigeria. March 2015; Vol.1 (1): pp.14-23. Retrieved from www.eajournals.org.

Priyadarshini M. and Gowri PM. Assess the Knowledge on Antenatal Care among Antenatal Care Giver. *International Journal of Scientific Engineering and Research*. October 2015; Vol 3(10):89-90. Retrieved from www.ijser.in.

Puri R. Knowledge, Attitudes and Practices of Obstetric Care Providers in Bugesera District, Rwanda. Online published thesis submitted in partial fulfillment of the requirements for the degree of Master in Science in the Duke Global Health Institute in the Graduate School of Duke University, 2011. www.google.com.

Scaria TM1, Valsaraj PB, Pias M. The effectiveness of Video Teaching over Lecture Cum Demonstration in Improving

Knowledge and Skill, of Nursing Students on Antenatal Examination. *International Journal of Nursing Education*, January 2013; Vol.5 (1):228-30.

World bank data. <http://www.data.worldbank.org/indicator.SHSTA.MMRT>.

World Health Organization, UNICEF, UNFPA, and the World Bank. Trends in maternal mortality: 1990 to 2008. Estimates developed by WHO, UNICEF, UNFPA and The World Bank. World Health Organization; Geneva: 2010. <http://www.who.int/reproductivehealth/publications/monitoring/9789241500265/en/>.
