College of Nursing
UNIVERSITY OF THE PHILIPPINES MANILA
The Health Sciences Center

Sotejo Hall, Pedro Gil Street, Ermita, Manila 1000 Philippines
Tel Nos. (02) 523-1472, (02) 523-1477, (02) 523-1494 • TeleFax: (02) 523-1485
Email: upm-cn@up.edu.ph

N-101 Nursing Informatics
First Semester, Academic Year 2023-2024

STUDY GUIDE
MODULE 5
Use of Nursing Informatics in Healthcare Research
Developed by: AC Banayat

Introduction

The future of nursing science is closely linked to the application of nursing informatics in nursing education, nursing research, and nursing administration. Nursing informatics in research focus on how client information and evidence-based studies can guide decision making and clinical practice to achieve better health outcomes.

Learning Outcomes:
At the end of the module, the students will be able to:
1. Assess informatics tools for literature review, collecting data, and storage of information
2. Compare informatics tools for processing and analyzing quantitative and qualitative data

Nursing Informatics and Nursing Research

Nursing informatics provides tools and technologies that have changed the conduct of nursing research. This includes the use of bibliographic management in the review of literature, informatics for data collection and storage, data processing and analysis tools, and translational research.

1. Bibliographic (reference) management

The use of bibliographic (reference) management tools can be helpful in doing research. These collect and save details of the resources used in the research and generate references or bibliographies in different styles. Do this activity to find out more about the features of bibliographic (reference) management tools and choose a tool that is appropriate to your needs.

2. Informatics for Data Collection and Storage

Survey forms and tools and have become more popular in recent years given easier access and deployment to their intended audience. Find out the best online survey forms and tools in 2020. Aside from the surveys, there are other data collection tools featured here for photos, GPS location, voice data collection and others.

3. Data Processing and Analysis Tools

This paper shows how digital technology has changed the research process and provides examples of linked databases in different locations that allow integrating data

College of Nursing
UNIVERSITY OF THE PHILIPPINES MANILA
The Health Sciences Center

Sotejo Hall, Pedro Gil Street, Ermita, Manila 1000 Philippines
Tel Nos. (02) 523-1472, (02) 523-1477, (02) 523-1494 • TeleFax: (02) 523-1485
Email: upm-cn@up.edu.ph

sets and performing comparative quantitative and qualitative analyses using visualization tools, simulation, text mining, and qualitative longitudinal analysis.

4. Translational Research

Translational informatics is essentially the usage of bioinformatics and statistical approaches to explore, synthesize, combine and interpret data that comes from laboratory research, clinical study, electronic health records, imaging data, etc. into useful insights (Fan Fan, 2019). Read about the challenges and promises of translational informatics.

Learning Activities
1. Read the recommended content discussed above and refer to the linked resources.
2. Work with your group in updating and improving your group project.
3. Participate in the Discussion Forum.

References:

McGonigle, D., & Mastrian, K. G. (2017). *Nursing informatics and the foundation of knowledge*. Burlington, MA: Jones & Bartlett Learning.

Other references are linked in-text.