

RECENT TRENDS IN NURSING RESEARCH & EDUCATION

Abstract

Nurse is an important member of a hospital or health care organization. Role of nurses in providing quality healthcare is most essential and they are considered angel on the earth. In a health care set-up has been demonstrated by increase in patient mortality and morbidity. There have been several advances in the nursing education & research. Several recent courses in Nursing have been initiated to give a boost to nursing career.

Keywords: Recent trends, Nursing Research, advances in nursing, Education, healthcare

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I. INTRODUCTION

The role of nurses in providing quality healthcare is most essential. They are considered “angel on the earth”. It has been observed that the U.S. experienced to feel the shortage in the number of physicians in the last few years. The shortage of nurses is observed to be a critical factor. In a health care set-up, it has been demonstrated by increase in patient mortality and morbidity. With the advances in science the work opportunities in the field of nursing have immensely grown. Now-days the nurses can find well-paying and meaningful job offers. Utility of nursing research knowledge is shown in Figure1.

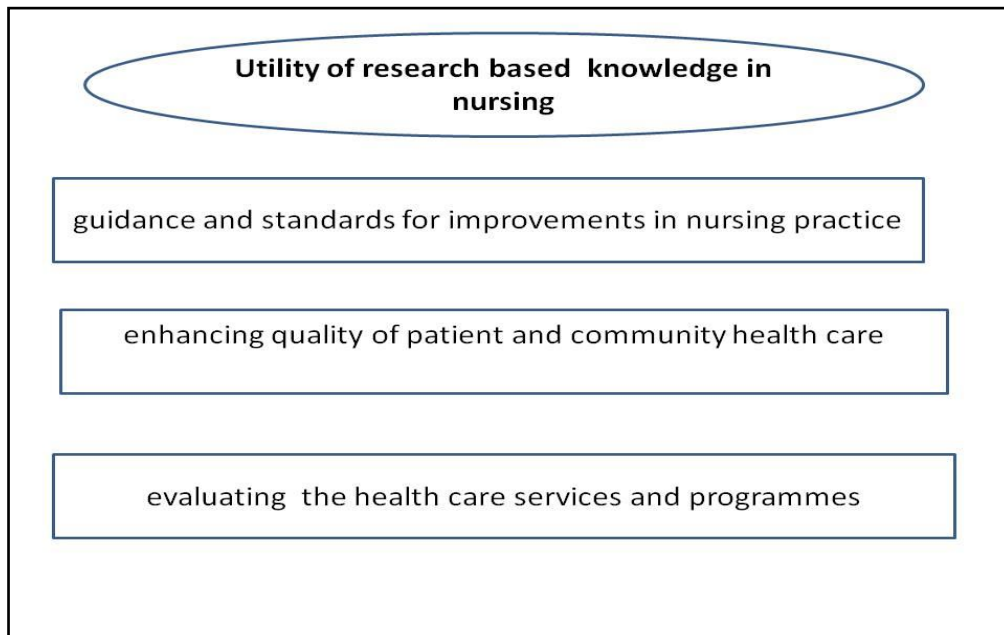


Figure 1: Utility of Research Based Knowledge in Nursing

Major Areas & Intents of many Research Programs: Many nursing research programs are being conducted in nursing field with different intentions such as;

- Consequences of diseases or their treatments like Endotracheal suctioning.
- Management of symptoms of common problems and understanding the factors that influence these such as pain.
- Self-help programs by National Arthritis Foundation making the families and individuals to adapt to chronic disease like people with arthritis.
- A school-based program is now adapted by many schools to focus strongly on promotion of better healthy lifestyles and risk factors reduction. As for young children and adults at risk for cardiovascular disease, advice for regular exercise and balanced diet.

II. HISTORY OF NURSING RESEARCH

| Year | Changes Happened |
|---|---|
| Evolution of Nursing | |
| mid-1850s | <ul style="list-style-type: none"> • Florence Nightingale, chief British nurse emphasized the importance of patient care and the environment, not the disease only • changes in sanitary conditions, hydration and nutrition, resulting in drastic reduction in mortality rates |
| 1850 - 1950 | <ul style="list-style-type: none"> • guidance in the field of nursing education began • laws of nursing framed • epidemiological research • advancement in nursing research • supportive environment for nursing research like funding and the availability of advanced research skills in the field of nursing research |
| 1950s- 1960s | <ul style="list-style-type: none"> • the development of many complex theories explaining nursing concepts with regards to the art and science • in the teaching field and designing the educational curriculum rather than research. |
| 1952 | <ul style="list-style-type: none"> • the first journal of <i>Nursing Research</i> • nursing research textbooks • The American Nurses Association established the American Nurses Foundation • first, research conferences at the regional level were instituted |
| Clinical Revolution & Advances in Nursing Research | |
| early 1980 | <ul style="list-style-type: none"> • Patient focused Research • Research methodologies were qualitative research methods like phenomenology and ethnography. |
| mid 1980s, | <ul style="list-style-type: none"> • Increase in nursing studies experiencing environmental, developmental or illness-generated stress situations |
| 1983 | <ul style="list-style-type: none"> • Creation of journal : <i>Annual Review of Nursing Research</i> • Development of nursing research and its dissemination. |
| 1986 | <ul style="list-style-type: none"> • National Center for Nursing Research |
| 1990s | <ul style="list-style-type: none"> • Use of knowledge and its findings for the patients treatment & decision building • Utilization of knowledge for the improvement in the existing health care system • Stimulation of nursing research growth |
| 1993 | <ul style="list-style-type: none"> • National Institute of Nursing Research (NINR) • Strengthening to more equal position of nurses with scientists and other health professions and giving the status of Center institute. |

III. ADVANCES IN NURSING EDUCATION & RESEARCH

Over the years, there have happened many changes in nursing practice, education and research. The current trends are found to be variable and multifactorial and even there is potential for many imminent changes in nursing in the future shown in Figure 2.

1. Use of Competency-Based Nursing Education: The competency-based nursing education was implemented with the main aim was to make nurses more competent and ready for clinical practice. These competencies are adopted by The American Association of Colleges of Nursing serve as a road map. These competencies provide a standardized structure for development of course content, teaching-learning methods as well as the assessment of learned information in the better and most uniform manner in pre licensure programs designed for nursing education.

2. Learning in COVID-19 Era:

- **E-Learning and Electronic Communication Systems: Video Platforms& Apps:** In the past two-three years, there has been observed the immense use of technology for attending professional meetings & undergoing educational training in the form of visual platforms. The technology has been playing key role in teaching better quality and safety in nursing education & research. The technology has emerged as an essential tool for development of nursing profession in addition to other professions. It also serves as the road map for techniques in the mass education.

It is an alternative approach, important in clinical practice, education and research. Due to the quick modifications in the work setting, traditional educational systems i.e. the classroom set, is useless and unproductive. The e-learning system is having more flexibility and responsiveness. Depending upon the learning objectives and resources available, the available systems are: group learning, audience response systems, Video conferencing platform.

Video conferencing platform are quite useful for many participants. During the COVID-19 pandemic, it helped a lot in the nurses training to work in-patient care units and to educate about novel anti viral medicine protocols. The video conferencing platforms were successfully used by the hospitals to deliver virtual didactic lectures, certification courses and even nurse residency program. It enabled the implementation of interactive teaching learning assessment and methods being in the virtual meetings. For individual learning, webinars, videos, and text messaging are useful. The standard learning systems such as traditional blackboard or Canvas have been used recently in clinical practice to assist the nurses completing work before attending face-to-face clinical training. Thus, online learning modules were blended with clinical skill demonstrations and have been found to be good in keeping continuous nursing education.

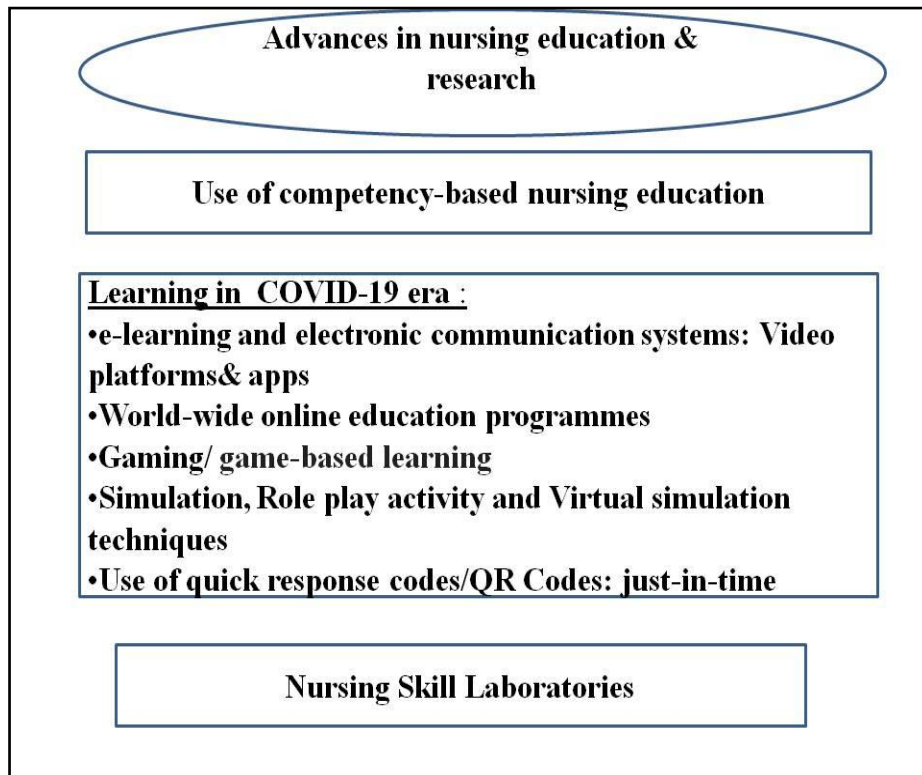


Figure 2: Advances in Nursing Education & Research

- **World-Wide Online Education Programs:** To adjust a changes in nursing practice, more advanced online teaching programmes have been started and being implemented at the level of well reputed universities in India and abroad. Due to recently changed nursing practices, they can now earn Bachelor's or a Master's of Science degree in the field of Nursing and for those who would like to go in teaching profession or conducting research, even doctorate-level degrees are being offered. As majority of the nurse are working day or night shifts, the numerous accredited schools have been offering the teaching learning programs across the country.
- **Gaming/ Game-Based Learning:** Latest growing technologies has created educational opportunities in the form of gaming. As a result, there has been progress in safety and quality in nursing practice.

Gaming / is a safe, innovative and interesting educational approach. Here the game elements are applied to assess learners' knowledge about any disease, its staging or treatment related topics. It gives the simultaneous feedback to the learners and influence their motivation and retention of knowledge positively.

- **Simulation, Role Play Activity and Virtual Simulation Techniques:** There are also available many more educational techniques like simulation, role play activity and Virtual simulation. These are now a days used to enhance the professional's competencies in an educational setup and are implemented following the evidence-based guidelines.

- **Simulation:** is used widely to impart and evaluate the clinical knowledge and skills. In simulation, there can be used low and high-fidelity manikins. The role-play provides with the effective domain of the learning outcomes (attitudes and emotional aspects).
- **Simulation through Role Play Activity:** It helps in evaluation of communication tact's of the participants in addition to timely feedback. With the purpose to develop joint effort and cooperation, Inter professional simulations can be used. The team players work mutually & develop better administration competencies as well as critical thinking. This Inter professional approach results in enhanced quality, better patient outcomes and fewer chances of errors. It can be implemented through the use of e-communication techniques.
- **Virtual Patient Simulation:** This is the digital simulation platform. Here features of both technologies; simulation and gaming are combined. It provides learners the experience of clinical scenarios in virtual mode without causing harm to the patient in an interactive way. Learners navigate the virtual patient scenario through diagnosing, stabilizing, and teaching patients thus enabling nurse staff to evaluate the learner's clinical competencies.

Immersive virtual reality simulation is more an advance technology form, computer generated environment with use of an experiential simulation platform to replicate real-life patients. On reviewing systematically, it is found efficient in improvement of cognitive and psychomotor skills.

- **Quick Response Codes/QR Codes: Just-In-Time:** Just-in-time training has proved to be quite effective during the COVID-19 pandemic, to train the nursing staff about new or unfamiliar procedures or equipment. It is a micro learning type of process. It is an effective as well as innovative way of delivering on-the-spot" training, directing the learner on scanning the code by the Smartphone to a specific educational portal and providing the access to needed information immediately. Thus, its use during the pandemic showed nurse's adaptability to ensure implementation of competencies in evidence based practice.
- 3. Skill Laboratories:** In these laboratories, latest technologies provide learning opportunities to nurses in a nonthreatening, unhurried environment controlled setting without harming the patient. The educators in the field of nursing should always use different teaching and learning modes to fulfill learning outcomes. This novel technique is effective in nursing education. To ensure health and health equity, there is requirement to train and employ the nurses with expertise in technology i.e. using digital platforms, access artificial intelligence, and other technologies in the health care systems as per the *Future of Nursing Report 2020–2030*.

The paradigm is shifting from traditional teaching methods to innovative, technology-focused and more interactive teaching methods in education and practical settings. The learner approach has now changed to a problem-centered and is essential to the development of competencies.

IV. THE RECENT COURSES IN NURSING

Recently there have been added several short and long duration courses in nursing field such as:

- Several e-learning courses and course for Maternal and Newborn Health Care
- One year duration courses : Post Basic Diploma in Cardio Thoracic Nursing of
- Nursing in Operation Room (O.T) Psychiatrics, Geriatrics, Orthopedics, Oncology, Emergency & Disaster, Neurology, Critical Care
- Forensic Nursing and Rehabilitation Nursing
- Residency Programme in Reconstructive Surgery Nursing
- Residency Programme in Haematology Nursing
- 2 years duration course : Nurse Practitioner in Critical Care

V. CONCLUSION

Now nurses can work with greater efficiency giving more emphasis on better outpatient care. They can enjoy their freely available time in a better way as the post-operative recovery time of patients has also been shortened with best healthcare and technological methods. Even addition of new courses has increased work span and experience opportunities for nurses.