Integrating nursing informatics into undergraduate nursing education in Africa: A scoping review

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Background

- Nursing informatics (NI) refers to "the specialty that integrates nursing science with multiple information and analytical sciences to identify, define, manage and communicate data, information, knowledge and wisdom in nursing practice." (ACN, 2017, p. 1).
- Technology has become omnipresent in the healthcare system.
- Nurses are the majority of the health sector workforce.
- Time spent by nurses documenting patient care.
- Universities are integrating nursing informatics in nursing education.
- Need to prepare nursing students for the digital era.

Aim

- This scoping review summarised the literature on the integration of NI into undergraduate nursing education in Africa.

Methods

- Levac, Colquhoun, and O'Brien (2010) framework guided the scoping review.
- Searched databases : CINAHL Plus databases, EMCARE, MEDLINE Ovid, Scopus; ERIC ProQuest, and Web of Science.
- Publication period: 2009–2019.
- Mixed Methods Appraisal Tool (MMAT) and research questions guided the selection of articles.
- PRISMA flowchart was used to report the final number of selected studies.
- 19 studies were included in this review (Figure 1).
- Extracted data were presented in the form of a table.
- Extracted data were analysed using a descriptive analysis and an inductive thematic synthesis.

Results

- Basic computer literacy was explored in eight studies, and NI content and competencies in four studies.
- Nursing students used digital tools primarily for academic purposes, and rarely for clinical practice.
- Challenges for teaching NI in education included: limited digital skills amongst faculty and students, poor teaching strategies**,** lack of standardisation of NI competencies, and limited research studies on NI in Africa.
- Facilitating factors for NI included: restructuring NI content and teaching strategies, capacity building of the faculty and students in digital literacy, political commitment, and collaborative partnership.

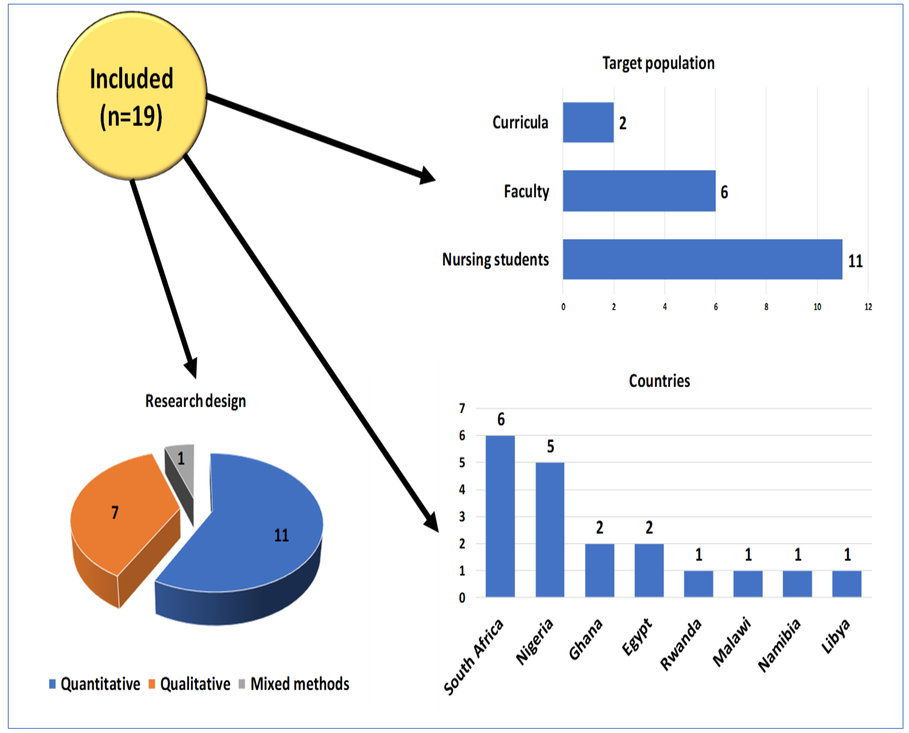

Figure 1: Summary of the dataset

Conclusion

- In Africa, the integration of NI in undergraduate nursing education was in the early stage due to implementation and adoption challenges.
- Responding to these challenges requires a multi-sectoral approach in the revision of undergraduate nursing curricula.
- Effective teaching of NI would enhance quality patient care in an increasingly digitalised healthcare system, which is equally applicable to the Australian environment.

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