**INTRODUCTION ON FUTURISTIC TRENDS IN NURSING AND EVIDENCE BASED PRACTICE**

Jayshree Kalita

M.Sc.N.(Medical-Surgical Nursing)

PhD Scholar

Srimanta Sankaradeva University of Health Sciences

Guwahati, Assam

**ABSTRACT**

Nursing exists from the time of existence of human caring nature. From that ancient time to till being a full-fledged profession, Nursing came a long way and yet everyday expanding. The world is undergoing tremendous change due to scientific advancement, technological development and globalization. To cope with the changing nature of the world, health care sector is also changing as well as the nursing profession. Telemedicine, artificial intelligence, use of robotics, online courses, trans-cultural nursing are majorly developing trends with the global need. Research and evidence based practice is getting more importance in modern Nursing to develop the body of knowledge.

**Keywords:** globe; issues; nursing research; trends; artificial intelligence, evidenced based practice.

1. **INTRODUCTION**

Nursing is an evolving profession. In today’s world, healthcare system cannot be imagined without Nursing Service. As health is a prime part of human life, Nursing profession will be always integral to it and will be in high demand. With the changing nature of the world, globalization, technological influx, healthcare system is rapidly developing to adapt as well as the Nursing profession. It is altering as society changes, as health care emphasis and methods change, as life styles change and the nurses themselves changes. In the current nursing scenario, a person is considered as a whole in the dimensions of health and illness which interacts with family and community. Present philosophies and definitions also support this holistic point of view. Modern nursing is expanding the employment opportunities. It changes public perception and also has impact on politics and health policy.

1. **MAJOR CAUSES WHICH IMPACT ON FUTURISTIC TRENDS IN NURSING**

Followingare the major causes which impacting the nursing profession trends:

1. **Technological Advancement:**
2. **Specialized Knowledge:**
3. **Global Shortage of Nurses:**
4. **Research needs**

**1.Technological Advancement:**

Rapid development in science and technology is influencing our every part of life, whether it education, healthcare, service etc. It makes life easier than before and making the world global village. Due to rapid advancement in artificial intelligence and technology, it is integral in healthcare system for nurses to adapt with the continuing technological demand. It will impact on continuing nursing education and service. Technological advancement will lead to improvement in telemedicine, different online courses etc. Use of robotics will be more common in near future. Technological advancement provides huge amount of electrically generated data which can be further analyzed for better healthcare delivery. It will increase the scope for profession related to inspection of data example:

* Clinical informatics specialist
* Nursing informatics specialist
* Clinical analyst
* Clinical informatics manage
* Clinical informatics coordinator
* Nursing informatics analyst

**2.Specialized Knowledge:**

Due to changing need of the healthcare profession, technological advancement, new research, it is very important have specialized knowledge. It leads to introduction of various certificates course may be online and offline.

**3.Global shortage of Nurses:**

According to WHO, 27 million nurses accounts for nearly 50% of global workforce. Globe needs approximately 3 million nurses by the year 2030 to meet the sustainable development goal 3. International Council of Nurses (ICN) says the worldwide shortage of nurses should be treated as a global health emergency. Increase in ageing population worldwide, shortage of nurses has major impact on future trends in nursing leading to more use of machines and robotics. There will be more job growth in nursing field in near future.

**4.Research Needs:**

Recent advancement in healthcare leads to knowledge gap which can be fulfilled by research. For a profession to grow and adapt with the current scenario, continuing research is inescapable for upliflting the knowledge. Evidence based practice and Nursing Research is getting more and more importance to fulfilling the gap. Various organization are providing funds for research. Different remuneration process are adapting to promote institutional research.

1. **FUTURISTIC TRENDS IN NURSING**

Futuristic trends in Nursing majorly can be discussed in three areas:

1. Nursing Service
2. Nursing Education and
3. Nursing Research

**1.Nursing Service:**

Nursing Service majorly impact by manpower need, technology, artificial intelligence and demographic change.

1. **Nurses will be in high demand:** Due to increase health care need, ageing nations, the demand of Nurses will be continue to high in future. According to the Bureau of Labor Statistics, “demand for nurse anesthetists, nurse midwives and nurse practitioners — positions known as advanced practice nurses — is expected to increase by 31 percent between 2014 and 2024, adding about 53,400 jobs to the market.”
2. **Increasing leadership opportunity:**

Due to global demand and shortage in nursing workforce there is huge possibility in Nursing leadership field.. Some job titles are - clinical nurse leader, nurse manager, nurse executive and nurse administrator.

1. **Necessity of higher education and specialization:** Nurses needs to be more knowledgeable to adapt to the future scenario of health care system, for that continue up gradation while in service will be mandatory. More and more nurses are likely will choose to specialize that lead to a higher salary, including:

* Assistant Nurse Manager
* Case Management
* Charge Nurse
* Clinical Development Specialist
* Healthcare Informatics
* Infection Control
* Nurse Educator
* Quality Control

Also nurses needs to learn new language, adapt with new culture (trans-cultural nursing) to deliver care to persons with different culture.

1. **More men entering to service:** As the stigma about the profession is vanishing, more men entering to the profession. In 1960, only 2% were male nurses in US; whereas it increases to 13% today.
2. **Informatics:** Artificial Intelligence and use of computer helps in generating a large data in healthcare sector. By analyzing these data bridge the knowledge gap in health care. Inspection of these data will be fertile ground for new professional are as follows:
   * + Clinical informatics specialist
     + Nursing informatics specialist
     + Clinical analyst
     + Clinical informatics manage
     + Clinical informatics coordinator
     + Nursing informatics analyst
3. **Telemedicine:** Due to technological advancement, telemedicine is a majorly evolving area in healthcare. Various online portals, apps help to provide doorstep delivery of care in no time.
4. **Artificial intelligence**: Artificial Intelligence is reforming the health care. As the newer development is coming up, it will lead to more growth in this sector. Artificial Intelligence act as backbone in all the aspects of healthcare delivery system such as healthcare management, telemedicine, online learning, research etc.

**2. Nursing Education:**

Nursing profession evolved and expand in terms of knowledge tremendously in last century. There are now specialized areas a nurse may chose to grow. Because of increase use of internet, technological advancement and changing nature of healthcare system, various online courses will be more feasible in near future. More specific areas will be evolved for nursing professionals. Some of these are:

1. **Advanced Practice registered Nursing:** Today Nursing Education has ladder moving up from the ANM, diploma programme to the B.sc (N), P. Bs.c(N), M.sc (N), M.Phil (N) ,PhD& Post Doctoral programmes. Some of the extended training programme are - a clinical nurse specialist (CNS), nurse practitioner (NP), nurse anesthetist (CNA), or certified nurse-midwife.
2. **Ambulatory Care Nursing:** Here, a Nurse delivers care outside the hospital setting wherever it is required. It helps in delivering care in doorstep as well as in remote areas.
3. **Cardiac Nursing:** As non-communicable diseases are increasing globally Cardiovascular diseases are more common. Cardiac Nurse deals with cardiovascular diseases.
4. **Case Management Nurse:** These nurses give ongoing support to patients and decrease the hospitalization and helps in implement a treatment plan.
5. **Critical Care Nursing:** Critical care nurses deliver care to the critically ill patient who needs close monitoring and care.
6. **Dialysis Nursing:** Dialysis nurses deliver care for patients with dialysis, it may be peritoneal or haemodialysis.
7. **Genetics Nursing:** Genetic nurses have in depth knowledge about pathology of gene and its role. They can assess family risk, research activity, genetic data analyzing etc. Moreover they are responsible for provide deliver care for patients with genetic disease.
8. **Geriatric Nursing:** As the world has undergone various population control measures, now geriatric population increasing globally, hence the nursing needs. These nurses have more specialized knowledge to care for elderly patients.
9. **Mental Health Nursing:** These Nurses deals with mental health, psychiatric, or behavioral disorders. They deliver support to these patients as well as their families too. They are also known as psychiatric Nurse.
10. **Neonatal Nursing:** Neonatal nurses care infants in their early life’s few weeks.
11. **Oncology Nursing:** Oncology nurses care for patients with malignancy. As malignancy is increasing, scope of oncology nursing also emerging.
12. **Pediatric Nursing:** Pediatric nurses deliver care for young children and their families. They have specialized knowledge regarding growth and development of a child, its norml and abnormal health condition.
13. **Forensic nursing:** Forensic Nursing is also an emerging field which deals with scientific investigation of trauma and death, accidents, criminal activity etc.
14. **Other Specializations:** There are other so many possible fields that a nurse may choose to specialize in, including:

* Gastroenterology nursing
* Holistic nursing
* Medical-surgical nursing
* Midwifery nursing
* Neuroscience nursing
* Obstetrical nursing
* Occupational health nursing
* Orthopedic nursing
* Ostomy nursing

**3.Nursing Research:**

For continuous escalation of a profession, constant expansion of body of knowledge is integral to it. Research which means finding new knowledge is core process to fill up the knowledge gap. Due to changing healthcare needs, innovation in technology, nursing research is becoming obligatory to it.

Literature shows majorly six themes in current nursing research trends:

(a) Demographic alterations;

(b) Increasing diversities and globalization;

(c) Technology innovation;

(d) Individualized or personal care and population health initiatives;

(e) Health policies and regulations; and

(f) Nursing workforce changes.

In near future due to increasing demand of research, there will be new scope for nurse researchers in health informatics, service and education. Evidenced based practice is also an emerging field for nurse researchers.

**IV: CONCLUSION**

In conclusion ,futuristic nursing is significant to ensure seamless delivery of services in healthcare facilities. However foe successful implementation of futuristic nursing ,there is a need for higher degree and competencies among nurses. similarly nurses should treated equally just like other partners in the development of future health care reforms. future of nursing is of great scope. The nurses can make use of great scope for their professional advancement and to safeguard their lives.

**EVIDENCE BASED PRACTICE**

**ABSTRACT**

Evidence based practice (EBP) is seemed to be an emerging concept in modern era, but it rooted in ancient days as the human use their decision making skill in delivering care and treatment by choosing the best option for it. EBP is beneficial for all the Nurses, patients as well as for the organization. For nurses it gives opportunity to grow their knowledge, patients gets personalized best low cost care and organization gets benefitted as the patient satisfaction is high. To cope with the changing nature of the health care industry due to technological enhancement, EBP is the future of it.

**Keywords:** Nursing, Evidenced Based Practice, Research

1. **INTRODUCTION**

Evidence based practice (EBP) is a process of selecting best available evidence for treatment and taking care of patient. It helps improving quality care according to changing needs of the environment in low cost. Although it seems Evidence based practice (EBP) is newly emerging concept in modern nursing, its presence is there actually from ancient time. When a mother care for a baby, she knows in which way if baby was kept, he will be comfortable is an example of evidenced based practice. In modern era according to some literature physician Archie Cochrane had practiced EBP first on 1970s. On the other had many Nurse Researchers believe Florence Nightingale first practiced EBP in 1800. While caring for wounded shoulders, Florence Nightingale observation about importance of hygiene and environment is an example of practice of EBP.

People often take EBP and research as a same process; but in reality though there are similarities there are differences between EBP and nursing research. The main aim of the EBP is to use the best available evidence whereas research tries to generate new knowledge. Various evidences in nursing practice arises from nursing research; whereas EBP further translate the available evidence to apply it in clinical setting. Nursing research purpose is to generate knowledge whether it may be clinical or non-clinical or to testing or generate theory. EBPs purpose is mainly clinical best, to use best practice in clinical setting.

According to Benefield, “Evidence Based Practice (EBP) as using the best evidence available to guide clinical decision making. This definition shifts the provision of healthcare away from opinion, past practices and precedent towards a more scientific basis.”

Evidence based practice in nursing is a process of collecting, analyzing and implementing best evidence available in clinical practice and evaluating its result in achieving desired goal.

1. **IMPORTANCE**

In this demanding world, where quality service is an essential constituent, EBP has irrefutable importance in delivering high quality service to the patients. There are uncountable benefits of EBP for not only for the patients, but also for the Nurses as well as for the institutions. .

1. It helps nurses in decision making through various available scientific research and helps in critical thinking.
2. As EBP is based on research, it promotes lifelong learning among Nurses.
3. Every person has uniqueness in it. EBP helps in delivering individualized patient care.
4. It allows patient to involve in planning, implementing procedures and thereby promote patients autonomy.
5. EBP tries to prevent patient complication. Thereby it helps in reducing healthcare cost.
6. It also decreases hospital acquired infection.
7. EBP make nurses up-to-date with new protocols, researches and thereby improving decision making skills of the nurses.
8. It improves Nurses evaluation of skill of researches, risk or effectiveness of treatment, test etc.
9. If EBP properly implemented, it reduces recourses used which can be used in other areas.
10. EBP improves patient satisfaction, which have a positive impact on health care institution image.
11. Health care delivery system also gets benefited by EBP as it produces knowledgeable Nurses.

1. **COMPONENTS OF EBP**

There are three main component of EBP:

1. Clinical Experience
2. Research Evidence and
3. Patient preference



**Fig1: Component of EBP**

**1.Clinical Experience:** Nurses clinical experience is a key component of EBP. A Nurse clinical experience and expertise knowledge about the present condition effect in practice in EBP. For example, a nurse dealing with COPD (chronic obstructive pulmonary disease) who is under oxygen therapy should have knowledge about different mode of oxygen therapy administration.

**2.Research Evidence:** For practicing EBP, selecting the best research available is a key step. Various research evidences related to the situations are another important component in EBP. For the former example given, a nurse can collect data about various method of administering oxygen to a COPD patient with its advantages and disadvantages.

**3.Patient preference:** EBP is a process where patient autonomy and uniqueness is taken care of by participation of patient. Patient participation and preferences can be influenced by various factor like patient’s value, previous experience, custom, education etc. For the former example, the patient may prefer nasal-cannula over oxygen mask due to his personal preference thereby influencing the EBP.

1. **STEPS**

EBP is a constant and lifelong learning practice, where a nurse is in search for best available evidence. In today’s context what is the best evidence available may be changed tomorrow. A Nurse should always be aware for new researches, new protocols to uplift the present scenario. EBP is a five step never-ending circular process:

1. Formulation of a question
2. Gather the best evidences
3. Analyze each evidences
4. Apply the best evidence
5. Assess the result

**1.Formulation of a question:** The first step of evidence based practice is to formulate a clear question based on clinical problem which the nurse in interested in. For formulating a question, ideas can come from various areas example a nurse experience, her expertise, previous literature available, brainstorming, scientific discussion etc.

The sources of ideas can be mainly categories in two areas: one is problem focused another is knowledge focused. The problem focused ideas arises from mainly improve the quality of care or to solve a specific problem Knowledge focused ideas came from reading new researches, scientific discussion which lead a nurse attention to a newer field of knowledge. For example, a nurse notices increase incidence of bed sore in critically ill patient; this is an example of problem focused trigger. On the other hand a research study done in America shows preoperative teaching in patient decrease anxiety in patient during postoperative period. The Nurse wanted to generate same knowledge about the patient in her country. This is a example of knowledge focused trigger.

**2.Gather the best evidences:** Once the question is formulated in EBP, the next step is to collect data regarding the available evidences and research. Evidences can be collect from various research journal, institution protocol, library, scientific meetings etc. It is important for a nurse to read and have a theoretical knowledge and broad view of the topic before critiquing the research.

**3.Analyse each evidences:** After collecting various research evidences, a nurse have to evaluate its advantages and disadvantages in that particular situation. After analyzing all the available evidences, the nurse now has to select the best solution for this particular problem.

**4.Apply the best evidence:** In this phase, the nurse implements the selected evidence to solve the problem. Here a nurse always keep in mind a patient’s decision should have utmost priority in a situation.

**5.Assess the result:** Here after implementation, the nurse evaluate the problem is solved or not through peer review, internal or external audit or through self reflection. If not desired result found, the same process will restart. That is why EBP is a lifelong process.

1. **LEVELS OF EVIDENCES**

There are five levels of evidences:

**Level A:** It is the most reliable level of evidences. Here evidences are acquired from randomized control trials. Example: administration of a anti-hypertensive drug A and placebo to determine its effectiveness on a hypertensive patient.

**Level B:** Here, Evidence is found from quality-designed control trials without randomization, clinical cohort studies, case-controlled studies, uncontrolled studies, epidemiological studies, and qualitative/quantitative studies. Example: studying the progress of heart disease after having or non-having of 15 years sedentary lifestyle.

**Level C:** Evidence is acquired from meta-synthesis, consensus viewpoint or expert opinion. It is naturally used when there is less data yet available about a specific problem.

**Level ML (multilevel):** Here Evidence is acquired from more than one level usually used in more complex cases.

1. **BARRIERS IN EVIDENCED-BASED PRACTICE**

There are different barriers in practicing EBP among nurses. Some of them are discussed below:

1. A nurse’s lack of professional ability to critically evaluate research is a major barrier.
2. Lack of Nursing workforce worldwide and overburden workload on the nurses de-motivate EBP.
3. Lack of organizational support to the Nurses is a major barrier in implementing EBP
4. Lack of scientific environment for nurses in an organization example, library for nurses, remuneration for nurse researchers etc.
5. As EBP gives freedom to change, resistance of authority or a nurse to change is a barrier to EBP.
6. Lack of support of colleague and confidence on Nurses is another barrier in EBP.
7. Nurses not understanding the importance of EBP and fear of being not accepted are a barrier to EBP.
8. Resource constrain within an organization is another barrier of EBP.
9. Patient personal choices do not match with EBP is also a barrier to it.
10. **PROMOTING EVIDENCED-BASED PRACTICE IN NURSING**

Despite the fact that there are various challenges and barriers in practicing EBP among Nurses in today’s world; a Nurse leader responsibility is to promote EBP in clinical practice for the betterment of the future health care system and patient satisfaction. Following are few ways develop EBP among Nurses:

1. A nurse leader may inquire for suggestion from fellow nurses regarding a particular problem thereby boosting up their confidence and engagement.
2. Conducting workshop, educational programme, offering education opportunities to the nurses improve the scientific temperament among the Nurses.
3. Motivation in terms of prize, monitory benefit also can improve the EBP culture among Nurses.
4. Increased resource allocation as per needed and maintaining nurse patient ratio will also improve the research temperament.
5. Evidences related to the organization should be taken in consideration to promote EBP in that particular organization.
6. Approaching the authority for protocols developing scientific environment among the nurses in an organization.
7. **CONCLUSION**

EBP is future of health care delivery system which has a holistic approach towards patient to give best care available in a cost effective way. Nurses can develop their awareness through their clinical practice by collecting, implementing suitable evidences in the setting. EBP provides patients personalized care as they are also involved in decision making. With the changing nature of the world, where preserving human rights are becoming an important topic, EBP gives space to it as well as cut the health care cost.

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