



INFORMATION COMMUNICATION AND TECHNOLOGY (ICT) IN NURSING PRACTICE

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ICT IN ACTION



OUTLINE FOR TODAY'S TEACHING

- Introduction of Information Communication Technology (ICT) in Nursing Practice.
 - The Origin of Information Technology in Nursing Practice.
 - What does ICT Entails.
 - Some examples of Basic/Advanced ICT Skills.
 - Benefits of ICT in Nursing Practice.
 - Nursing Challenges in the era of ICT.
 - Nursing Role in the era of ICT.
 - Nursing Consideration.
 - Conclusion/Questions.
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WHAT IS INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) IN NURSING PRACTICE?

- Information and Communication Technology is crucial in modern healthcare.
 - IT integrates nursing science, computer science, and information to manage and communicate data and knowledge in nursing.
 - It involves using technology to manage health information to improve patient care.
 - ICT involves operating, managing, and maintaining communication using technology.
 - The goal of ICT to improve healthcare, reduce cost, and helps in clinical decision-making (Jidkov et al, 2019).
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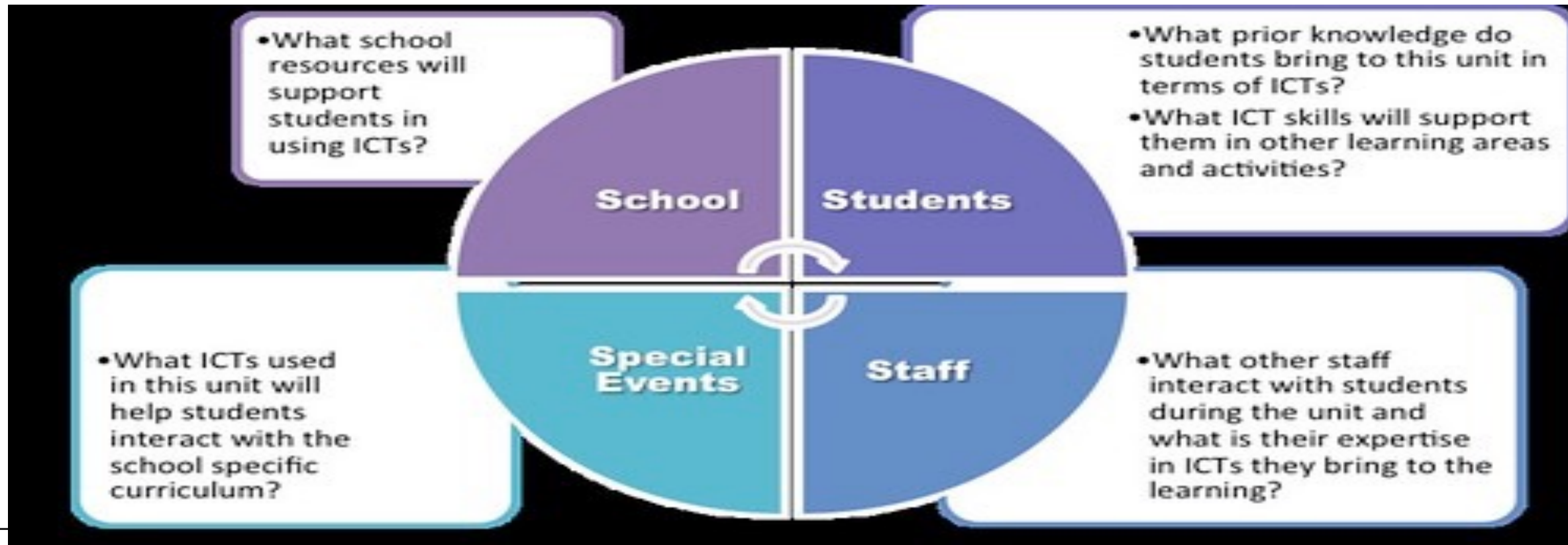
THE ORIGIN OF INFORMATION TECHNOLOGY IN NURSING PRACTICE

- Nursing informatics is important to healthcare improvement and patient outcome.
 - It can be trace back to Florence Nightingale. She used data to improve patient care.
 - Computers were introduced into healthcare in 1950.
 - In 1976, computer technology for nursing practice, education, and research started to emerged.
 - In the 80s, Nursing informatic started to gained recognition with increase access to computers and technology, such as the use of automated dispensing of medication to reduce error.
 - In 2015, hospital informatic started to integrate task such as admissions, discharges, and transfers (Jidkov et al, 2019).
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WHAT DOES ICT ENTAILS IN NURSING PRACTICE

- It involves using technology and networks to create, share, and manage patients' information.
 - It involves using computers to store, process, and transmit patient's information.
 - ICT in Nursing involves using digital tools and systems to improve patient care.
 - Involves using technology to streamline workflow and improve professional development.
 - Involves using electronic health record (EHR) for efficient documentation, remote patient monitoring, communication, and data analysis to improve decision making.
 - ICT skills are important. It enhance employability, global digital economy, and promote access to information (Jidkov et al, 2019).
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INFORMATION COMMUNICATION TECHNOLOGY (ICT) NEEDS INVOLVEMENT OF THE:



EXAMPLES OF BASIC/ADVANCED ICT SKILLS

- Hardware Operation. Involves using turning on computer, using the mouse, keyboard, printing, and using digital camera.
 - Software Basics. Involves navigating and operating system like windows, using word processors, spreadsheets, and presentations software.
 - Internet and Communication. Involves browsing the internet, sending emails, and making videos.
 - File Management. Creating, saving, organizing, and backing up of files and folders.
 - Advanced ICT. It includes data management and analysis, cloud computing, cybersecurity, digital content, and problem-solving.
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BENEFITS OF INFORMATION AND COMMUNICATION. TECHNOLOGY (ICT) IN NURSING PRACTICE

- Using Electronic Health records (EHR) helps nurses to efficiently document patient information, track medical history, manage medication, access patient information, record vital signs, bar coding, and help to improve patient care.
 - Communication and Collaboration. This improves connections between nurses, patients, and other healthcare professionals. It helps with real time communication and efficient collaboration through digital platforms. It improves patient safety and increase efficiency.
 - It provides real time patient monitoring, recognize early warnings, and notification of changes to other healthcare team workers.
 - Data Analysis and Decision Making: This helps to identify trends, improve patient care, outcomes, and support evidence-based decision making by providing nurses with critical information at their fingertips.
 - Patient Education and Empowerment: Provides patients with access to health information and interactive tools for education about their conditions and treatment plan. This foster active participation of patients in their care to improves patient care and outcomes.
 - Efficiency and Workflow: Streamline task, allow nurses and other health providers to share patients' information effectively.
 - Patient Safety: Reduces medication/medical error and safe care of patients. It facilitates timely intervention and improve quality of care through data management and communication (Alotaibi et al, 2017).
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BENEFITS OF ICT IN NURSING PRACTICE CONTINUES

- Professional Development: Provides access to medical information, clinical guidelines and evidence-based nursing practices to support ongoing learning.
 - Patient Engagement: Empower patients through technology and involvement in their healthcare.
 - Telehealth and Remote Patient Monitoring: Telemedicine allows for remote consultation and providing care to patients in their homes. Technology enables patients monitoring in their homes such as tracking chronic conditions with devices like digital monitors, such as wearable technology like 24 hours ECG and cardiac monitor.
 - Common Nursing informative tools are EHR, Clinical Decision Support System (CDSS), e.g, (drug interaction checker, and dosage calculation).
 - Promotes collaboration between healthcare professionals (Kruse & Beane, (2018)).
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BENEFITS OF TECHNOLOGY IN NURSING PRACTICE CONTINUES.

- It enables prompt action, prevents complications, and improve patient outcome.
 - ICT provide adequate approach and decrease strain on healthcare resources.
 - Helps for efficient allocation of healthcare resources.
 - ICT enable nurses to provide more accurate and individualized patient care.
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NURSING CHALLENGES IN THE ERA OF ICT

- Nurses need to understand the development and implication of information technology in nursing practice.
 - Ethical concerns which include privacy, security, and accountability.
 - Maintaining the core value of nursing practice such empathy and human interaction.
 - Vulnerability and breaches of patient data. Challenges involves maintaining privacy with sensitive health information.
 - Maintaining professional standard and ethical values in nursing practice (Nashwan et al, 2015).
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THE NURSING ROLE IN THE ERA OF ICT

- Nurses play a great role in advocating for ethical use of patient information in the era of ICT.
 - Protecting patient health information is crucial.
 - Nurses must ensure that the system uphold patient consent.
 - Maintain transparency in use of patient data.
 - Address concerns about misuse of patient information.
 - Nursing leaders must advocate for nurses in maintaining professional standard.
 - Ensure policies maintain clear communication involving patient data collection, sharing, and storage, to enable patients to make informed decisions about their healthcare (Nashwan et al, 2015).
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NURSING CONSIDERATION

- Address security concerns by creating transparent policies in healthcare.
 - Overcoming obstacle and technical breach of patient data by maintaining privacy.
 - Needs Standard and Regulation. Policy makers must recognize transformation in nursing practice and develop policies/Regulation that support ethical responsibility that integrate IT into nursing practice.
 - Medical organizations should make effort to improve accessibility to computer technology by all healthcare systems and communities.
 - Adequate training of nurses is crucial to enable them to use/familiar with information technology in clinical practice.
 - Nursing schools must incorporate informatics into curricula to prepare nurses for future tech driven healthcare.
 - Schools should prepare nurses to work alongside IT in clinical setting by providing hands-on (Nashwan et al, 2015).
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CONCLUSION

- Information communication and technology in nursing practice combines nursing science, and information management/technologies in caring for patient to promote patient well-being.
 - ICT streamline workflow and promotes collaboration.
 - ICT transform healthcare, enhance decision making, and improve patient outcome through individualized care.
 - However, data privacy, ethical consideration, and adequate nursing training in IT are crucial.
 - ICT skills are important. It enhance employability, global digital economy, and promote access to information.
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QUESTIONS



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