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KNOWLEDGE AND ATTITUDE ON OBSTETRICAL TRIAGE AMONG STAFF NURSE IN SELECTED HOSPITALS OF KAMRUP, ASSAM: A DESCRIPTIVE STUDY

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ABSTRACT:

BACKGROUND:

The Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN) describes obstetrical triage as 'the brief, thorough and systematic, maternal and fetal assessment performed when a pregnant woman presents for care, to determine priority for full evaluation'. Obstetrical triage is more specialized than general and trauma triage, as it involves assessing labor condition and fetal well-being and preparing tests and interventions for obstetric problems. Obstetrical triage unit is the place where maternal patients entering the hospital system are initially processed to receive emergency medical and obstetric care.

OBJECTIVES:

- > To assess the knowledge regarding obstetrical triage among staff nurse working in selected hospital of Kamrup, Assam.
- > To assess the level of attitude regarding obstetrical triage among staff nurse working in selected hospital of Kamrup, Assam.
- > To find out the correlation between knowledge and attitude with the selected demographic variables regarding obstetrical triage among staff nurse working in selected hospital of Kamrup, Assam.
- > To find out the association between knowledge and attitude with the selected demographic variables regarding obstetrical triage among staff nurse working in selected hospital of Kamrup, Assam.

METHODS AND MATERIALS:

Quantitative approach and descriptive research design was used in the study to accomplish the objectives. By using non-probability convenient sampling technique, sample was selected on the basis of the inclusion criteria. The study was conducted among 102 staff nurse of selected hospitals of Kamrup, Assam. Semi-structure knowledge questionnaire and 5-point Likert scale were used to assess the knowledge and attitude.

RESULTS:

Out of 102 respondents majority of the staff nurses, 47(46.1%) were aged <30 years, 102(100%) were female, 53(52%) were unmarried, 74(72.5%) were G.N.M, 37(36.3%) had ≤1 year of total working experience, 47(46.1%) were working in antenatal ward and 72(70.6%) had attended training / in service classes on obstetric triage. The knowledge and attitude on obstetrical triage among staff nurses were assessed using structured questionnaire and 5-point likert scale. Majority of the staff nurses were 77(75.49%) had inadequate knowledge and 25(24.51%) had moderate knowledge on obstetrical triage. Majority of the staff nurses were 75(73.53%) had undesirable attitude, 26(25.49%) had moderately desirable attitude and 1(0.98%) had desirable attitude on obstetrical triage. the mean score of knowledge was 7.55±3.10 and the mean score of attitude was 22.21±6.78. The calculated Karl Pearson's Correlation value of r=0.350 shows a positive correlation between knowledge and attitude which was found to be statistically significant at p<0.001 level. This clearly infers that when knowledge regarding obstetrical triage among staff nurses with their selected demographic variables, it was observed that the demographic variables did not show statistically significant association with level of knowledge and attitude regarding obstetrical triage among staff nurses at p<0.05 level.

CONCLUSION:

In this study shows out of 102 majorities of the staff nurses were 77(75.49%) had inadequate knowledge and 25(24.51%) had moderate knowledge on obstetrical triage. Majority of the staff nurses were 75(73.53%) had undesirable attitude, 26(25.49%) had moderately desirable attitude and 1(0.98%) had desirable attitude on obstetrical triage. The study identified that the knowledge and attitude of the staff nurse regarding obstetrical triage are positively correlated.

KEYWORDS: Knowledge, Attitude, Obstetrical triage, Staff nurse.

INTRODUCTION:

Obstetric triage is a new idea, so the design and implementation of it requires identification of its concept and structure. Labor and delivery units often serve as emergency units for pregnant women, the use of obstetric triage systems with poor or inadequate quality can lead to unintended consequences such as over and under-triage and so a waste of humans and financial resources.

The methodologies of triage vary by institution, locality, and country but have the same universal underlying concepts. In most cases, the triage process places the most injured and most able to be helped as the first priority, with the most terminally injured the last priority. Triage systems vary dramatically based on a variety of factors, and can follow specific, measurable metrics, like trauma scoring systems, or can be based on the medical opinion of the provider.

OBJECTIVES:

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- > To find out the correlation between knowledge and attitude with the selected demographic variables regarding obstetrical triage among staff nurse working in selected hospital of Kamrup, Assam.
- > To find out the association between knowledge and attitude with the selected demographic variables regarding obstetrical triage among staff nurse working in selected hospital of Kamrup, Assam.

HYPOTHESIS:

- ➤ H₁ There is a significant correlation between level of knowledge and attitude with the selected demographic variables regarding obstetrical triage among staff nurse working in selected hospitals of Kamrup Assam at p<0.05 level.
- ➤ H₂ There is a significant association between the level of knowledge and attitude with the selected demographic variables regarding obstetrical triage among staff nurse working in selected hospitals of Kamrup Assam at p<0.05 level.

METHODOLOGY:

A descriptive design was used in the study to accomplish the objectives using non- probability convenient sampling technique for obtaining adequate sample for the study. Study was done on 102 staff nurse in selected hospitals of Kamrup, Assam. Respondents were selected on the basis of inclusion and exclusion criteria; Semi-Structured knowledge questionnaire was used to assess the level of knowledge and 5-point Likert scale was used to assess the level of attitude.

DESCRIPTION OF THE TOOL:

In order to meet the objectives of the study, the following tools were constructed which consists of three sections.

SECTION-I: Demographic characteristics of staff nurse.

SECTION-II: Semi-structured knowledge questionnaires on obstetrical triage.

SECTION-III: 5-point Likert scale to assess the attitude staff nurse on obstetrical triage.

DATA COLLECTION PROCESS:

The data collection period was scheduled from 8th Nov 2023 to 30th Nov 2023 from 9 am to 4 pm as per scheduled for 3 weeks. After getting Ethical clearance from the INS trust ethics committee (GNRC Complex), Dispur, Guwahati, Assam as well as from the Director and Joint Director of Health Services and Principal of Gauhati Medical College and Hospital, a formal written permission was obtained from Superintendent of Tolaram Bafna Kamrup District Civil Hospital, Amingaon, Dhirenpara FRU, Pandu FRU, Sonapur District Hospital, Kamrup, Assam. A brief self-introduction and the purpose of the study were explained to the sample prior to data collection and keeping in mind the ethical aspect of research, the data was collected after obtaining the informed consent of the sample for their willingness to participate in the study. The samples were assured anonymity and confidentiality of information provided by them. The

knowledge of the study was assessed through structured and self-reporting questionnaire. The attitude of the study regarding obstetrical triage was assessing through 5-point likert scale. The respondents took approximately 25-30 minutes to complete the questionnaire.

RESULTS:

SECTION-I: Frequency and percentage distribution of demographic variables of staff nurses.

n = 102

Demographic Variables	Frequency (f)	Percentage (%)		
Age in years				
<30 years	47	46.1		
30 – 45 years	24	23.5		
>45 years	31	30.4		
Gender				
Male	-	-		
Female	102	100.0		
Marital status				
Unmarried	53	52.0		
Married	49	48.0		
Qualification				
G.N.M	74	72.5		
B.Sc. Nursing	16	15.7		
Post Basic B.Sc Nursing	12	11.8		
M.Sc. Nursing	-	-		
Total working experience				
≤1 year	37	36.3		
1-3 years	12	11.7		
3 – 5 years	17	16.7		
≥5 years	36	35.3		
Area of working				
Antenatal ward	47	46.1		
Labour room	24	43.5		
Observation room	31	30.4		
Any training/in service classes attended on Obstetric Triage?				
Yes	72	70.6		
No	20	19.6		
If yes, please specify	10	9.8		

Section-I portrays that most of the staff nurses, 47(46.1%) were aged <30 years, 102(100%) were female, 53(52%) were unmarried, 74(72.5%) were G.N.M, 37(36.3%) had ≤ 1 year of total working experience, 47(46.1%) were working in antenatal ward and 72(70.6%) had attended training / in service classes on obstetric triage.

SECTION-II: Frequency and percentage distribution of level of knowledge regarding obstetrical triage among staff nurses.

n = 102

Level of Knowledge	Frequency	Percentage (%)
Inadequate knowledge (≤50%)	77	75.49
Moderate knowledge (51 – 75%)	25	24.51
Adequate knowledge (≥76%)	-	-

Section-II depicts the frequency and percentage distribution of level of knowledge regarding obstetrical triage among staff nurses. It shows that, 77(75.49%) had adequate knowledge and 25(24.51%) had moderate adequate knowledge regarding obstetrical triage.

SECTION-III: Frequency and percentage distribution of level of attitude regarding obstetrical triage among staff nurses.

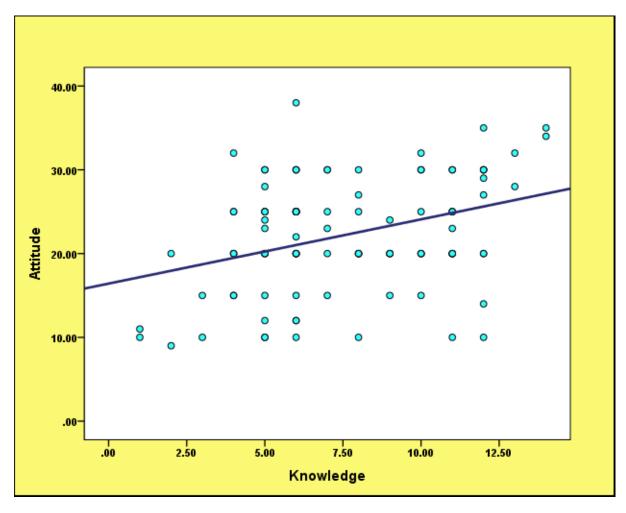
n = 102

Level of Attitude	Frequency	Percentage (%)
Undesirable attitude (≤50%)	75	73.53
Moderately desirable (51 – 75%)	26	25.49
Desirable attitude (≥76%)	1	0.98

The findings presented in section-III show the frequency and percentage distribution of level of attitude regarding obstetrical triage among staff nurses. It shows that, 75(73.53%) had undesirable attitude, 26(25.49%) had moderately desirable attitude and 1(0.98) had desirable attitude regarding obstetrical triage among staff nurses.

SECTION-IV: Karl's Pearson Correlation Co-efficient between knowledge and attitude scores of the respondents

n = 102



Scatter diagram showing the correlation between knowledge and attitude regarding obstetrical triage among staff nurses (r=0.350)

SECTION-V: Association of level of knowledge regarding obstetrical triage among staff nurses among staff nurses with their selected demographic variables.

n = 102

	Inade	quate	Mod	erate	Chi-Square p-
Demographic Variables	f	%	f	%	value / Fisher Exact test p-value
Age in years					2_1 167
<30 years	35	34.3	12	11.8	$\chi^2=1.167$
30 – 45 years	20	19.6	4	3.9	p=0.558 N.S
>45 years	22	21.6	9	8.8	G.VI
Gender					
Male	-	-	-	-	-
Female	77	75.5	25	24.5	
Marital status					$\chi^2 = 0.216$
Unmarried	39	38.2	14	13.7	p=0.642
Married	38	37.3	11	10.8	N.S
Qualification					p=1.000
G.N.M	56	54.9	18	17.6	N.S

	Inade	equate	Mod	erate	Chi-Square p-	
Demographic Variables	f	%	f	%	value / Fisher Exact test p-value	
B.Sc. Nursing	12	11.8	4	3.9		
Post Basic B.Sc Nursing	9	8.8	3	2.9		
M.Sc. Nursing	-	-	-	-		
Total working experience						
≤1 year	30	29.4	7	6.9	n=0.006	
1-3 years	7	6.9	5	4.9	p=0.096 N.S	
3 – 5 years	10	9.8	7	6.9	N.S	
≥5 years	30	29.4	6	5.9		
Area of working					√ ² −1 167	
Antenatal ward	35	34.3	12	11.8	$\chi^2=1.167$	
Labour room	20	19.6	4	3.9	p=0.558 N.S	
Observation room	22	21.6	9	8.8	N.S	
Any training/in service classes attended						
on Obstetric Triage?					m 0.200	
Yes	56	54.9	16	15.7	p=0.399 N.S	
No	15	14.7	5	4.9	G.VI	
If yes, please specify	8	5.9	4	3.9]	

 $N.S-Not\ Significant$

Section-V shows the level of knowledge regarding obstetrical triage among staff nurses with their selected demographic variables. It was observed that the demographic variables did not show statistically significant association with level of knowledge regarding obstetrical triage among staff nurses at **p<0.05 level**.

SECTION-VI: Association of level of attitude regarding obstetrical triage among staff nurses with their selected demographic variables.

n = 102

Demographic Variables	Undesirable		Moderately desirable		Desirable		Chi-Square p- value / Fisher
	f	%	f	%	f	%	Exact test p- value
Age in years							
<30 years	36	35.3	11	10.8	0	0	p=0.581
30 – 45 years	16	15.7	7	6.9	1	1.0	N.S
>45 years	23	22.5	8	7.8	0	0	
Gender							
Male	-	-	-	-	-	-	-
Female	75	73.5	26	25.5	1	1.0	
Marital status							T 0.650
Unmarried	40	39.2	12	11.8	1	1.0	p=0.650 N.S
Married	35	34.3	14	13.7	0	0	N.S
Qualification							
G.N.M	53	52.0	20	19.6	1	1.0	p=0.869 N.S
B.Sc. Nursing	12	11.8	4	3.9	0	0	
Post Basic B.Sc Nursing	10	9.8	2	2.0	0	0	C.V1
M.Sc. Nursing	-	-	-	-	-	-	

Demographic Variables	Undesirable		Moderately desirable		Desirable		Chi-Square p- value / Fisher
Demographic variables	f	%	f	%	f	%	Exact test p- value
Total working experience							
≤1 year	26	25.5	10	9.8	1	1.0	m_0 169
1-3 years	10	9.8	2	2.0	0	0	p=0.468 N.S
3 – 5 years	15	14.7	2	2.0	0	0	11.5
≥5 years	24	23.5	12	11.8	0	0	
Area of working							
Antenatal ward	36	35.3	11	10.8	0	0	p=0.581
Labour room	16	15.7	7	6.9	1	1.0	N.S
Observation room	23	22.5	8	7.8	0	0	
Any training/in service classes							
attended on Obstetric Triage?							0.079
Yes	56	54.9	16	15.7	0	0	p=0.078 N.S
No	12	11.8	8	7.8	0	0	G.VI
If yes, please specify	7	6.9	2	2.0	1	1.0	

N.S – Not Significant

Section-VI shows the level of attitude regarding obstetrical triage among staff nurses with their selected demographic variables. It was observed that the demographic variables did not show statistically significant association with level of attitude regarding obstetrical triage among staff nurses at **p<0.05 level**.

CONCLUSION:

Out of 102 respondents majority of the staff nurses, 47(46.1%) were aged <30 years, 102(100%) were female, 53(52%) were unmarried, 74(72.5%) were G.N.M, 37(36.3%) had ≤ 1 year of total working experience, 47(46.1%) were working in antenatal ward and 72(70.6%) had attended training / in service classes on obstetric triage. The knowledge and attitude on obstetrical triage among staff nurses were assessed using structured questionnaire and 5-point likert scale. Majority of the staff nurses were 77(75.49%) had inadequate knowledge and 25(24.51%) had moderate knowledge on obstetrical triage. Majority of the staff nurses were 75(73.53%) had undesirable attitude, 26(25.49%) had moderately desirable attitude and 1(0.98%) had desirable attitude on obstetrical triage. The study identified that the knowledge and attitude of the staff nurse regarding obstetrical triage are positively correlated.

REFERENCES:

- 1. Tuteja T.V, Niyogi M.G. *Obstetric triage International Journal of Reproduction, Obstetrics and Gynecology*. [Internet] 2016 Aug 5 (cited on 2024 Jan 2) Available at: https://www.ijrcog.org/
- 2. Mustafa L and Taiwo O. Maternal and Fetal Outcome of Obstetric Emergencies in a Tertiary Health Institution. *Minia Sceientific Nursing Journal* (2021) [internet] 2023 (cited on 2023 Dec 27) Retrieved from: https://doi.msnj.journals.ekb.eg
- 3. Upadhyay RP, Chowdhury R, Aslyeh Salehi, Sarkar K, Singh SK, Sinha B, Pawar A, Rajalakshmi AK, Kumar A. Obstetric triage: a systematic review and meta-analysis. *Bull World Health Organ*. [internet] 2017 Oct 1 (cited 2024 Jan 2); 95; retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5689195

- 4. Nyariki C, Mbuthia G, Yegon E. Nurse-midwives' knowledge and attitude to obstetric triage in Kiambu referral hospitals, Kenya. *African Journal of Midwifery and Women's Health* [internet] 2023 Dec 13 (cited on: 2024 Jan 6) Retrieved from: https://doi.org/10.12968/ajmw.2023.0012
- 5. Moudi A, Iravani M, Najafian M, Zareiyand A, Forouzane A and Mirghafourvand M. Factors influencing the implementation of obstetric triage: A Qualitative study at Tertiary Referral Hospital in Ahvaz, Khuzestan, Iran. *Midwifery, Volume 92* [internet] 2021 Jan 9 (cited on 2024 Jan 5) Retrieved from: https://doi.org/10.10.1016/j.midw.2020.102878
- 6. Fakari FR and Simbar M (2020) conducted a Qualitative study on explaining challenges of obstetric triage structure: A qualitative study at Shahid Beheshti University of Medical Sciences, Iran. *Nurs Open* [internet] 2020 Jul 18 (cited on 2024 Jan 2) Retrieved from: https://doi.1002/nop2.478
- 7. Shriraam V, Shah PB, Rani M A, Sathiyasekaran B. A study of Obstetric triage in rural Southern India. *Indian J Soc* [serial online] 2019 (cited 2024 Jan 2); 35:64-8. Retrieved from: http://www.indjsp.org/text.asp2019/35/1/64/254994
- 8. Anu G, Arti A. Obstetric triage. *International Journal of Research and Review*. Vol.5 Issue.2 Feb2018/IJRR008.pdf [internet] 2018; (cited 2024 Jan 2) 5(2):58-60. Retrieved from: https://www.ijrrjournal.com/IJRR
- 9. Manjrekar S, Patil S conducted a descriptive cross-sectional study on Obstetric triage among 30 staff nurse. *J Neurosci Rural Pract*. 9(4): 473-477. [internet] 2018 Oct-Dec; (cited 2024 Jan 2) Retrieved from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6126298/
- 10. Mostafa SM, Emam EAR, Mohammed E (2023) conducted a Experimental study on Effect of implementing Triage Training Program on Obstetric Nurses' Performance at the Maternity and Child Minia University Hospital, Egypt. *Minia Sceientific Nursing Journal* [internet] 2023 (cited on 2023 Dec 27) Retrieved from: https://doi.msnj.journals.ekb.eg
- 11. Basavanthappa BT. Nursing Research & Statistics. 3rd ed. New Delhi: Jaypee Brothers Publications; 2014.
- 12. Boswell C, Cannon S. Introduction to Nursing Research. 4th ed. Burlington: Jones & Barlett Learning.
- 13. Mostafa SM, Emam EAR, Mohammed E. Effect of implementing Triage Training Program on Obstetric Nurses' Performance at the Maternity and Child Minia University Hospital, Egypt. *Minia Sceientific Nursing Journal* [internet] 2023 (cited on 2023 Dec 27) Retrieved from: https://doi.msnj.journals.ekb.eg
- 14. Knight E, Morris M, Heaman M. Women presenting to an obstetric triage unit with no prenatal care at women's hospital in Winnipeg. *Obstetrics, Volume 36, Issue 3, p. 216-222* [internet] 2023 March (cited on 2024 Jan 2) Retrieved from: https://doi.org/10.1016/S1701 2163(15)30629-0
- 15. Vasilevski V, Ryan D, Crowe G et al. Satisfaction with maternity triage following implementation of the Birmingham Symptom-Specific Obstetric Triage System (BSOTS): Perspectives of women and staff at a large tertiary maternity service located in Melbourne, Australia. *Journal of Advance Nursing, Volume 80, Issue 2, p. 673-682* [internet] 2023 July 27 (cited on 2023 Dec 20) Retrieved from: https://doi.org/10.1111/jan.15806

- 16. Gupta A, Yadav S, Singh N et al. Ttriage of antenatal care through telehealth during COVID-19 pandemic in a tertiary care centre of North India from May 2020 to December 2020. *J Family Med Prim Care* [internet] 2022 March 10 (cited on 2023 Dec 27) Retrieved from: https://doi.10.4103/jfmpc.jfmpc_1155_21
- 17. Oduro F, Otchi E H, Coleman J et al. Improving 'needles' waits in an obstetric ER: implementing an obstetric triage system in a tertiary hospital in Ghana. *Care Delivery and Practice Improvement* [internet] 2022 April 11 (cited on: 2024 Jan 2) Retrieved from: https://doi.10.1093/ijcoms/lyac002
- 18. Ali A H, Elsheikh M. Application of triage protocol to improve quality of care in emergency unit at maternity hospital, Ain Shams University. *J Family Med Prim Care* [internet] 2022 March 10 (cited on 2023 Dec 27) Retrieved from: https://doi.10.4103/jfmpc.jfmpc_1155_21
- 19. Moudi A, Iravani M, Najafian M, Zareiyand A, Forouzane A and Mirghafourvand M. Factors influencing the implementation of obstetric triage: A Qualitative study at Tertiary Referral Hospital in Ahvaz, Khuzestan, Iran. *Midwifery, Volume 92* [internet] 2021 Jan 9 (cited on 2024 Jan 5) Retrieved from: https://doi.org/10.10.1016/j.midw.2020.102878
- 20. Fakari FR and Simbar M. Explaining challenges of obstetric triage structure: A qualitative study at Shahid Beheshti University of Medical Sciences, Iran. *Nurs Open* [internet] 2020 Jul 18 (cited on 2024 Jan 2) Retrieved from: https://doi.1002/nop2.478
- 21. Moudi A, Iravani M, Najafian M, et al. Exploring the concept and structure of obstetric triage: a qualitative content analysis at Imam Khomeini Hospital, Iran. *Midwifery*, *Volume 92* [internet] 2020 Jan 9 (cited on 2024 Jan 5) Retrieved from: https://doi.org/10.10.1016/j.midw.2020.102878
- 22. Moudi A, Iravani M et al. Obstetric triage system: a systematic review of measurement properties. *BMC Pregnancy and Childbirth 20, Article number:m275 (2020)* [internet] 2020 May 6 (cited on 2023 Dec 25) Retrieved from: https://doi.org/10.1186/s12884-020-02974-0
- 23. Razik A, Gamal A. Effect of Nurses Application of Structured Obstetrics Triage Guideline on Pregnant Women Outcomes at obstetrics department in Prince Hussein Bin Abdullah (Amman, Jordan). *International journal of Nursing Didactics* [internet] 2018 (cited on 2024 Jan 4) Retrieved from: https://doi.162.241.119.251
- 24. Dr. Choudhary V, Dr. S. Obstetric triage- time to prioritize emergency at a tertiary care centre, Rajasthan. *Mternity and Childbirth 20, Article number:m275 (2020)* [internet] 2020 May 6 (cited on 2023 Dec 25) Retrieved from: https://doi.org/10.1186/s12884-020-02974-0
- 25. Mostafa S M, Emam E A and Youness E M. Training program impact on nurse's knowledge and practice regarding obstetric triage at Maternity and Child Minia University Hospital. *Minia Sceientific Nursing Journal* [internet] 2023 (cited on 2023 Dec 27) Retrieved from: https://doi.msnj.journals.ekb.eg
- 26. Nyariki C, Mbuthia G, Yegon E. Nurse-midwives' knowledge and attitude to obstetric triage in Kiambu referral hospitals, Kenya. *African Journal of Midwifery and Women's Health* [internet] 2023 Dec 13 (cited on: 2024 Jan 6) Retrieved from: https://doi.org/10.12968/ajmw.2023.0012
- 27. Long E. Implementation of maternal fetal triage index to improve nurse knowledge and timeliness in obstetric triage at a fourteen bed labor and delivery unit in the Midwest. *DigitalCommons@UNMC*, *A Service of the Mcgoogan Library*. [internet] 2021 Dec 17 (cited on 2024 Jan 6) Retrieved from: https://digitalcommons.unmc.edu/con_dnp

- 28. Elmashad H A, Gouda A M et al. Effect of implementing simulation obstetric triage training on nurses' knowledge and practice at Egypt. *International journal of Nursing Didactics* [internet] 2020 (cited on 2024 Jan 4) Retrieved from: https://doi.162.241.119.251
- 29. Mekonnen T. Assessment of Knowledge and Attitude towards Obstetric Danger Signs During Pregnancy among Pregnant Mothers Attending Antenatal Care in Mizan Aman Public Health Facilities, Bench Maji Zone, South West Ethiopia. *Journals of Gynaecology and Women's Health*. [internet] 2018 Sept 6 (cited on 2024 Jan 6). Retrieved from: https://doi.10.19080/JGWH.2018.11.555813
- 30. Burns N. Grove K.S. The practice of nursing research conduct, critique and utilization, 8th ed. St. Louis, Missouri: Elsevier, 2017.
- 31. Sharma SK. Nursing Research and Statistics. 2nd Ed. USA: Elsvier, India Pvt.Ltd; 2012.
- 32. Polit D.F, Beck C.T. Essential of nursing research: appraising evidence for nursing practice 7th ed. Wolters Kluwer Lippincott Williams and Wilkkins Health Pvt Ltd 2010.
- 33. Pareek B, Sharma S. Textbook of nursing research and Statistics ND-106 Bikrampura, Tanda Road, Jalandhar City 2011.
- 34. Treece WE. Element of Research in Nursing, 2nd ed. CV Mosby Company Publishing, 2009.
- 35. Gupta S.P. Statistical method. 3rd ed. New Delhi: Sultan Chand and Sons; 2001.