



## Nursing Informatics Competency and Self-Efficacy in Clinical Practice among Nurses in Palestinian Hospitals

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### ABSTRACT

This study purposed to determine the levels of nursing informatics competency and self-efficacy in clinical practice and influencing factors on self-efficacy among Palestinian nurses in hospitals. A descriptive-correlational design was adopted. The nurses who worked in the North West Bank of Palestine ( $N=331$ ) were recruited. The data were collected using the Self-Assessment of Nursing Informatics Competencies Scale (SANICS) which consists of 30 items rated on a 5-point Likert scale, ranging from 1(not competent) to 5 (expert), and scored by calculating the mean as follows: novice/low (1.00–2.59), beginner/moderate (2.60–3.39), and competent/high (3.40–5.00); and the New General Self-Efficacy Scale (NGSE) that consists of eight items rated on a 5-point Likert scale, ranging from 1(strongly disagree) to 5(strongly agree) and scored according to the average of the scale, whereas the average of  $> 3$  indicated high self-efficacy, and  $\leq 3$  reflected low self-efficacy. The data were collected during the period from September to November 2020. Findings showed that the total mean score for the nursing informatics competency scale was 2.9 ( $SD = 0.7$ ), which indicated that the nurses had a moderate level of nursing informatics competency. The average score for the self-efficacy scale was 3.5 ( $SD=0.8$ ), which reflected that nurses had high self-efficacy. Self-efficacy in clinical practice increased with age and with nursing informatics competency. Thus, it is necessary to enhance nurses' informatics competency by developing continuous educational programs about this technology for nurses and engaging nurses in such programs to enhance their competencies in this system.

### KEYWORDS

Arab; nursing informatics; Palestine; self-efficacy; Self-Assessment of Nursing Informatics Competencies Scale (SANICS); New General Self-Efficacy Scale (NGSE)

### Introduction

Recently, healthcare delivery systems have undergone substantial transitions resulting from innovations such as information technology (IT), which enhanced the safety and quality of patient care (Gonen, Sharon, and Lev-Ari 2016). As a result of this transformation, healthcare institutions and healthcare professionals including nurses need technology and informatics systems to fill growing jobs, master technological tools and utilize data frameworks. Therefore, they developed and adopted nursing informatics (NI) (Gonen, Sharon, and Lev-Ari 2016; Thomas, Seifert, and Joyner 2016). Nursing Informatics is defined as a specialty that coordinates nursing science with different data and

investigative sciences to identify, characterize, supervise, and communicate information, data, and wisdom in nursing practice (American Nurses Association 2015).

Nursing informatics drives technological advances and strives to demonstrate the visible contributions of nurses using real-world practice data to guarantee viable nursing practice (Frazandipour et al. 2020). It could provide nursing skills related to nursing care practice, where the outcomes of such skills contain security practice care that support the ability to create and usage of legitimate nursing intercessions, knowing nurses' confinements, and realizing the time of requesting help (Aathi 2014).

In the healthcare sector, IT has a significant effect on the standard of nursing services since