Current Trends in Nursing Informatics:
Results of an International Survey

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Abstract. Nursing informatics (NI) can help provide effective and safe healthcare.
This study aimed to describe current research trends in NI. In the summer 2015, the
IMIA–NI Students Working Group created and distributed an online international
survey of the current NI trends. A total of 402 responses were submitted from 44
countries. We identified a top five NI research areas: standardized terminologies,
mobile health, clinical decision support, patient safety and big data research. NI
research funding was considered to be difficult to acquire by the respondents.
Overall, current NI research on education, clinical practice, administration and
theory is still scarce, with theory being the least common. Further research is needed
to explain the impact of these trends and the needs from clinical practice.

Keywords. nursing, informatics, research trends, research priorities, international
survey.

1. Introduction

Nursing informatics (NI) can help provide effective and safe healthcare. Currently, NI is
a fast evolving discipline. Unfortunately, little is known about the current trends in NI
research. We conducted an international survey to describe current NI research trends.

2. Methods

We designed an online questionnaire based on major themes from NI literature [1-2].
The questionnaire was translated into six languages (Arabic, English, Korean,

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Portuguese, Spanish and Swedish). Nurses and other allied health professionals with experience in NI from academia and practice were eligible to participate. Snowball sampling technique was used to reach as many respondents as possible internationally. Questions were broad in scope, in attempt to provide an overview of overall trends. Questions asked centered on participants' perspectives of NI within their respective countries. Topics included perceptions of NI national policies and standards and research, satisfaction with state of health information systems development, state of resources and infrastructure, potential future trends, and efforts that should be taken to advance NI.

3. Results

A total of 402 responses were submitted from 44 countries in Asia, Africa, North and Central America, South America, Europe, and Australia. The top five reported (n=376, 93,5%) research areas were: standardized terminologies (n=151, 40.2%); mobile health (n=128, 34%); clinical decision support (n=127, 33.8%); patient safety (n=123, 32.7%); and big data research (n=103, 27.4%). Respondents reported (n=289) that the possibility to get funding for NI research in their own country was difficult. On a scale from 1 (very easy) to 10 (extremely difficult), the mean response score was 6.8 (SD 2.5). Participants felt that only little NI research is conducted in their countries (on a scale from 1-very little to 10-very much) in the area of NI theory (mean 3.6, SD 2.1, n=281) while administration (mean 4.3, SD 2.1, n=290), clinical practice (mean 4.5, SD 2.2, n=304) and education (mean 4.5, SD 2.1, n=295) received slightly higher scores.

4. Discussion

The findings provide a snapshot of current trends in NI research and can be used to direct future research efforts. Respondents reported that NI research focusing on education, clinical practice, administration, and theory was limited in their countries. Yet, current research seems to focus on education and clinical practice when compared to research on administration and theory. These findings should be interpreted with caution as the sampling technique may result in skewed results. Further research is needed to explain the impact of these trends and the needs from clinical practice.

5. Acknowledgments

References

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