# Informatics Competencies Study in Iberoamerican Nursing Population

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## Abstract

*Nowadays, many hospitals and health center of the Latino-American region have adopted information technology (IT), to help nurses in their practice. Less study has focused in computer literacy of Latino American nurses. The purpose of this study was to determine computer literacy and use of systems and technologies of the information amongst nurses. The on line survey was the instrument for data collection. The respondents were 435 Chilean and Latina-American nurses. The results of this study revealed that 99.7% of nurses to possess knowledge and abilities in the computer use, but not of tools of informatics science in health nurse practice. They demonstrate to discharge motivation and interest to use nursing informatics and consider necessary to become qualified.*

*Keywords:*

Competencies, Nursing informatics, Education

## Methods

Nursing Informatics has grown dramatically in Latin-America. Health institutions activities have involved a constant introduction of ICT in management the patient and family's health care. The Latina- America Health Reform has implied one transformations process for the structural, legal, normative and administrative aspects at the region. Nurses need to know and to use these IT tools in order to help to improvement the health care delivery.

This study aimed to explore the computer literacy within this group of nurses. This is a cross-sectional study. The participants of population were N= 13,015 Iberoamerica nurses, with a sample of 435 nurses, with an error sample 4.6% (95% confidence). 44.4% were Chileans, 13% Mexican, 11.3% Argentineans and 31.4% the other country.

The data was obtained from 9/ 2008 to 1/ 2009, by an electronic survey. The research instrument consists of 4 categories (77 questions) that explore nurse's needs on systems and ICT in health and its use in the performance of the professional practice. It was validated with a 67 of nurses. The reliability of the instrument was 0.8 Crombach values. Informed consent with electronic form was used and the identities of all participants were kept confidential. The data was entered into the SPSS 16.0.

## Results

The quantitative results are found in the following order: Age average of 42.4 years, 85.1% women, work experience average 18.4 years, 84.1% work in health institution, 16% in teaching, 91.4% use computer daily, 77.7% accede in work and 93.8% in home. Internet usage is 95.7%.

42.3% of nurses use NANDA, NIC and NOC. 94.7% uses Google. 60.4% consider handling without needing aid the information systems and technologies and to handle them like expert 7.1%.

Nurses indicate not to own abilities in use of classifications (55.9%), 45.1% doesn't use electronic plan of cares. 54% indicate not to use computers tools in administrative role. In education role, not use software educative 40.2%. In investigation, they own abilities in electronic search 45.6%. They not use statistical software 34.2%.

They have motivation and interest to automate clinical processes and to participate in associations of computer science was affirmative.

## Conclusion

High motivation was demonstrated by nurses that participated in this study. There is a strong interest to use and become qualified in computer literacy (95%), but they do not actually use these abilities to support their practice professional, in order to manage health care of people - families and communities. The results of this investigation indicated that the curriculum of this type of training is required to achieve the appropriate skills, knowledge as competencies.

## References

[1] Ammenwerth E. Mansmann U, Iller C, Eichstaidter R. Factors affecting and affected by user acceptance of computer-based nursing documentation: result of a two year study. JAMIA 10 (1) 69-84, 2003 Jan-Feb.

[2] Hui – Mei Hsu, et al. Factors associates with computer literacy among nurses. In Hyeoun – Ae Park; Murray Peter; Delaney Connie. Computer – centered, Computer - support care for healthy people. Proceedings of Ni 2006. NI 2006 Seoul. Editing for IOS press. 2006, pp190-193.

[3] Cuesta Y. Enfermería desde un Enfoque Informático. Revista Habanera de Ciencias Médicas, 5(2) 2006.

[4] Porter M. Competitive Advantage: Creating and Sustaining Superior Performance. New York : NY The Free Press, 1985.