# GENERATING EVIDENCE FOR CLINICAL NURSING

BY
DR. JUSTINA .N. OKOLI
(FAIPH,RNE,RND) <u>ustina18@yahoo.com</u>

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### OUTLINE

- Introduction
- Clinical Nursing
- Brief history of Evidence based practice
- Benefits of evidence based practice
- Research sources for Evidence based practice
- Steps of generating evidence
- Challenges of EBP
- Implications for nursing profession
- Conclusion

#### INTRODUCTION

- •All health care consumers (patients and clients) expect quality health/nursing services from all health care professionals especially Nurses.
- •The care should be built on the use of best evidence.
- •Evidence Base Practice (EBP) dictates that we must be aware that times have

### INTRODUCTION CONTD.

- •International Council of Nursing (ICN) (2010) stated that Nurses are both responsible and accountable for their nursing practice.
- •However, nursing is also allied to other health professions through its collaborating, referring and coordinating activities and thus has developed a distinct as well as a shared body of knowledge and practice. changed.

### Introduction contd.

- •EBP is widely recognized within the role of nursing and its activities of care delivery is very important driver for nursing practice and clinical outcomes (Cullen & Adams, 2010).
- •Nurses authority comes from evidence based knowledge related to its sphere of practice.
- •The need for a paradigm shift in the orientation to care given, necessitated an appraisal of how a nurse should generate evidence for her practice.

### **CLINICAL NURSING**

- Bincy (2014) documented that clinical nursing focuses on the biophysical features of person in diseases, diagnosis and his/her response to treatment generally.
- Its emphasis are on caring according to medical/ nursing diagnosis of a patient, attending to the physical effects of diagnosis on an individual as a person.

It also access information on the effects the disease has on the ability of the individual to perform activities of daily living.

Clinical nursing also focuses on specific interventions developed to address functional limitations and also responds to side effects of medication.

It can also bring about good outcome if intervention is good

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Clinical nursing cares into provision of information vital to determining standards of care in a particular aspect of nursing services by examining the time line of patients care.

Nurses in the clinical areas make rooms for provision of services across varying patient backgrounds

...being knowledgeable about evidence based practice and levels of evidence is important.

### EVIDENCE BASED PRACTICE

Evidence: Evidence refers to sources of data relevant to a particular clinical problem that are used to facilitate decision making about patients' care (Oncology Nursing Society Evidence-Based Practice Online Resource Center.nd.)

Evidence based nursing(EBN) according to the International council of Nurses, is defined as 'a problem solving approach to clinical decision making that incorporates a search for the best and latest evidence, clinical expertise, assessment, and patient preference values within the context of caring'

### EVIDENCED BASED NURSING CONTD.

It is a practice through which nurses execute their clinical duties while utilizing the current and valid research findings, clinical expertise, the client values & preferences and the available resources to make a practice decision (International council for Nurses, 2012 Registered Nurses' association of Ontario 2014)

It is simply a systematic inquiry designed to develop trustworthy evidence about issues of importance to the nursing profession

### EVIDENCE BASED NURSING

- Evidence base symbolism defined evidence base nursing as the process of systematically finding, appraising and using contemporaneous research findings as the basis for clinical decision.
- Hence, it means that it is a shift in the culture of health care provision away from basic decisions on opinion, past practice and precedent toward making more use of science, research and evidence to guide clinical decision making.
- Nurses no longer just do only as taught in nursing schools but also use current information from research.

• Research often provides the evidence!

### EBN CONTD.

- •It is an approach to making quality decision and providing nursing care based on personal, clinical expertise in combination with the most current relevant research available.
- •EBN is about asking questions, systematically finding research evidence and assessing the validity, applicability and importance of that evidence.
- It requires the ability to apply knowledge of informatics (e;g efficiently searching the nursing literature) and clinical conditions and appraising the literature and adapting care of the individual patient/client to it.

- •Evidence based nursing practice means the use of best research proven assessments and treatments in our day to day client care and service delivery.
- •This means each clinician undertakes to study in touch with the research literature and to use it as a part at their clinical decisions making.
- Evidence based practice also means weighing the values of each part of the research evidence with clinical data and informed client choice.
- •This means that we need to know what the research says

### COMPONENTS OF EVIDENCE BASED PRACTICE



### Brief history of Evidence based Nursing

- Evidence based practice is by no means a new concept
- The roots of evidence based practice are in evidence based medicine and has been well documented and includes primitive experiments to test the effectiveness of practices (Clariadge and Fabian, 2005).
- While David Sackett is regarded as the father of EBM, Florence Nightingale is the real mother ....
- •EBN evolved from Florence Nightingale in 1800s to medical physicians' practice in the 1970s and to the Nursing profession in the late 1990s

### HISTORY OF EBN CONTD.

- •It began as an idea to provide better outcomes for patients who experienced deplorable and unsanitary conditions
- •This was because Nightingale who was known for her work in military hospitals during the war was asked to oversee the management of Barrack hospital in Scutari, Turkey.
- •The hospital then was known for its unsanitary conditions
- •It was there that Nightingale critically examined and observed a connection between patient's health

### HISTORY OF EVIDENCE BASED NURSING CONTD.

- She later published a book titled 'Notes of Nursing' in 1859 where she compared the dirtiness of the water for hands washed with cold water with/without soap & hot water with soap
- She noted that hot water with soap removed the most dirt
- The term *evidence-based nursing* was not known then but Nightingale was using evidence that had been determined through experimentation and critical examination to positively influence patient outcome
- Her book on Notes on Nursing could be considered as best practice guidelines for Nurses at that time.

### HISTORY OF EVIDENCE BASED NURSING 3

- Her book on Notes on Nursing could be considered as best practice guidelines for Nurses at that time.
- Her discovery is foundational to undergraduate and graduate nursing education and is a way to minimise the theory to practice gap (Mackey & Bassendowski, 2016).
- Nightingale also recorded medical statistics using patient demographics to ascertain the number of deaths in hospitals and connected the mortality rate to different illnesses and injuries
- Archie Cochrane introduced the concept of applying randomized controlled trials and other types of research to the nursing practice in 1972

### BENEFITS OF EBP IN NURSING

- •It provides nurses with scientific researches and studies to make well-founded decisions to support their day to day clinical practice
- •It helps nurses stay updated about new medical protocols for patient care
- •Provides documented interventions which when applied can aid patient's outcomes
- •It allows patients to have proactive role in their own healthcare as they can voice their concerns, share their values and preferences

#### **BENEFITS CONTD**

- •Equips nurses with more knowledge on risks and benefits of certain diagnostic and therapeutic measures
- •EBP would lead to better patient outcome, reduction in morbidity and mortality and better health indices
- •It would also reduce financial operational cost in healthcare of organizations as expenditure on out-dated supplies/products for certain procedures may no longer be needed
- •Nurses can participate in multidisciplinary investigatorinitiated research, contribute to various aspects of research or be consumers of research through evidence based nursing.

### RESEARCH RESOURCES FOR EBP

- •Nursing studies aim at generating and assessing evidence for nursing practice.
- •Qualitative research is number one and there must be training /retraining opportunities for nurse clinicians on how to go about this.It includes cohort studies, case studies, care studies
- •Randomized controlled trials: evidence from Case controlled studies, cohort and observational studies.
- •These are the most credible sources

### RESOURCES FOR EBP CONTD.

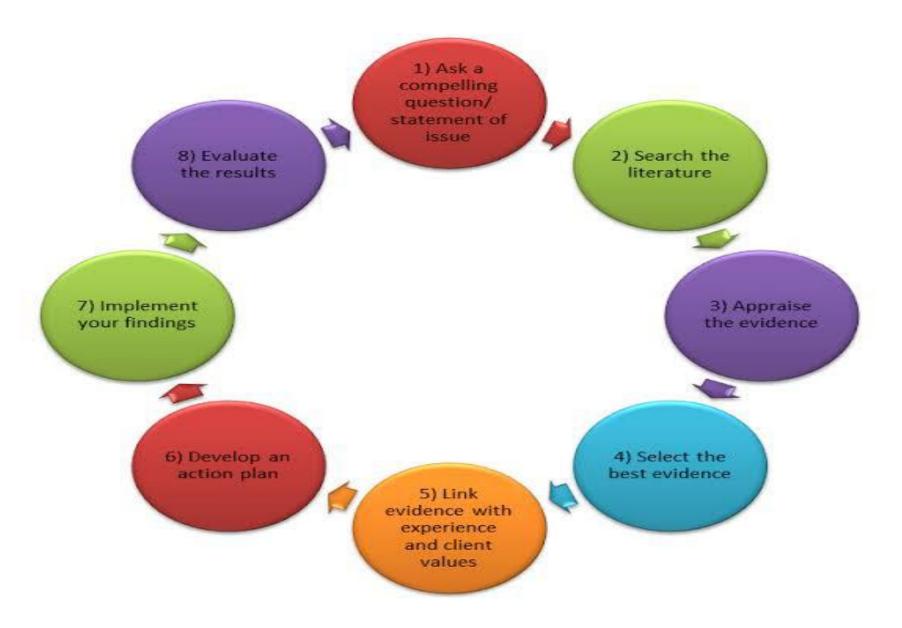
- •Reports from committees like clinical audit data: Clinical audit is a process of assessing clinical practice against standard
- •Opinions from clinical experts (clinical nurse specialists, nurse dietitian, nurse educationist, nurse lawyer, nurse psychologist), pharmacists, medical lab. scientist supported by experiences
- Published research findings
- •Reviews and clinical guideline:

Personal experiences with patients: This is the least credible source anyway.

# STEPS OF GENERATING EVIDENCE FOR CLINICAL PRACTICE

- 1. Identifying problems by having a spirit of inquiry
- 2. Having evidence by asking clinical questions
- 3. Appraising the evidence / search for and collect relevant evidence
- 4. Critically appraise the evidence/Summarizing the evidence
- 5.Integrate the evidence/ Applying to practice after appraising the evidence
- 6. Evaluate outcomes
- 7. Disseminate outcomes

### STEPS INVOLVED IN EBP



### 1. HAVING A SPIRIT OF INQUIRY

- Refers to an attitude in which questions are encouraged to be asked about existing practices.
- Questioning is a uniquely powerful tool for unlocking value in organizations as it spurs learning and the exchange of ideas, fuels innovation, and performance improvement.
- •It builds rapport and trust among team members and eventual uncovering avoidable pitfalls.
- •Cultivating a spirit of living allows health care providers to feel comfortable with questioning current methods of practice and challenging these practices to create much needed improvements and change.

### SPIRIT OF INQUIRY CONTD.

- •The curiosity at duty posts is like we are curiously thinking for example on different thermometry.
- •Nurses can study on this using different sites like oral, armpit or rectal
- •Or on various periods of medication rounds/time eg 6 or 8 am
- •Or different transportation of patients for investigations from wards or attitude of care givers from patients in the wards
- •Answers will surely say if patients find axilary, 8am or wheel chair better after the entire research.
- in 2021

## 2.FINDING THE EVIDENCE BY ASKING CLINICAL QUESTIONS

- •Forming an answerable questions.
- •This formatted questions address the patient/population issue of intervention, comparison group, outcome and time frame (PICOT).
- •A typical example on thermometry in other settings like hospital, states worldwide etc.
- •Asking questions in these format assists in generating a search that produces the most relevant, quality information related to a topic whole also decreasing the amount of time needed to produce these search results.

### 3.APPRAISING THE EVIDENCE/ SEARCH FOR AND COLLECT RELEVANT EVIDENCE-

- •To begin the search for evidence, use each keyword from the Population/Patient, Intervention, Comparison of treatment, Outcome, Time question formed by consulting literature.
- •Once results have been found on the intervention or treatment, the research can be rated to determine which provides the strongest level at evidence.

### 4CRITICALLY APPRAISE THE EVIDENCE /SUMARIZING THE EVIDENCE.

- •To begin the critical appraisal process, 3 questions may be asked to determine the validity, reliability and applicability of the evidence found.
- Are the results of the study valid close to the truth as possible?
- •What are the results are they reliable, determined by accomplishment?
- •Will the results be applicable in caring for patients if the benefit outweighs the harm?

### INTEGRATE THE EVIDENCE/ APPLYING IT TO PRACTICE AFTER APPRAISING THE EVIDENCE

After appraising the evidence, it is necessary to integrate it with the provides of expertise and patients preference.

The patient is encouraged to participate in the decision making process.

Even if the study has successful outcomes, the patient may refuse to receive a treatment.

Patients history may reveal contraindications to a certain evidence based treatment.

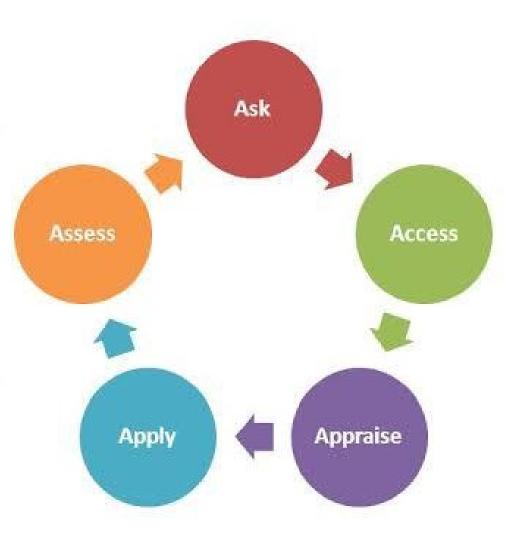
### **6.EVALUATE OUTCOMES**

This is to determine whether the treatment was effective in terms of patient outcomes. If it was and promising, we are good to go and protocols can be improved.

7. Disseminate outcomes: This is to share the information especially its positive outcomes are achieved by doing this, others benefit. Dissemination can be done through seminars, presentation etc.

### SUMMARY OF STEPS

- ASK: Formulate an answerable clinical question
- ACCESS: Track down the best Evidence
- APPRAISE: Appraise the evidence for its validity and usefulness
- APPLY: Integrate the results with your clinical expertise and your patient values/local conditions
- ASSESS: Evaluate the effectiveness of the process



### CHALLENGES OF EBP/N

- Lack of access to research and poor understanding of research process
- Non harmonized transdisciplinary model of evidence based practice that specifies a common language and enriched process for clinical and and/or policy decision making.
- Variables to be considered when selecting an evidence based practices such as age, social class, community resources, and local expertise
- Misconceptions surrounding the practice of EBP on the premise of insufficient knowledge and skills of nurses

# IMPLICATIONS OF EBP FOR THE NURSING PROFESSION

- It is imperative that registered nurses be proactive in their quest for research knowledge so that the gap between theory and practice continues to close
- According to the international council of Nurses(2012), the use of EBP challenges the approach to nursing/patient care and in doing so, holds Nurses accountable for their practice
- Due to the fact that at the heart of nursing is patient centred care, patient safety and improved outcomes, every nurse should strive to ensure that the most current and sound evidence is being used and that clinical guidelines are implemented to encompass all aspects of nursing care

### CONCLUSION

- EBN is an essential component of safe and quality patient care
- Research should be integrated into everyday nursing practice both for patients care and nursing education
- o Take the leap, find your niche and get involved
- Remember that research provides the evidence, RESEARCH IS THE WAY!
- Never be intimidated in research my fellow nurses
- Evidence based practice is in deed invaluable to nursing education and practice

# •THANK YOU FOR LISTENING



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