Evidenced Based-Practice

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Introduction:-

Internationally, evidence-based practice (EBP) has been a priority for many years. Both the World Health Organization and the European Commission emphasize that health and social services should be based on the best research evidence. EBP is a part of globalization trend emerging in health care.

➢ Definitions of terms:

Evidenced Based-Practice (EBP)

It is integration of current best research evidence with clinical expertise and patient value to facilitate clinical decision making.

Evidence-Based Nursing (EBN)

EBN is the process by which nurses make clinical decisions using the best available research evidence, their clinical expertise and patients' preferences and values to solve problems they encounter, in the context of

➢ Elements of Evidence-Based Practice:

EBP is the integration of best evidence with clinical expertise and patient values.

l. Best Research Evidence

The clinically relevant research derived from the basic sciences of medicine, especially from patient centered clinical research.

- Randomized controlled trials
- Laboratory experiments

2. Clinical Expertise

The ability to use our clinical skills and past experience to rapidly identify each patient's unique health state and diagnosis, patient’s individual risks and

benefits of potential interventions and patient's values and expectations.

3. Patient Values

The unique preferences, concerns and expectations each patient brings to the clinical encounter and which must be integrated into clinical decisions if they can be serving the patient.

➢ Applications of EBP:

The EBP process can also be applied to:

1. Making choices about diagnostic tests and protocols to insure thorough and accurate diagnosis),
2. Selecting, preventive or harm-reduction interventions or programs,
3. Determining the etiology of a disorder or illness,
4. Determining the course or progression of a disorder or illness,
5. Determining the prevalence of symptoms as part of establishing or refining diagnostic criteria,

➢ Benefits of evidence based nursing practice

1. **Benefits to patients:**
   - Improve the quality of received care.
   - Increased patient's satisfaction
   - Decrease treatment related errors and patient suffering
2. **Benefits to nurses:**
   - Increases the efficiency of nurses
   - Keep nurses updated by reading the published literature.
   - Helps the nurse provide high-quality care to the patients
   - Increase nurse confidence and self-esteem because they provide care that is supported by facts rather than habits, and can take legal accountability for their practice.
   - Help the nurse to gain better outcomes
   - Save nurse effort and time

- Improving decision making, problem solving capabilities
- Increase patient cooperation and compliance to produced services.

3. **Benefits of EBP for health-care systems:**

- Improvement in the quality of care
- Better outcomes for patients
- Increased patient safety
- Reduced costs
- Stronger basis for health-care investment decisions
- Capacity-building through collaboration

4. **Benefits of EBP for research and education:**

- Increased need for production and synthesis of strong evidence
- Competence development
- Integration of nursing expert roles in health systems

5. **Benefits of EBP for general population:**

- Improved conditions for patient-centered care
- Patient preferences included in decision-making
- Consistent health services leading to better equity
- Reduction in geographic variation
- Reduction in patients' length of stay
- Better patient outcomes
- Quality health-care services
- Increased patient safety

➢ Why nurses are not ready for EBP?

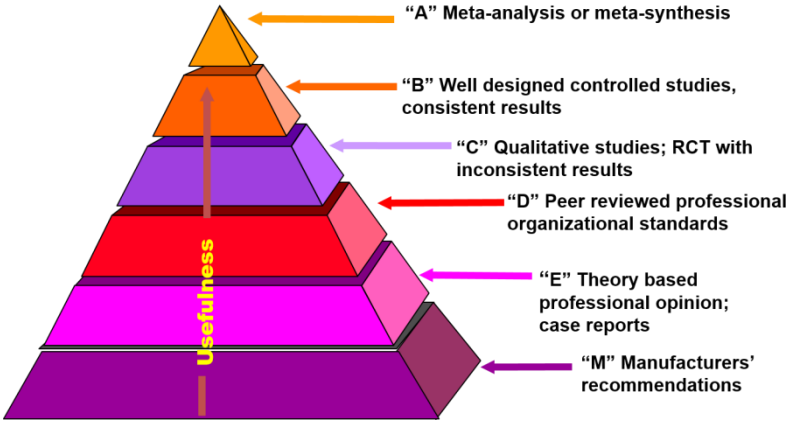
- The gaps in their information literacy and computer skills.
- Their limited access to high quality information resources.
- Their attitudes toward research.

➢ Levels of EBP:

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

Level of evidence (LOE)	**Description**
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 three or more RCTs of good quality that have similar results.
Level II	Evidence obtained from at least one well-designed RCT (e.g. large multi-site RCT).
Level III	Evidence obtained from well-designed controlled trials without randomization (i.e. quasi-experimental).
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.

➢ American Association of Critical Care Nursing- Levels of Evidence



Level A: **Meta-analysis** of multiple controlled studies or meta-synthesis of qualitative studies with results that consistently support a specific action, intervention or treatment.

Level B : Well-designed **controlled studies**, both randomized and nonrandomized, with results that consistently (significantly) support a specific action, intervention, or treatment.

Level C: Qualitative studies, descriptive or correlational studies, integrative reviews, systematic reviews, or randomized controlled trials with inconsistent (non-significant) results.

Level D: Peer-reviewed professional organizational standards, with clinical studies to support recommendations.

Level E: Theory-based evidence from expert opinion or multiple case reports.

Level M: Manufacturers' recommendations only.

➢ Main types of barriers to EBP:

1- Organization barriers:

- Insufficient support from management
- Lack of support structures and limited resources and tools
- Lack of organizational culture to support EBP
- Outdated organizational policies
- Hierarchical structures
- Lack of multi-professional collaboration
- Outdated and unquestioned routines
- Resource shortages

2- Leaders and management barriers:

- EBP not defined as an aim of the organization
- Insufficient commitment to EBP
- Insufficient support for staff
- Insufficient authority

3- Professionals barriers:

- Inadequate knowledge and skills in EBP
- Unfamiliarity with guidelines
- Negative attitudes
- Preconceptions concerning EBP
- Lack of time
- Disagreement with guidelines

4- Evidence barriers:

- High-quality studies not available
- Massive amount of information
- Unclear clinical-practice guidelines
- Guidelines not updated or incomplete

➢ Factors associated with successful EBP implementation:

1. Generative organization culture
2. Visible leadership and support
3. Mentors
4. Shared governance
5. Continuous evaluation of care outcomes
6. Feedback of outcomes
7. Educational programs
8. Tools for dissemination
9. Library resources and clinical librarians
10. Multidisciplinary working