# UNIT 6 RESEARCH UTILIZATION EVIDENCE BASED NURSING PRACTICE

#### **Structure**

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#### 6.0 OBJECTIVES

After going through this unit, you will be able to:

- define Evidence Based Nursing Practice
- list the characteristics of EBP
- explain the steps of EBP
- understand the barriers related to EBP

#### 6.1 INTRODUCTION

Evidence Based Practice integrates the best available evidence to guide nursing care and improve patient outcomes. This helps health practitioners address health care questions with an evaluative and qualitative approach.

It is a problem-solving approach to clinical decision-making within a health care organization. It integrates the best available scientific evidence with the best available experiential (patient and practitioner) evidence.

In this unit we shall discuss about definition and characteristics of evidence based research, steps of evidence based research and barrier. This knowledge will help you provide evidence based care.

#### **6.2 RESEARCH UTILIZATION**

Research utilization is the process of synthesizing, disseminating, and using research- generated knowledge to make an impact on or change in the existing nursing practice.

Research Utilization is the use of findings from a study or set of studies in practical application that is unrelated to the original research.

Data Analysis, Statistical Methods And Evidence Based Practice Research utilization validates the efforts of the researcher, motivates scholars to continue to discover new knowledge, and reinforces professional accountability.

#### **Purpose**

Research utilization strives to bridge the gap between scientific evidence and existing policy and practice. An understanding of the barriers and challenges that create and reinforce this gap can lead to new ways of implementing evidence-based policy and practice.

Digital or virtual engagement and social media can be research utilization. Knowledge management and dissemination can be research utilization. Evidence-based trainings of clinicians and the development of job aids and toolkits are also examples of this.

#### **Barriers to Research Utilization**

- Research related barriers
- Nurse related barriers
- Organizational barriers
- Barriers related to nursing profession

#### Strategies for using research evidence

- Read widely and critically
- Attend professional conference
- Learn to expect evidence that a procedure is effective
- Become involved in a journal club
- Pursue and participate in Research Utilization/EBP Project

#### **Types of Research Utilization**

- Conceptual/Indirect Research Utilization refers to the cognitive use of research where the research may be used to change one's thinking about a specific practice, but may or may not result in a change in action.
- Instrumental/Direct Research Utilization is a direct use of research knowledge.
- Persuasive/Symbolic Research utilization is the use of research as a
  persuasive or political tool to legitimate a position or influence the
  practice of others.

# 6.3 DEFINITION AND CHARACTERISTICS OF EVIDENCE BASED NURSING PRACTICE

#### Let us begin with definition

Evidence Based Practice is the conscientious, explicit and judicious use of current best evidence in making decisions about care of individual patients (Sackett, etal.)

Evidence Based Practice is defined as those interventions in health care that is based on the best available evidence (Shorten & Wallace, 1997).

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#### **Evidence Based Nursing Practice**

Evidence Based Nursing (EBN) is a type of evidence-based practice in nursing. It involves identifying solid research findings and implementing them in nursing practices, in order to increase the quality of practice.

#### **Characteristics of Evidence Based Practice**

- It is a problem based approach.
- It considers the context of the practitioner's current experience.
- It brings together the best available evidence and current practice.
- It facilitates the application of research finding in the practice.

### **Check your Progress 1**

1.	What is EBP?
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2.	List the characteristics of Evidence Based Practice.

## 6.4 STEPS OF EVIDENCE BASED PRACTICE

EBP is one way to keep nurse's knowledge up to date, enhance clinical judgment, and augment the existing provider-client decision-making process.

- Ask a Clinical Guiding Question: Organized in a format known as PICO (T): P patient, population or problem of interest; I intervention or prognostic factor being considered; C- comparison or intervention; O outcome measured; T time period.
- Search for the Best Evidence: Select the information databases or resources most likely to answer the type of question being asked; utilize keywords and concepts; combine multiple search terms and Boolean connectors.
- Critically Appraise the Evidence: Determine a study's reliability, validity, and applicability to the client in question. Assess and evaluate the strengths and weaknesses of the evidence.
- Integrate the Evidence with One's Clinical Expertise... and client preference to make the best clinical decision. Before integration, other considerations beyond applicability must be considered, such as biologic, socioeconomic, and epidemiologic issues.
- Evaluate the Outcomes of the EBP Practice Decision... or change based on evidence of the EBP decision. Was the expected outcome achieved? If not, why not? Was it due to non-adherence to treatment plan, different client prognostic factors, and/or providers not ready for



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- the practice change? Was it because of skills, evidence interpretation, or in implementing the intervention?
- **Disseminate the Outcome**: Disseminate evidence to colleagues within your organization, and beyond. Outcome dissemination can be done through intra- and inter-departmental in-services, journal clubs, online media, lectures, conferences, posters, and manuscripts.

# 6.5 BARRIERS IN EVIDENCE BASED PRACTICE

- Lack of Professional ability to critically appraise the research. This
  includes having a considerable amount of research evaluation skills,
  access to journals and clinic/hospital support to spend time on EBN
  are limited for the nurses.
- Lack of Time, workload pressures and competing priorities of patient care can impede use of Evidence Based Practices.
- Lack of knowledge of Research methods.
- Lack of support from professional colleagues and organizations.
- Practice environment can be resistant to changing tried and true conventional methods of practice.

#### 6.6 LEVELS OF EVIDENCE

Levels of evidence (sometimes called heirarcy of evidence) are assigned to studies based on the methodological quality of their design, validity and applicability to patient care. These decisions give the "grade (or strength) of recommendation".

The systematic review or meta-analysis of randomized controlled trials (RCTs) and evidence- based practice guidelines are considered to be strongest level of evidence on which to guide practice decisions. (Melnyk, 2004) The weakest level of evidence is the opinion from authorities and/or reports of expert committees.

When searching for evidence-based information, one should select the highest level of evidence possible—systematic reviews or meta-analysis. Systematic reviews, meta-analysis, and critically-appraised topic/articles have all gone through an evaluation process: they have been "filtered".

Information that has not been critically appraised is considered "unfiltered".

**Levels of Evidence:** The levels of evidence are given in Fig. 6.1.

- Level I Evidence from a systematic review or meta-analysis of all relevant RCTs (randomized controlled trial) or evidence-based clinical practice guidelines based on systematic reviews of RCTs or 3 or more RCTs of good quality that have similar results.
- **Level II** Evidence obtained from at least one well designed RCT (eg. Large multi-site RCT).
- **Level III** Evidence obtained from well designed controlled trials without randomization (i.e. quasi-experimental).

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**Level IV** – Evidence from well-designed case-control or cohort studies.

**Level V** – Evidence from systematic reviews of descriptive and qualitative studies (meta-synthesis).

**Level VI** – Evidence from a single descriptive or qualitative study.

**Level VII** – Evidence from the opinion of authorities and/or reports of expert committees.

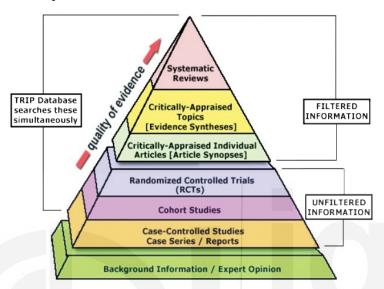


Fig. 6.1: Levels of Evidence

As you move up the pyramid (however, fewer studies are available) it's important to recognize that high levels of evidence may not exist for your clinical question. If this is the case, you will need to move down the pyramid if your quest for resources at the top of the pyramid is unsuccessful.

#### 6.7 LET US SUM UP

In this Unit six of this block we have focussed on meaning and definition of Evidence Based Practice, Evidence Based Nursing Practice characteristics of EBP which include problem based approach, practitioner's current experience, best available evidence and application of research finding in the practice.

Steps of EBP include selecting a topic, formation of team, retrieving the evidence, applying the retrieved evidence and deciding about the practice.

Barriers in implementing EBP are lack of professional ability, lack of time, workload pressures, lack of research knowledge, and lack of support from professional colleagues.

#### 6.8 LET US SUM UP

- Evidence

   It refers to available body of facts or information indicating whether a belief or proposition is true or valid.
- **Conscientious** It refers to do one's work or duty well and thoroughly.
- **Retrieve** It refers to getting or bringing something back from somewhere.

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## 6.9 ANSWERS TO CHECK YOUR PROGRESS

#### Check your progress 1

1) Evidence Based Practice is defined as those interventions in health care that are based on the best available evidence (Shorten & Wallace, 1997).

It is a problem based approach, It considers the context of the practitioner's current experience, It brings together the best available evidence and current practice, It facilitates the application of research finding in the practice.

- 2) Characteristics of Evidence Based Practice
  - It is a problem based approach.
  - It considers the context of the practitioner's current experience.
  - It brings together the best available evidence and current practice.
  - It facilitates the application of research finding in the practice.



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