ADDIS ABABA UNIVERSITY

COLLEGE OF HEALTH SCIENCES

SCHOOL OF ALLIED HEALTH SCIENCES

DEPARTMENT OF NURSING AND MIDWIFERY

ASSESSMENT OF NURSES' KNOWLEDGE AND UTILIZATION OF EVIDENCE BASED PRACTICE AND ITS ASSOCIATED FACTORS IN SELECTED HOSPITALS OF THREE ZONES OF SOUTHERN ETHIOPIA, 2017.

BY:

EYOEL ABATE DADE (BSC IN NURSING)

A THESIS SUBMITTED TO ADDIS ABABA UNIVERSITY COLLEGE OF HEALTH SCIENCE DEPARTMWNT OF NURSING AND MIDWIFERY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTERS OF SCIENCE IN ADULT HEALTH NURSING.

JUNE, 2017

ADDIS ABABA, ETHIOPIA.

ADDIS ABABA UNIVERSITY
COLLEGE OF HEALTH SCIENCES
SCHOOL OF ALLIED HEALTH SCIENCES
DEPARTMENT OF NURSING AND MIDWIFERY

ASSESSMENT OF NURSES' KNOWLEDGE AND UTILIZATION OF EVIDENCE BASED PRACTICE AND ITS ASSOCIATED FACTORS IN SELECTED HOSPITALS OF THREE ZONES OF SOUTHERN ETHIOPIA, 2017.

BY:

EYOEL ABATE DADE (BSc IN NURSING)

E-mail: yabatelijeyoel@gmail.com

ADVISOR: TESHOME HABTE (RN, BScN, MSc IN ADULT HEALTH NURSING)

CO-ADVISOR: TADESSE BEDADA (BSc, MSc)

JUNE, 2017

ADDIS ABABA, ETHIOPIA.

APPROVAL BY THE BOARD OF EXAMINATION

THIS THESIS BY EYOEL ABATE DADE IS ACCEPTED IN ITS PRESENT FORM BY THE BOARD OF EXAMINERS AS SATISFYING THESIS REQUIREMENT FOR THE DEGREE OF MASTER OF SCIENCE IN NURSING**.**

INTERNAL EXAMINER:

_____	_____	_____	_____
FULL NAME	RANK	SIGNATURE	DATE

RESEARCH ADVISORS:

FULL NAME	RANK	SIGNATURE	DATE
1._____	_____	_____	_____
2._____	_____	_____	_____

JUNE, 2017 G.C.
ADDIS ABABA, ETHIOPIA.

Abstract

Background: Evidence based practice is conscientious, clear and judicious use of current best evidence in making decisions about the care of the individual patient. It integrates individual clinical experts with the best available external clinical evidence from systematic research. Evidence based practice in nursing is come up to make value decisions and given that nursing care based on personal clinical expertise in combination with the most current, relevant research available on the topic. Through the time, new and more effective medicines, medical devices and procedures are invented to help doctors, nurses and medical technicians provide the best possible care and treatments to patients

Objective: To assess nurses' knowledge and utilization of evidence-based practice and its associated factors in selected hospitals of three zones of SNNPR, South Ethiopia.

Methods: Facility-based cross-sectional study design was conducted among nurses working in selected hospitals of three zones of south region from March 30 to May 1, 2017. 208 BSC nurses were involved in the study. Convenient sampling technique was employed for the study. Self administered questioner was used to collect data .Data was collected by three trained diploma nurses. Descriptive analysis was done. The collected data was entered and analyzed using SPSS version 21 statistical software package. Bivariate and multivariate logistic regression was done to identify factors that are associated with utilization of EBP. A statistical significance was declared at p value<0.05.

Results: Nearly half (45.3%) of study participants had poor knowledge regarding evidence based practice. 38.5% of respondents never utilize EBP in their clinical practice. In this study being head nurse was 3.43 times (AOR=3.427 [95%CI= [**1.289, 9.112**] more likely to use EBP when compared to being staff nurse. Knowledge of EBP was significantly associated with nursing experience and working unit.

Conclusion and Recommendation: The result of findings in this study revealed that nurses in selected Hospitals in SNNP have low level of knowledge about evidence-based nursing practice. Also their utilization of evidence-based nursing was low. Hospitals need to manage to provide training about evidence practice which raises level of knowledge and utilization.

Key words: knowledge, EBP and utilization

Acknowledgments

First of all I would like to thank Almighty God and my families providing strength and hope needed to complete this project. I would like to express my deepest gratitude to my advisors, Mr**.** Teshome Habte and Co-advisor Mr. Tadesse Bedada for their contributions and constructive comments they have provided in the development of each steps of this project work without which this project would not have appeared in this form.

I would like to extend my thanks to Wachemo University for providing me a chance to develop my educational level which is the reason to do the thesis. My thanks also go to Addis Ababa University College of Allied Health Sciences, School of Nursing and midwifery for providing me the opportunity to carry out this study.

Last but not least, I would like to say thank you for hospitals, respondents and data collectors which were the main parts of the thesis.

Table of Contents

Contents **Pages**

List of Tables

List of Figures

List of Abbreviations

AICU	Adult Intensive Care Unit
AOR	Adjusted Odd Ratio
BGH	Butajira General Hospital
BSC	Bachelor of Science
COR	Crude Odd Ratio
EBCP	Evidence Based Clinical Practice
EBN	Evidence Based Nursing
EBP	Evidence Based Practice
EBPQ	Evidence Based Practice Question
HDU	Highly Dependent Unit
ICU	Intensive Care Unit
IRB	Institution Review Board
MDRT	Multi-Drug Resistant Tuberculosis
MSC	Masters of Science
RN	Registered Nurse
NICU	Neonatal Intensive Care Unit
SNNPR	South Nation Nationalities Peoples Region
SPSS	Statistical Package for the Social Science
TASH	Tikur Anbesa Specialized Hospital
WCSH	Worabe Comprehensive Specialized Hospital
WUNEMMR	Wachemo university Nigest Elleni Mohammed Memorial Referral Hospital

1: INTRODUCTION

1.1 Background information

Evidence based practice is conscientious, clear and judicious use of current best evidence in making decisions about the care of the individual patient. It integrates individual clinical experts with the best available external clinical evidence from systematic research (1, 2). The translation of evidence into practice has a role in ensuring quality care, patient safety, and improved patient outcomes. Various researchers claim the reality that EBP fosters value health care, better health outcomes, and reduced health care costs (3, 4).

Evidence based practice in nursing is come up to make value decisions and given that nursing care based on personal clinical expertise in combination with the most current, relevant research available on the topic. Evidence based nursing implements the most up to date methods of providing care, which have been proven through appraisal of high quality studies and statistically significant research findings. Evidence based nursing is a process founded on the collection, interpretation, appraisal, and integration of valid, clinically significant, and applicable research. To properly implement Evidence based nursing, the knowledge of the nurse, the patient's preferences, and multiple studies of evidence must all be collaborated and utilized in order to produce an appropriate solution to the task at hand. These skills are taught in modern nursing education and also as a part of professional training (5).

Evidence-based practice is acknowledged internationally. The accessibility of information and the development of science have led to considerable improvements in health outcomes all over the world. However differences in outcomes, health inequalities and weakly performing health services continue to present a real challenge to all nurses (6).

Through the time, new and more effective medicines, medical devices and procedures are invented to help doctors, nurses and medical technicians provide the best possible care and treatments to patients. In addition to using traditional and well established procedures and practice, health care practitioners are adopting innovative interventions that are based on practice as well as solid research- based evidence (7).

The progress of evidence-based health care has evolved over time. Principal themes for the decades of 1970-1980 were "doing things cheaper" (efficiency) and "doing things better" (quality improvement). These two themes together were considered "doing things right." During 1980-1990, "doing the right things" (increasing effectiveness) was the major theme and this, in combination with "doing things right" was considered "doing right things right" in the 21st century. Thus, it can be said that this is an “evidence based era” (8).

1.2 Statement of the problem

Implementing EBP is not easy, because it depends on the readiness of the individual RN and senior leadership to embrace and help practice in a changing health care environment that is based on research. RNs are not ready for EBP due to the gaps in their information literacy and computer skills, their limited access to high quality information resources, and their attitudes towards research. Since nurses graduate from different academic programs, there is typically a gap between training and practice, and this creates variations in their knowledge. As a result how they practice, is based on what they learned in school and on their shared experiences in the clinical settings (9).

Researchers have argued that daily practice in nursing care is influenced more by tradition, intuition and experience and less by scientific research. Study conducted in various countries like Norway, Canada, Germany (9-12) revealed that implementing EBP in hospitals is a complex activity. Different issues have made integrating EBP in to clinical practice difficult. Although from its original appearance in the early 1990’s, the philosophies and methods of EBP has been changed over the time to overcome some of the issue to optimize patient care the tie between scientific evidence, clinician expertise and clinical environment need to be improved. However, even though EBP as a theoretical framework has the potential to enhance nursing practice, a majority of nurses do not avail themselves of opportunities to find practice information because they have little or no training in using database searches to find evidence for their practice (13).

Despite numerous calls for shift towards the use of research and scientific evidence to guide practice, most nurses continue to base practice decisions largely on anecdotal evidence, intuition trial and error and utilize treatment techniques with little scientific support. Nurses appear to rely more heavily on initial education and training when selecting treatment techniques or modalities

instead of using scientific evidence to guide practice. Thus, clinical decision making had been guided by personal experience and expert opinion (14).

The number of systematic reviews and resources for evidence-based practice has also risen. Despite these factors, application of evidence to practice remains challenging for nurses as well as for other clinicians (15). There are several obstacles to implement EBP practice in nursing, lack of education about evidence based practice in academic settings, lack of knowledge among nurse leaders, attitude about EBP, use and future use of EBP are multiple barriers (9).

Evidence based practice in Africa is remaining in challenge. One reason for this challenge is Africa lag behind in research. Another obstacle is lack of funds. But some African countries like, South Africa, Botswana, Nigeria, Kenya Malawi and Egypt are in advocating EBP (16). The concept of implementing evidence-based practice in nursing in most parts in Ethiopia is based on experience, tradition, intuition, common sense and untested theories. There is lack of research evidence in many areas of nursing practice (17). Therefore, the Purpose of this study is to assess the knowledge and utilization of evidence-based practice and its associated factors among nurses in selected hospitals of three zones of SNNP, Ethiopia.

1.3 Significance of the study

New knowledge must be transformed into clinically useful forms and it must be implemented across the health care system. To redesign health care, nurses must move out of their comfort zone, and use evidence-based knowledge to care for their patients and their families.

EBP is crucial in the overall health care delivery system because it can help reduce escalating health care costs, save time, afford better patient outcomes, and provide nurses with more autonomy in their practice, (which can ultimately lead to greater job satisfaction and increased retention).

To build substantial support for EBP requires new evidence forms, new roles, new teams, new practice cultures, and a new field of science. Implementation of a practical approach to EBP should be considered, to assist staff nurses to evaluate evidence and then translate evidence into practice. Time, resources, and support from the nursing leadership are needed, along with collaboration between hospital leaders and academic nursing. It will improve patient outcomes, decrease health care costs, which is a priority of governmental and funding agencies. The findings will be used to improve the nurse's knowledge and to facilitate effective utilization of evidence-based nursing practice in patient care.

In addition, the result will provide feasible recommendation for policy makers, Nursing Program managers, demonstrators, Ethiopian Nurse Association, researcher and Nurses about EBP and the finding will help the nurses to put in more effort toward the utilization of evidence-based nursing practice in the care of patients. It will also serve as baseline data for those who are interested further research on the issue.

2. LITERATURE REVIEW

2.1. Nurses' Knowledge about EBP

"Use, knowledge, and attitude towards evidence based practice among nurses". This was cross sectional study conducted by White- Wlliams in Spain. The study result showed that, 96% of nurses were aware of the concepts of EBP. On the study Correlations and multivariate analysis of covariance were used for statistical analysis (18).

The survey which was conducted about adopting EBP in clinical decision making: nurses' perceptions, knowledge, and barrier in Singapore. The result showed that most of the nurses didn't express any opinion about barriers to adopt evidence based practice. The reason raised by nurses for not responding on the study was because of not practicing or had limited knowledge (19).

Thesis undergone in Nigeria Ebonyi State University, Abakaliki-Nigeria on level of utilization of evidence-based nursing practice guidelines among Nurse Practitioners, explained that, 77.7% were heard about EBP. 33.3% had less than five years work experience. 90% respondents agreed that EBP is a problem solving approach. 77.7% agreed that it enhances delivery of highest quality of nursing care. 72.2% agreed that it combines research with knowledge and theory (20).

Research investigated about knowledge and utilization of evidence based practice in Offa Specialist Hospital indicated that 95.5 % of respondents were aware of the concept of evidence based practice. Most of the respondents were aware of that EBP is a problem solving approach. Also 85.5% of respondents were agreed that it enhances delivery of highest quality of care (21).

Nurse practitioners and nurse managers felt that many inpatients direct care nurses did not have a basic knowledge of EBP. This result was found from the thesis conducted in Midwestern United States rural community hospital. The study was focus group discussion about identifying barriers to evidence-based practice adoption. In the study years of experience ranging from four to forty years. Twenty percent of respondents were below four years nursing experience, 52% were unaware of research (22).

Egyptian survey conducted in Alexandria about Attitudes and Barriers towards Evidence-Based Practice among Nursing Educators. The result of the study showed that unawareness of method of using the electronic data base was identified as major barrier for EBP. It was from individual barrier accounts highest mean cor. also the study revealed that difficulty in understanding the statistical analysis as a barrier (23).

Study conducted in Ethiopia at TASH about nurses' perceptions and barriers on EBP. The barriers of implementation of EBP were analyzed in both bivariate and multi-variate level. According to this study lack of knowledge was seen as a barrier for implementing EBP. Those who have knowledge were implementing EBP 3 times more than who have no knowledge about EBP. Also lack of adequate search skills and searching experience is identified as a barrier to implementing evidence-based practice (24).

2.2. Utilization of Evidence-Based Nursing Practice

On the study of Offa specialist hospital about knowledge and utilization of evidence based practice, 30.9% of respondents were used journal on EBP to improve nursing care more often. 55.5% use the journal occasionally (21).

The cross section descriptive study of south Africa revealed that, the levels of use of EBP by nurses were 35.6%, 32.9% and 31.5%) use EBP frequently, moderately and rarely, respectively. The results indicated that the trained ICU nurses had a welcoming attitude towards EBP (75%) (25).

The study done at TASH in Ethiopia to assess nurses' perceptions and barriers in implementation of evidence based practice. In the study level of use of Evidence Based Practice among nurses was assessed. Their levels of use were rated by self-report with three options (sometimes, usually and always. (57.6%) of nurses were integrate EBP in their clinical practice. But, only 15.7%) use EBP in their clinical practice always (24).

2.3 Factors associated with utilizations of evidence-based nursing practice

Individual factors such as educational level, years of experience and beliefs and confidence in practicing EBP, as well as organizational factors such as supportive leadership, organizational climate and access to resources, have been demonstrated to be associated with practice of EBP.A range of individual and organizational factors associated with nurses' practice of EBP have been explored. Nurses with a higher educational level, such as a Master's degree or qualifications at an advanced level, have reported a higher extent or more frequent practice of EBP compared with nurses with lower qualifications (26).

A descriptive cross sectional survey was done on Evidence Based Practice Use in School Nurses of Central and Eastern Carolina and 29 barrier items addressed in the BARRIER scale. According to the study, the greatest barrier was found to be that there is not enough time on the job to read research (56%), followed by the nurse does not feel that the research are not generalizable to own setting (46%). Most of the reported barriers (70%) were characteristics of the organization setting. Also this study indicates that most of nurses involved in the study have no opinion about facilitator for utilization of EBP (27).

A focus group study conducted in a Midwestern United States rural community hospital. Four nurse practitioners, three nurse administrators/managers, and eleven inpatient direct care nurses were included in the study. Three focus groups were conducted. Data were analyzed using qualitative methodology. Themes identified included institutional and/or cultural barriers, lack of knowledge, lack of motivation, time management, physician and patient factors, and limited access to up-to-date user-friendly technology and computer systems (21).

The Iranian study about evaluating factors associated with implementing evidence based practice in nursing. On this study, the nurses rise the biggest barrier in implementing the evidence based practice was difficulty in judging the quality of research papers and reports. The most important supporting factor was mentoring by nurses who have adequate EBP experience (28).

The nurses on the Singapore's study of Perceptions, Knowledge, and Barriers about adopting EBP, identifies that, lack of time at their work place to search and read research article(53%), inability to understand statistical terms, inadequate understanding of technical jargon used in

research article and reports (more than 47%) as barriers on utilization of evidence based practice. also the study revealed that, appropriate EBP training was perceived as factor to tackle the barriers and enhance the utilization of EBP. Identifying clinical issue for implementing EBP and understanding what is EBP should be considered for providing EBP training (29).

A survey was done among school nurses at a national conference regarding current use, factors associated with and to identify resources to enhance use of EBP. Descriptive statistics, correlations, and independent *t* tests were used to analyze data. The results identified networking opportunities, pre-developed EBP guidelines, and education on outcome evaluation to enhance use of EBP. The study suggested that strategies could be developed to increase the use of EBP in the school setting (30).

The study conducted in private ICU of South Africa, Eastern Cape Province identifies that, lack of familiarity with EBP(18%), lack of access to information required for EBP, inadequate source to access evidence, organizational support were among the barriers to implement EBP. In this study nurses whose age less than 40 years (66%) were more familiar with the term EBP. Also the study revealed that 44% of respondents were under category of work experience less than ten years (31).

Offa specialist hospital thesis indicates that, lack knowledge (81.8%), inadequate organizational support (65.5%), insufficient time work (51.8%), inadequate time for utilization (79.1%) were seen as barriers for implementing the evidence based practice (21).

The study which was done in TASH about nurses' perceptions and barriers on EBP. The Barriers of implementation of EBP were analyzed in both bivariate and multi-variate level. According to this study lack of knowledge was seen as a barrier for implementing EBP. Those who have knowledge were implementing EBP 3 times more than who have no knowledge about EBP. Also lack of adequate search skills and searching experience is identified as a barrier to implementing evidence-based practice (24).

2.4. Conceptual Frame Work

Conceptual frame work developed by Evert Rogers in 1995 and then modified after review of different literature as shown in fig. below.

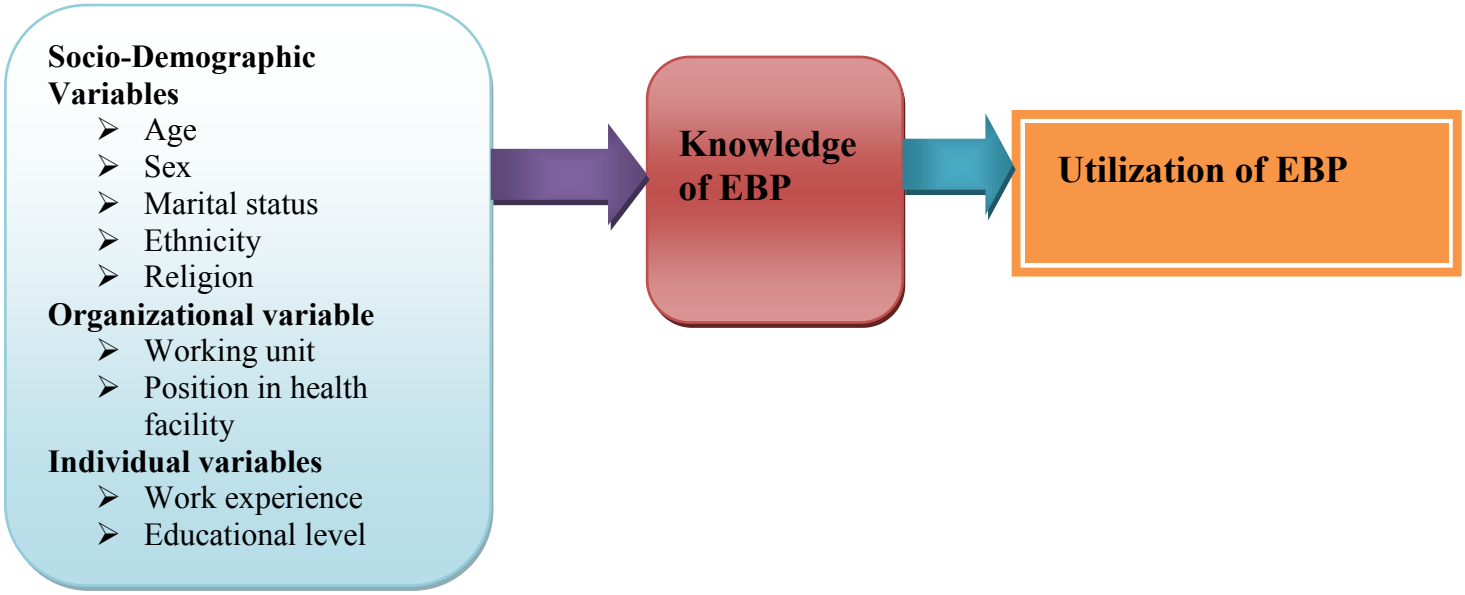

Figure 1: Conceptual frame work adopted from modified theory of diffusion innovation, then modified from different literature accordingly (32).

3: OBJECTIVES OF THE STUDY

3.1 General objective

To assess nurses' knowledge and utilization of evidence-based practice and its associated factors in three selected hospitals of three zone of SNNPR, Southern Ethiopia, 2017.

3.2 Specific Objectives

- To assess the knowledge of professional nurses regarding EBP in selected hospitals
- To describe the level of utilization of evidence-based nursing practice in selected hospitals
- To identify factors associated with knowledge of nurses towards EBP in selected hospitals
- To identify the factors associated with the utilization of evidence-based practice in the selected hospitals among nurses

4: METHODS

4.1. Study Area:

Hadiya, Silte and Gurage zonal administrations are among the zonal administrations of SNNPR. Hosanna town is a capital city to Hadiya zonal administration and 230km away from Addis Ababa. Worabe town is a capital city to Silte zonal administration and 170km away from Addis Ababa. Wolkite Town is capital city to Gurage zonal administration. Butajira town is special woredas located at 130 km away from Addis Ababa.

The study was conducted at three hospitals, namely Wachemo University Nigest Elleni Mohammed memorial referral hospital (WUNEMMRH), Worabe comprehensive specialized hospital (WCSH) and Butajira General Hospital (BGH) located in North West of southern region. WUNEMMRH is teaching hospital while WCSH and BGH are public hospitals.

WUNEMMRH: The hospital has a total of 203 beds. Medical ward has 46 beds, surgical ward 46 beds, pediatrics 44 beds, gynecology ward 25 beds, eye clinic 12 beds, NICU 10 beds; MDRT has 10 beds, HDU 6 beds and AICU 4 beds. The hospital also has more than 10 outpatient departments. Total nurses in the hospital are 147.

WCSH The hospital has a total of 117 beds. Medical ward has 37 beds, pediatrics 38 beds, surgical ward 38 beds, gynecology 18 beds, eye clinic 10 beds, NICU 10 beds and AICU 4 beds. Total nurses in the hospital were 112.

BGH: Located in Butajira town. The hospital has a total of 169 beds. Medical ward has 41 beds, pediatrics has 33 beds, gynecology ward 22 beds. Also hospital has eye clinic, NICU, Operating room and AICU. Total nurses in the hospital were 152.

4.2. Study design and Study period:

An institution based cross sectional quantitative study design was implemented from March, 30-May 1, 2017.

4.3. Source and Study Population

4.3.1. Source population;

All nurses working in the WUNEMMRH, WCSH and BGH Southern Ethiopia.

4.3.2. Study population:

Sampled BSC and above nurses working at WUNEMMRH, WCSH and BGH

4.4. Inclusion and Exclusion Criteria

4.4.1. Inclusion Criteria

All BSc and above nurses were part in the study.

4.4.2. Exclusion criteria:

Nurses who were on practice, critically sick during data collection were excluded.

4.5. Sample Size Determination:

The sample size for this particular study was calculated using formula for a single population proportion considering the following assumptions

Assumptions: A 95% confidence level, margin of error (0.05), p (= 0.157) prevalence of nurses practiced EBP always in the study conducted at TASH (23) is substituted in the following single population proportion formula.

$$n = \frac{(Z\alpha/2)^2 p(1-p)}{d^2} = \frac{(1.96)^2 (0.157)(0.843)}{(0.05)^2} = 203$$

10% of non response rate was added. Finally 223 study samples were needed for data collection

4.6. Sampling Procedures:

Three hospitals were selected purposefully and Bsc and above nurses working at the three hospitals (WUNEMMRH, WCSH AND BGH) was taken proportionally, as shown in the figure below.

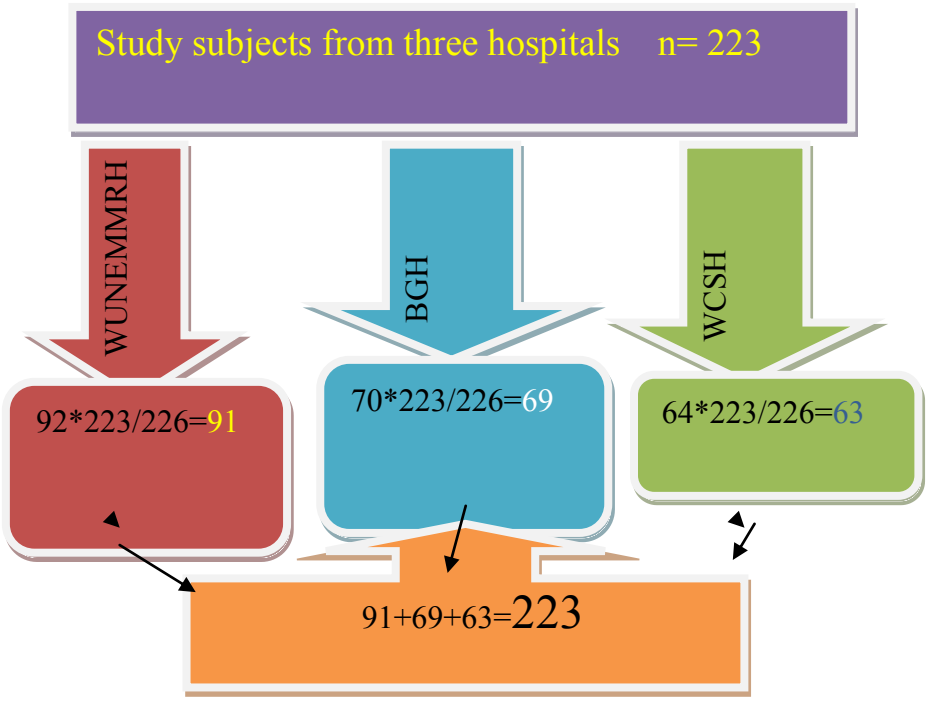

Figure 2: Schematic presentation of sampling procedure in selected hospitals three Zones of SNNP from March 30- May 1, 2017

Finally convenient NPS technique was applied to take data from each hospital

4.7. Data Collection Procedures:

Data was collected using a structured self administered questionnaire which had five sections; socio-demographic, knowledge of nurses toward EBP, barriers for EBP, facilitators for EBP and utilization of EBP. Seven Knowledge questions were adapted and modified from study conducted in Nigeria.'(20) .Questions regarding barriers and facilitators to EBP is adapted from Majid et.al 2011. (10) Proven to be reliable in related study of our country which was done in TASH. (23) Questions about utilization of EBP are adapted from different studies and which were reliable to conduct the study because it was applied in study of TASH. (23) Questioners were prepared in English since the study subjects were BSC and above holders. Three trained Diploma nurses were collected data.

4.8. Data quality control Assurance:

To assure the quality of the data properly designed data collection instrument and training of data collectors and supervisors was done. The enumerators and the supervisor were given training for two days on procedures, techniques and ways of collecting the data. 5% pretest was done at Homacho primary hospital to check consistency of the questioner. The collected data was reviewed and checked for completeness by principal investigator each day. To avoid low response rates the study was collected through three shift program of the hospitals.

4.9. Operational Definitions:

EBP: Evidence-based practice is an approach in which critically examined literature and research findings are used to provide nursing care that is safe and modern.

Barriers: obstacles for implementing EBP. These barriers could be related to the nurses' Experience, the environment, resources, and lack of administrative support.

Level of use EBP: Nurses used EBP in the clinical setting self- rated by three options (Often, occasionally and never utilize)

Good Knowledge: respondents who answer correctly to knowledge related question and those who scored equal and above the overall mean value

Poor knowledge: respondents who answered knowledge related question below the overall mean value.

4.10. Study Variables

4.10.1 Dependent variables

- Nurses' knowledge on EBP
- Level of use of EBP.

4.10.2 Independent variable

- **Demographic variables:** Age, sex, religion, Ethnicity, and marital status
- **Organizational variables:** Working unit, position
- **Individual variables:** Educational level and nursing experience

4.11. Data Analysis Procedures

The collected data was checked for its completeness manually and then entered in EPI Info version 7.1.1 and analyzed using SPSS version 21 statistical software package. Descriptive statistic including, table, figures, frequency distribution and mean was used to describe the data. A bivariate logistic regression model analysis was done to see the association between the explanatory and outcome variables. Odds ratio with 95% C.I was used to measure the strength between dependent and independent variables. P value < 0.05 was used to determine level of statistical significance.

4.12. Ethical Consideration

Institution Review Board (IRB) of Addis Ababa University, College of Health Science, School of Allied Health Sciences, Department of Nursing and Midwifery reviewed the protocol to insure full protection of the rights of study subjects. Following the approval by IRB, Official three letters of co-operation was written to WUNEMMRH, WCSH and BGH from Department of Nursing and Midwifery of AAU. After getting permission from Hospitals, data collectors was informed about the study, then after Verbal and written Informed consent obtained from study subjects, Confidentiality was assured for all the information provided, no personal identifiers (anonymity) was used on the questionnaires.

4.13. Dissemination of Results

Findings of this study will be submitted to department of nursing and midwifery, Addis Ababa University. It will also communicate to SNNP regional health bureau and respective zonal health offices as well as results will be disseminated to the WUNEMMH, WCSH, and BGH. It will be presented in seminars and workshops as well as further effort will be made to publish the findings on national and international peer review journal if it is possible

5: RESULTS

This thesis assessed nurses' knowledge and utilization of evidence based practice and its associated factors in selected hospitals of three zones of SNNPR. The plan was to collect data from 223 study participants. But data were extracted from a total of 208 BSc nurses that makes the response rate 93.3%

5.1 Socio-Demographic Characteristics

Majority of respondents 107, (51.5%) were under the age bracket of 25-29, mean age of respondents was 26.6, and Silte were large ethnic group which accounts 53 (25%). Among religion Muslim (36.5%) were largest religion in the study followed by orthodox 75(36.1%), protestant 41(19.7%), and catholic16 (7.7%). Also this study revealed that males 139(66.8%) were dominant study participant while female accounts 69(33.2%) and 142(68.3%) were unmarried.

The vast majority 201(96.6%) of respondents were BSC degree holders, 7(3.4%) were MSC holders and 157(75.5%) of respondents had 1-3 years of nursing experience. Concerning role position in the health facility, most (78.4%) of nurses were staff nurses, while 18.3% were head nurses and 3.4% were others. majority of study participants 63(30.3%) were from medical-surgical ward.

Table 1: Distribution of respondents by their basic socio demographic characteristics, in selected hospitals of three Zones in South Region from March, 30- May 1, 2017 (n=208)

Socio-Demographic characteristics		frequency	Percent
Age group	20-24	72	34.6
	25-29	107	51.5
	30-34	29	13.9
Ethnicity	Silte	53	25.5
	Amhara	49	23.6
	Hadiya	35	16.8
	Oromo	20	9.6
	Gurage	22	10.6
	Other s	29	14.0
Year of experience at work	1-3	157	75.5
	4-6	41	19.7
	>6	10	4.8
Marital status	single	142	68.3
	married	60	28.8
	Divorced	4	1.9
	widowed	2	1.0
Your work area at your hospital	Medical surgical	63	30.3
	Intensive care unit	27	13.0
	Emergency unit	45	21.8
	Operating unit	8	3.8
	others	65	31.2

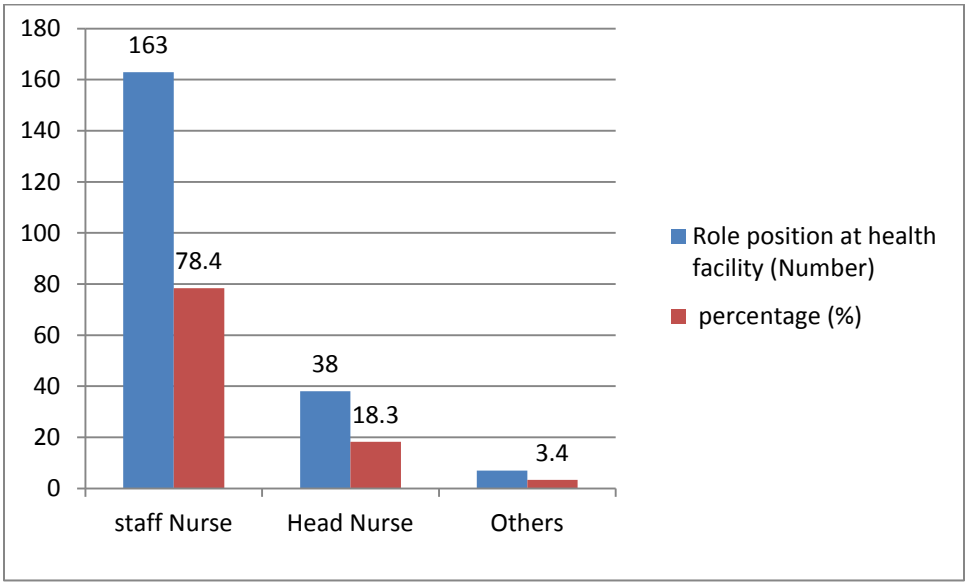

Figure 3: Position of nurses in selected hospitals of three Zones of SNNR in 2017 (n=208)

5.2 Knowledge about EBP.

From 208 study participants 95(45.7%) had poor knowledge about evidence based practice. one hundred and ninety (91.3%) of respondents knew that EBP is a problem solving approach. Also 0ne hundred and ninety (91.3%) knew that it enhances delivery of highest quality of nursing care. 186(89.4%) knew that it combines research with knowledge and theory, Most of the respondents 166(79.8%) agreed that it fills the gap between research, theory and practice.

Table 2: Nurses' knowledge about evidence based practice at selected hospitals in three Zones of South Region, March, 30- May 1, 2017 (n=208)

Variables		Frequency	Percent
Are you aware of concept of EBP	yes	169	81.2
	no	39	18.8
EBP is problem solving approach	yes	190	91.3
	no	18	8.7
EBP deliver highest quality care	yes	190	91.3
	no	18	8.7
EBP combines knowledge and theory	yes	186	89.4
	no	22	10.6
EBP fills gap between theory and practice when utilize	yes	166	79.8
	no	42	20.2
There is no need of EBP in nursing	yes	131	63
	no	77	37
EBP should be for nurse educator not for nurse at clinical area	yes	74	35.6
	no	134	64.4
Level of knowledge	Poor knowledge	95	45.7
	Good knowledge	113	54.3

5.3 Level of Use Evidence Based Practice

Regarding level of use of evidence based practice, 80 (38.5%) were never utilize evidence based practice, Among those who were used evidence based practice only 57(44.5%) were used evidence based practice more often while 71(55.5%) were utilized occasionally.

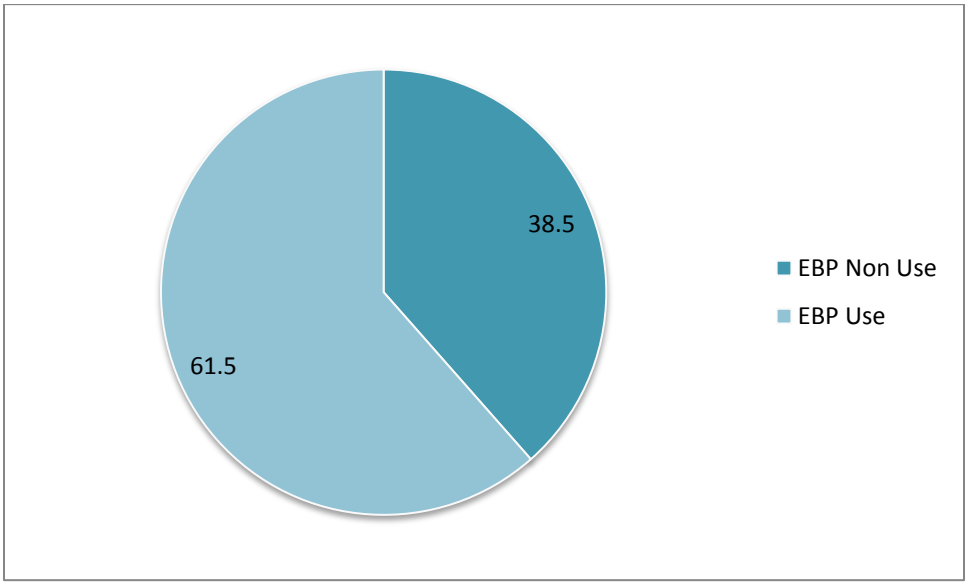

Figure 4: Level of utilization of EBP among nurses in selected hospitals of three Zones in SNNP from March, 30- May 1, 2017.

5.4: Barriers and facilitators of evidence based practice

Only descriptive analysis was done to assess barriers and facilitators of evidence based practice. The responses given strongly disagree and disagree merged. Also strongly agree and agree merged as it was in previous studies so that comparing is reasonable. According to the result of the study, 48.1% of the nurses agreed that lack of knowledge of evidence-based nursing practice is a barrier, 32.2% of them disagreed while 19.2% of the population sampled were indifference. Also, 42.3% observed that inadequate understanding of terms in research article is a barrier, 43.3% of them disagreed while 14.4% of the population sampled were indifference 37% of the nurses indicated insufficient time work, and 44.7% had contrary opinion while 18.3% were undecided. Also, 37% of the nurses were of the opinion that inadequate resources for utilization of evidence-based practice is a barrier, 44.7% disagreed while 18.3% of them could not decide on the issue. Furthermore, 48.1% of the nurses identity Inability to understand statistical terms used in research article, as a barrier 39% of the nurses disagreed while 3% could not decided. Also, 52.4% of the nurses agreed that one of the barriers is the fact that relevant research is not available, 23.2% disagreed while 14.4% were not able to decided.

Participants were asked to rate each of five items on the scales with facilitators extent to which they were perceived as a facilitator. The categories of great and moderate extent were merged as in previous study to make comparison meaningful. The most frequently cited facilitator was improving research knowledge, followed by the answer that having cooperative and supportive colleagues. The individual facilitators found on this sample of nurses are displayed in Table 3.

Table 3: Shows facilitators for utilization of evidence based practice in selected hospitals of three Zones of SNNP from March 30-May 1, 2017 (n=208).

variables		frequency	percent
Enhancing administrative support	To no extent	18	8.7
	To little extent	44	21.2
	To M to G extent	144	69.2
	No opinion	2	1
Cooperative and supportive colleagues	To no extent	20	9.6
	To little extent	26	12.5
	To M to G extent	159	76.4
	No opinion	3	1.4
Improving research knowledge	To no extent	13	6.2
	To little extent	30	14.4
	To M to G extent	162	77.8
	No opinion	4	1.9
Sufficient staffing	To no extent	17	8.2
	To little extent	31	14.9
	To M to G extent	156	75
	No opinion	4	1.9
Given adequate training	To no extent	23	11.5
	To little extent	27	13
	To M to G extent	155	74.5
	No opinion	3	1.4

To M to G extent= to moderate extent and to great extent merged

5.5 Factors associated with knowledge of EBP

Knowledge about evidence based practice was assessed for its association with socio demographic, individual and organizational variables. The result of this study shows that Sex (p=0.029) and marital status. (p=0.0001) and, nursing experience (p=0.018) were significantly associated with knowledge regarding evidence based practice

According to the result this study, female were 56.5% (AOR=0.435) [95%CI= [0.206, 0.919] less likely knowledgeable about evidence based practice than male. Those married were 14.7 times (AOR=14.706 **(**95 %= **(**1.370**,** 57.834**)** more likely knowledgeable when compared to unmarried. As the result of the study indicated, those who had working experience between four to six, 91.2% (AOR=0.088) [95%CI= (0.015, 0.502) less likely knowledgeable when compared with working experience below three years. Also those who had long working experience (more six years according to this study), (AOR= **(0.147**) [95%CI= [**0.024, 0.893**] 85.3% less likely knowledgeable compared to nursing experience below three years. the result of this study revealed that head nurses had 3.2 times AOR **=3.22** [95%CI= **(1.215, 8.57)** more likely knowledgeable when compared with staff nurses.

Table 4: Multivariate analysis shows association of socio demographic variables with knowledge of evidence based practice in selected hospitals of three Zones of SNNP from March, 30- May 1, 2017.

Variable		Good knowledge No (%)	Poor knowledge No (%)	COR (95%CI)	AOR (95%CI)
Age	20-24	25(34.7)	47(65.3)	1	1
	25-29	41(38.3)	66(61.7)	.944 (.503, 1.772)	0.494(.122, 1.998)
	30-34	15(51.7%)	14 (48.3%)	0.505 (.211, 1.218)	0.839 (0.187, 3.769)
Year of experience	1-3	62(39.5)	95(60.5)	1	1
	4-6	14(34.2)	27(65.8)	1.225 (.594,2.528)	**0.088 (0.015, 0.502) ****

	>6	2(20.0)	8(80.0)	2.638(.542, 12.839)	**0.147 (0.024, 0.893) ***
sex	male	65(46.8)	74(53.2)	1	1
	female	48(69.6)	21(30.4)	2.57(.707, 2.379)	**0.435 (0.206, 0.919)***
religion	orthodox	28(37.4)	47(62.6)	1	1
	Muslim	30(39.4)	46(60.6)	0.278(.034, 2.273)	.966(.499, 1.870)
	protestant	11(26.8)	30(73.2)	1.660(.720, 3.828)	2.898(.544, 15.454
	catholic	10 (62.5)	6(37.5)	.365 **(**.120**,** 1.115}	4.054(.468, 35.089)
Marital status	single	82(57.7)	60(42.3)	1	1
	married	25(41.7)	35(58.3)	.204(.106, .390}	**14.706 (1.370, 57.83)****
	widowed	1(50)	1(50.0)	0.0001(.00001,.0001)	0.0001(0.001,0.0002)
	divorced	3(75)	1(25)	.114(.012, 1.134)	.061(.002, 1.577)
Position at health facility	Staff nurse	89(54.6)	74(45.4)	1	1
	Head nurse	21(55.3)	17(44.7)	1.650(.688, 3.960)	**3.22 (1.215, 8.57)***
	others	3(42.9)	4(57.1)	1.650(.311, 8.752)	0.54 (0.076, 2.720)
Work area	Medical surgical	33(52.4)	30(47.6)	1	1
	Intensive care unit	13(48.1)	14(51.9)	0.541(.217, 1.347)	**0.302(0.096, 0.95)***
	Emergence unit	29(64.4)	16(35.6)	2.703(1.111, 6.577)	1.16(.52, 3.143)
	Operating unit	5(62.5)	3(37.5)	1.126(.247, 5.142)	0.853(.077, 8.077)
	others	48(73.8)	17(26.2)	0.988(.485, 2.012	0.661(.223, 1.61)

*=P-Value <0.05, **= p-value <0.01, ***=p-value <0.001

5.6 Factors associated with utilization of EBP

Utilization of EBP was assessed for its association with socio-demographic variables. Multivariable analysis logistic regression model showed that; sex, marital status, year of work experience and position in the health facility were statistically associated with utilization of EBP at p-value < 0.05

This study result shows that females were 2.6 times (AOR=2.56 [95%CI= [1.17, 5.59] more likely utilize evidence based practice when compared with male was significantly associated with evidence based practice. In this study being head nurse was 3.43 times (AOR=3.427 [95%CI= [1.289, 9.112] more likely to use EBP when compared to being staff nurse. According to the result of the study those married were 89.9% (AOR=0.102[95%CI= [.041, .258]. less likely to utilize evidence based practice when compared with unmarried. With respect to year of nursing experience, those who had long year nursing experience 13.8 times (AOR=13.799) [95%CI= (2.352, 80.974) more likely utilize evidence based practice. There is no significant association between age category, religion, ethnicity, working area and professional qualification in the health facility with utilization of EBP. There is no significant relationship between nurses' knowledge and utilization of evidence -based nursing practice. (p = 0.61).

Table 5: Multivariate analysis of socio demographic data with utilization of EBP in selected hospitals of three zones of SNNP from March, 30- May 1, 2017.

Variable		EBP no use No (%)	EBP use No (%)	COR (95%CI)	AOR (95%CI)
Age	20-24	25(34.8)	47(65.2)	1	1
	25-29	41(38.3)	66(61.7)	.944 (.503, 1.772)	.494(.122, 1.998)
	30-34	15(51.7)	14(48.3)	0.505 (.211, 1.218)	0.839 (0.187, 3.769)
Year of experience	1-3	63(40.1)	94(59.9)	1	1
	4-6	15(36.6)	26(63.4)	1.225 (.594,2.528)	1.331(.548, 3.233}
	>6	2(20.0)	8(80.0)	2.638(.542, 12.839)	**13.799 (2.352,**

					80.97)*
sex	male	56(40.3)	83(59.7)	1	1
	female	24(34.8)	45(65.2)	2.57(.707, 2.379)	**2.560 (1.170, 5.59)** *
religion	orthodox	28(37.3)	47(62.7)	1	1
	Muslim	30(39.5)	46(60.5)	.278(.034, 2.273)	.966(.499, 1.870)
	protestant	11(26.8)	30(73.2)	1.660(.720, 3.828)	2.898(.544, 15.454
	catholic	10(62.5)	6(37.5)	.365 (.120, 1.115}	4.054(.468, 35.089)
Marital status	single	36(25.)	105(74.5%)	1	1
	married	37(62.7)	22(37.3)	.204(.106, .390	0.102(.041, .258)
	widowed	1(25.0)	3(75.0)	0.0001(0.00001,0.02)	0.0001(0.01,0.0002)
	divorced	3(75)	1(5)	.114(.012, 1.134)	0.061(.002, 1.577)
Position at health facility	Staff nurse	68(39.8)	103(60.2)	1	1
	Head nurse	8(26.8)	20(71.4)	1.650(.688, 3.960)	**3.427 (1.289, 9.112)** *
	others	3(33.3)	6(66.7)	1.650(.311, 8.752)	2.754 (0.407, 18.620)
Work area	Medical surgical	26(41.3)	37(58.7)	1	1
	Intensive care unit	15(55.6)	12(44.4)	0.541(.217, 1.347)	.261(.078, .877)
	Emergence unit	9(20)	36(80)	2.703(1.111, 6.577)	1.053(.352, 3.143)
	Operating unit	3(37.5)	5(62.5)	1.126(.247, 5.142)	0.790(.077, 8.077)
	others	27(41.5)	38(58.5)	0.988(.485, 2.012	0.600(.223, 1.61)
Knowledge	Poor	39(41.1)	56(58.9)	1	1
	Good	41(36.3)	72(63.7)	1.22(0.698,2.14)	0.83(0.39,1.73)

*=P-Value <0.05, **= p-value <0.01, ***=p-value <0.001

6. DISCUSSION

6.1 Socio Demographic Characteristics of Respondents

The purpose of this study was to assess nurses' knowledge and utilization of evidence based practice in three selected hospitals of three zones of SNNP. A cross sectional descriptive study design was used in carrying out the study. The response rate in this study was 93.3% which is analogous with study of TASH 96.8% (24) and Iran 93% (28). As the study result revealed that, Female study participants (AOR=0.394 [95%CI= [.159, .978]. were less likely knowledgeable than males about evidence based practice. This might be related with female were less involved in training and managerial position.

Regarding to year of nursing experience in current study 75.5% of study participants were below three years nursing experience which is consistent with TASH in which 63%were below five years job experience (24). With respect to academic level, BSC and MSC and above which accounts 96.6% and 3.4%, respectively. Unlike study conducted in Singapore which includes diploma in nursing (41.0%), advanced diploma (14.8% ,bachelor's nursing (41.4%) and master's (2.3%,) But the proportion of BSc to MSc was comparable(29).

In present study there is no significant association between educational qualification and evidence based practice. This agrees with study result of (21) however, contradicts with the findings of (26) in which there is significant association between educational qualification and evidence based practice. Nurses with a higher educational level, such as a Master's degree or qualifications at an advanced level, have reported a higher extent or more frequent practice of EBP compared with nurses with lower qualifications. This might arise from lack of time for involvement of MSC and above holders in evidence based practice and they were passed most of their time in administrative role.

6.2 Knowledge towards EBP

The data analysis of this study shows that 45.7% of the study participants had poor knowledge level regarding evidence based practice. According to this result the level of knowledge is too low when compared with Offa specialist hospital result.(Nigeria). In Nigerian study Where level of knowledge was categorized as low 4.5%, medium 18.5% and high 77.3% (21). The reason for this might be socio-demographic background of study participants. The reason also may be countries educational policies. The study revealed 81.2% of the respondents were aware of the concept of EBP which is lower than study conducted by White Williams in Spain 96%. The difference may arise from place where study conducted. Present study was done in developing country while Williams study was in developed country. The result of current study revealed that 91.3 % study participants knew evidence based nursing practice delivers highest quality of care which is analogous with Offa specialist study 85.5%.(21) But higher than that of (20).

Working experience was determinants of knowledge about evidence based practice. As those who had long year working experience 91.2% (AOR=0.088) [95%CI= (0.015, 0.502) less likely knowledgeable when compared with working experience below 3 years. The reason for this might be related with those who have long working year experience were not learned recently, hence they are not updated with new knowledge. They practiced based on their previous experience. Working unit was also seen as determinant factor for having good knowledge.

6.3 Level of utilization of EBP

The levels of uses in this study were 55.5 % and 44.5%, occasionally and often respectively. Also only 27.4% (n=208) of study participants' uses evidence based practice often, which was almost the same with study of Offa specialist hospital, Nigeria (21) in which 30.9% were uses journals more often. The remaining were either uses occasionally or never use evidence based practice. Even though this (27.4%) level of utilization is higher than that of Tikur Anbesa Specialized Hospital, in which only 15.7% were uses evidence based practice more often (24). Still it is alarming that level of utilization is in low level. This might be indicated that, lack of time and lack training hindering them from utilizing evidence based practice. This result is comparable with the study conducted in South Africa which found 35.6% and 31.5% use EBP frequently and rarely, respectively (31).In this study more than 55.5% (n=128).of the respondent used EBP were occasionally. This result was the same with the result of study conducted in Offa

specialist hospital, Nigeria in which 55.5% (21) were utilize evidence based practice occasionally. This might be related with lack of training and lack of time to utilize evidence based practice.

In current study utilization of evidence based practice was significantly associated with role position. According to the result of this study being head nurse was 3.43 times (AOR=3.427 [95%CI= [1.289, 9.112] more likely to use EBP when compared to being staff nurse and this might be related with head nurses have opportunities to take trains and workshops about EBP. This is similar with that of study conducted in Mid Western United States of rural community (22). The result of this study revealed that nursing experience was significantly associated with EBP utilization. Those nurses worked more years were (in this study above 6 years) 13.8 times (AOR=13.799) [95%CI= (2.352, 80.974) more frequently utilize EBP when compared nurses with less working experience. This might be related to overcome challenges they faced during their working years they refer some evidence based practice.

Educational qualification and knowledge were not seen as determinant factors for evidence based practice utilization. The reason for this might be those who have higher educational qualification might be needed for managerial position rather than staffing and they might be busy on their administrative roles. In current study Knowledge was not determinant factor for evidence based utilization. This might be related with lack of time and work overload. This contrary with study of Tikur Anbesa Specialized hospital of Addis Ababa in which there was significant association between knowledge and utilization of evidence based practice. According to the result of TASH study, those who have knowledge were implementing EBP 3 times more than who have no knowledge about EBP (24).

7. LIMITATIONS AND WEAKNESS OF THE STUDY

7.1 Strength

- Pretest was done on 5% of respondents at Homacho primary hospital and necessary arrangements was done.
- Under the study teaching hospital, specialized hospital and general hospitals were incorporated.

7.2 Limitation

- The literature used were most from developed country so, comparing the result may have some negative effect as large difference in socio-demographic may exist
- Instrument used for this study was self administered questionnaire which could be subject to personal bias.
- This study was used convenient sampling technique so that generalizing the result may be difficult.

8: CONCLUSION AND RECOMMENDATION

8.1 Conclusions

The result of findings in this study revealed that nurses in selected Hospitals, SNNP have low knowledge level about evidence-based nursing practice. Also their utilization level of evidence-based nursing practice was low. There is no significant relationship between professional qualification of nurses and Knowledge with utilization of evidence based nursing practice. Year of work experience and position had significantly associated with utilization of EBP.

8.2 Recommendations

Based on the findings in this study, the following recommendations are made:

- Nursing Managers should design an appropriate strategic plan by considering supporting factors and barriers for integrating EBP into clinical setting.
- Hospitals management in the hospitals could develop strategy for building EBP competencies through proper training.
- Minster of education should include evidence based practice in curriculum as a subject
- Ethiopian nurse association should give concentration towards knowledge and utilization of evidence based practice
- Further research will be needed about knowledge, utilization and associated factors of evidence based practice

9: REFERENCES

1. Stevens, K. R. (2013). The impact of evidence-based practice in nursing and the next big ideas. OJIN: The Online Journal of Issues in Nursing, *18*(2). doi:10.3912/OJIN.
2. Barnes, Lisa M., "Evidence Based Practice in School Nursing: A Study of School Nurses in Central and Eastern North Carolina" (2012). Nursing Theses and Capstone Projects. digitalcommons@gardner-webb.edu
3. Smith, J .R, & Donze, A. (2010). Assessing environmental readiness. First steps developing an evidence-based practice implementation culture. Journal of Prenatal & Neonatal Nursing, 24 (1), 61-71.
4. Melnyk, B. M., Gallagher Ford, L., Long, L. E., & Fineout-Overholt, E. (2014). The establishment of evidence based practice competencies for practicing registered nurses and advanced practice nurses in real world clinical settings: Proficiencies to improve healthcare quality, reliability, patient outcomes, and costs. Worldviews on Evidence Based Nursing, 11(1), 5-15.
5. Hastings, C., & Fisher, C. A. (2014). Searching for proof: Creating and using an actionable PICO question. Nursing management, 45(8), 9-12. doi:10.1097/01.NUMA.oooo452006.79838.67
6. Jump up Melnyk, B.M. (2011). Evidence-based practice in nursing & healthcare: A guide to best practice. Philadelphia, PA: Lippincott Williams & Wilkins. pp. 3–7. ISBN 978-1-60547-778 7
7. International council of nurses: closing the gap from evidence to action, Geneva – Switzerland,2012
8. Kania-Lchance D.M. Best P.J.M, McDonah M.R, and Ghosh A.K. Evidence based practice and the nurse practioioner.Nurse Pract. 2006; 31(10):46-54. (Pub Med)
9. Mija K. Evidence based nursing-connecting knowledge to practice. Resource Library, 2000 Nov. Available from: URL: http://findarticles.com/p/articles/mi_qa3932/is_200011/ai_n8905921/
10. Boström, A.-M., Rudman, A., Ehrenberg, A., Gustafson, J. P. & Wallin, L. (2013) Factors associated with evidence-based practice among registered nurses in Sweden: a national cross-sectional study. BMC Health Services Research, 13 (1), 165.

11. Majid, S., Foo, S., Luyt, B., et al. (2011) Adopting evidence-based practice in clinical decision making: nurses' perceptions, knowledge, and barriers. Journal of the Medical Library Association, 99 (3), 229–236.
12. Wallin, L., Boström, A. M. & Gustavsson, J. P. (2012) Capability beliefs regarding evidence-based practice are associated with application of EBP and research use: validation of a new measure. Worldviews on Evidence-based Nursing, 9 (3), 139–148.
13. McSherry, R., Artley, A. & Holloran, J. (2006) Research awareness: an important factor for evidence-based practice? Worldviews on Evidence-based Nursing, 3 (3), 103–115.
14. Centre for Evidence-Based Practice: University of Toronto Health Network (2013). Retrieved March 16, 2011 from http://www.cebin.u.torontocal/ syllas/ nur/intro/htm.
15. Mclnerney, P. Evidence-Based Nursing and Midwifery: The State of the Science in South Africa. Worldviews on Evidence-Based Nursing, 4th quarter, 2004 pp. 207-208.
16. Tweed, E., Sauers, E., Valovich McLeod, T., Guo, R., Trahan, H., Kristine, M., et al., Review of librarians of Evidence-Based Practice. In Nursing And Allied health Professions in the United States**.** Journal of Medical Library Association, 2007. vol. 95, no. 4, pp. 394-407.
17. Agency for Healthcare Research and Quality (2008). Preventive Service task force. Retrieved July 24, 2011 from http://wwwabng.gob/clinic cuspstfix.htm.
18. Anne Dalheim, Nortvedt SHRMNaMW (2006). Evidence-Based Practice Among Nurses A Self-Report Survey.5.
19. White-Wlliams, C., Patrician, P., Fazeli, P., Degges, M. A., Graham, S., Andison, M., &.McCaleb, K. A. (2013). Use, knowledge, and attitudes toward evidence-based practice among nursing staff. Journal of Continuing education in nursing, *44*(6), 246-54.
20. Majid S, Foo S, Luyt B, Zhang X, Theng Y-L, Chang Y-K, et al. Adopting Evidence-Based Practice In Clinical Decision Making: Nurses' Perceptions, Knowledge, and Barriers. Journal of the Medical Library Association: JMLA. 2011;99 (3):229.
21. Ominyi, Jude N., OKO, CONSTANCE C., Chidobu, Christian C. Nwodom, Maureen U. (2015) Assessing the level of utilization of evidence-based nursing practice guidelines among nurse practitioners.
DOI**:** http://dx.doi.org/10.15520/ijnd.2015.vol5.iss03.61.10-15

22. Oluwatoyin. E. F, FWACN Justina H. Eke, Bisola F B *(Jul. - Aug. 2015),* Knowledge and Utilization of Evidence-Based Nursing Practice among Nurses of Offa Specialist Hospital, Kwara State,
DOI: 10.9790/1959-04435162. www.iosrjournals.org
23. Leilani Tacia, Karen Biskupski, Alfred Pheley, Rebecca H. Lehto (2015) identifying barriers to evidence-based practice adoption. www.sciedu.ca/cns Clinical Nursing Studies. Vol. 3, No. 2. http://dx.doi.org/10.5430/cns.v3n2p90
24. Azza H.M. Hussein and Rehab G. Hussein. The Attitudes and Barriers towards Evidence-Based Practice among Nursing Educators. *J Am Sci* 2013; 9 (12):609-618]. (ISSN: 1545-1003).http://www.jofamericanscience.org. 79
25. G. Hadgu, S. Almaz, S. Tsehay. Assessment of Nurses' Perceptions and Barriers on Evidence Based Practice in Tikur Anbesa Specialized Hospital Addis Ababa Ethiopia. American Journal of Nursing Science. Vol. 4, No. 3, 2015, pp. 73-83. doi: 10.11648/j.ajns.20150403.15
26. Wezzie K Challenges of Implementation of EBP in SA in ICU, May, URL:http://www.hst. org.za/sahr 2012 PAGE 69
27. .Gerrish K, Guillaume L, Kirshbaum M, McDonnell A, Tod A, M: N. Factors Influencing The Contribution Of Advanced Practice Nurses To Promoting Evidence-Based Practice Among Front-line Nurses: Findings From A Cross-Sectional Survey. J Adv Nurs,.2011;67(5):1079-90.
28. Barnes, Lisa M., "Evidence Based Practice in School Nursing: A Study of School Nurses in Central and Eastern North Carolina" (2012). Nursing Theses and Capstone Projects. digitalcommons@gardner-webb.edu
29. Farokhzadian J, Khajouei R, Ahmadian L (2015) Evaluating factors associated with implementing of evidence-based practice in nursing. Journal of Evaluation in Clinical Practice ISSN 1365-2753
30. Adams S. Use of evidence-based practice in school nursing: survey of school nurses at a national conference. J Nurs Scholarsh 2009 Aug 1; 25(4):302. Available from: URL: http://www.deepdyve.com/lp/sage/use-of-evidence-based-practice-in-school-nursing-survey-of-school-XFuBCPCq0C

31. P.Jordan, C Bowers, D, .Morton (2016) Barriers to implement EBP in a private ICU in the Eastern Cape. South. Afr.j.crit. care (online) vol.32 n.2 Cape Town. http://dx,doi.org/10.7196/
32. Evert Rogers (1995) modified theory of diffusion innovation about knowledge towards evidence based practice.

Lists of Annexes

Annex I. Personal Information Sheet

Title of Research: assessment of knowledge and utilization of EBP and its associated factors among nurses, in selected hospitals of three zones of SNNP, Southern Ethiopia.

Institution: Addis Ababa university department nursing and midwifery

Name of sponsor: Wachemo University

Principal Investigator: Eyoel Abate (BSC.)

Mobile: +251 910369557

E-mail: yabatelijeyoel@gmail.com

Advisor: Mr. Teshome Habte (BSc, MSc)

Purpose: The aim of the study is to assess knowledge and utilization of EBP among nurses

Duration: The question that is going to read and answer usually takes about 30 minutes.

Benefit of the study: - There is no direct benefit to you now. However, the result of the study will be helpful for nurses in the future by identifying level of knowledge and barriers and facilitators for utilization of EBNP, which is useful in delivering improved health care service.

Risk of the study: - Participating in this study will not have any risk or harm associated with data collection.

Rights of Participants: - You have full right to participate or to refuse and you can ask question if it is not clear for you.

Confidentiality: - Issue will be maintained, no identification will be recorded.

Email: yabatelijeyoel@gmail.com,

Annex II: Informed Consent Form

Title of the project: Assessment of nurses' knowledge and utilization of EBP and its associated factors in selected hospitals of three zones in SNNPR

I have been well aware of that this research undertaking is for a partial fulfilment of MSc degree which is fully supported and coordinated by Addis Ababa University, College of Health Science Department of Nursing and midwifery, and the designate principal investigator. I have been fully informed in the language I understand about the research project objectives that are to understand level of knowledge and utilization of EBP .I have been informed that all the information I shall provide to the data collectors will be kept confidential. I understood that the research has no any risk and no composition. I also knew that I have the right to withhold information, skip questions to answer or to withdraw from the study any time I have acquainted nobody will impose me to explain the reason of withdrawal. It is also enlighten there would have no effect at all in my health benefit or other administrative effect that I get from the refuge.

I have assured that the right to ask information that is not clear about the research before and or during the research work and to contact Addis Ababa University, College of Health Science IRB Office

Principal Investigator's Name: Eyoel Abate Tel: +251910369557

Advisor's Name and Address: Mr Teshome Habte (BSC, MSC) Tel: +251911436150
: Mr.Tadesse Bedada (BSC, MSC) Tel+251912055109

I understand this form; therefore, I am willing and confirm my participation by signing the consent.
Agreed to participate in the study: Yes /No (mark one of them for verbal consent)

Signature _____

Name of witness signature _____ (Data collector, supervisor, any third person)

Annex III Questionnaire

Part I. Socio-Demographic Questions

Please provide answers to the following questions**:**

<table>
<tr>
<td>1. Age in year_____</td>
<td>2. What is your Ethnicity?
a. Hadiya b. Silte c. Gurage
d. Oromo e. Amhara f. Tigray
others (specify) _____</td>
</tr>
<tr>
<td>3. Sex:
a. Male
b. Female</td>
<td>4. What is your Religion?
a. Orthodox
b. Muslim
c. Protestant
d. Catholic_____
Other specify _____</td>
</tr>
<tr>
<td rowspan="2">5. Marital status:
a. Single
b. Married
c. Widowed
d. Divorced
Others (specify)_____</td>
<td>.6. Year of experience at your work?
_____</td>
</tr>
<tr>
<td>7. What is your role or position in the health care facility?
a. Staff nurse
b. Head nurse
c. Other, Specify _____</td>
</tr>
<tr>
<td>8. What is your Educational level?
a. BSc
b. MSc and above_____</td>
<td>9. What is your primary work area in the hospital?
a. Medical-Surgical
b. Intensive care
c. Emergency Unit
d. Operating Unit
e. Other specify</td>
</tr>
</table>

Part. II Questions Regarding Knowledge towards EBP

	yes	no
1. Are you aware of the concept of Evidence-based practice in nursing		
2. Evidence-based practice is a problem solving approach		
3. It enhances delivering of highest quality of care		
4. It combines research with knowledge and theory		
5. It fills the gap between research theory and practice when utilized		
6. There is no need of evidence-based practice in nursing.		
7. Evidence-based practice should be for nurse educators and not for those in the clinical area.		

Part III. Questions about Level of Utilization of EBP

1. Have you ever use EBP (library books, journals, research documents) in your practice?

a. Yes

b. No

2. If your answer is yes how often used?

a. Often

b. Occasionally

3. Have written protocol or guideline for Implementing Evidence-based nursing practice

a. Yes

b. No

4. If your answer for question number 3 is yes, do you us it?

a. Yes b. no

Part. IV. Questions Regarding Barriers of evidence based practice

Do you agree or disagree that the following barriers have been preventing you from adopting EBP?

Barriers	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1. Inadequate understanding of research terms used in research articles					
2. Inability to understand statistical terms used in research article					
3. Difficulty in judging the quality of research papers and reports.					
4. Inability to properly interpret the results of research studies.					
5. Insufficient time at workplace to implement changes in their current practice.					
6. There are sufficient resources(e.g. equipment, internet) to implement EBP					
7. I have knowledge to implement EBP Principles					
8. Difficulty in finding time at work place to search and read research articles and reports					
9. The relevant literature is not available					
10. There is not a documented need to change practice					
Other barriers (please specify):					

Part V questions regarding facilitators of evidence based practice

In your opinion, what factors are important for you to adopt EBP?

SN	QUESTION	To no extent	To little extent	To moderate extent	To great extent	No opinion
1	Enhancing administrative support and encouragement					
2	Cooperative and supportive colleagues					
3	Improving research knowledge					
4	More employees/sufficient staffing					
5	Given adequate training in EBP					

Annex IV: Assurance of principal investigators

Declaration:

I, the undersigned, declare that this is my original work and has not been presented in this or any other University and all sources of materials used for this thesis have been fully acknowledged.

Name: **Eyoel Abate**

Signature: _____

Date: _____

Place: Addis Ababa University, College of Health Sciences, Department of Nursing and midwifery

This thesis has been submitted for examination with my approval as University advisor

Teshome Habte (BSc, MSc)

Signature: _____ Date, _____

Tadesse Bedada (BSc, MSc)

signature_____Date,_____

Place: Addis Ababa University, College of Health Sciences, Department of Nursing and midwifery