The Process of Innovation in Nursing: An Interdisciplinary Perspective

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Background

To date much of the theoretical and research literature on innovation has emerged from the business, management, and economics fields, with relatively little attributed to healthcare or nursing. This is problematic because the resulting processes that emerge fail to take into account the ideas of practitioners, patients and the almost unique regulatory framework in which nursing operates.

The concept of innovation has clearly been at the forefront of recent discussions in nursing. Yet, with all the talk of innovation and innovativeness, it is unclear how nursing is using this term, and whether unified understanding of the term innovation exists in nursing.

Purpose

1. Conduct an international literature review of models of innovation, definitions and processes as applied to nursing, business, and management.
2. Assess longitudinal trends in use of the terminology of innovation within titles of peer-reviewed nursing papers.
3. Compare common theories of innovation used in nursing literature to theories used in business and management.
4. Use findings to generate a model of innovation in nursing practice, research and education

Methods

- A search of CINHAL was conducted 1981-2015 to identify the nursing literature. Sources were limited to peer-reviewed articles that included “nursing” in the journal title and the terms ‘innovation’ or any of its derivatives in the paper title.
- Review articles on the history and models of innovation in business, economics, and management were identified using other databases.
- The frequency of the use of “Innovation” or derivatives in titles of publications from nursing journals over the past 35 years was calculated and compared to published trends in business and economics journals.
- The most commonly used theories/theorists were identified and the definitions of innovations across fields were compared.
- A theoretical model was generated, building upon existing and well-established organizational frameworks across disciplines.

Innovation

A process, distinct from creativity, which involves:

“The intentional introduction and application within a role, group or organization of ideas, processes, products or procedures, new to the relevant unit of adoption, designed to significantly benefit the individual, the group, the organization or wider society”.

![Figure 1. A Multi-Dimensional Process Model of Innovation in Nursing ©](image)

Innovation in nursing is depicted as a multi-step, multidimensional process preceding an outcome, with various dimensions and modifiable determinants. (Figure 1)

Results

West and Farr’s definition of innovation was found to be widely accepted within management science and studied within healthcare organizations.

The stages of the process, based in cross-sector collaborative relationships, involve recognition of a need or opportunity; idea generation that can take the form of a process, product, structure or service; exploration and development of the idea; and finally implementation, diffusion, and adoption of the innovation that leads to value creation and intended benefit at the individual, team or organizational level. Team climate and other determinants act dynamically to shape innovation process outcomes.

![Figure 2. Frequency of the use of “innovation” or derivatives in titles of articles published in all nursing journals](image)

![Figure 3. Growth of articles on innovation in business and economics journals](image)

Conclusions

- The CINHAL selection criteria resulted in a final sample of 2,697 papers from 300 different nursing journals.
- The number of publications with innovation in the title grew from 52 between 1981-1984 to 691 between 2010-2014. From the 1980s to the 2010s the frequency of titles containing innovation or derivatives increased by over 800% (Figure 2).
- Innovation was described in a limited variety of ways within nursing, despite evidence of continued calls for innovativeness.
- Discussions of innovation often lacked references to established innovation theory or science, and typically did not contain a clear definition for the term innovation itself, but focused largely on innovation’s novelty and economic/social benefit.
- In comparison, in business, economic, and management literature it was clear that innovation was a well-studied and practiced theory and science.

• Authorities within nursing have been particularly interested in and vocal about the need for innovation within nursing education due to projected nurse shortages, a growing elderly population, and the rise of medical and information technology. Thus, understanding the process of innovation is of vital importance to the future of nursing.

• We believe that innovation within nursing functions to a high degree like it does within other business sectors, and should be conceptualized and treated similarly.

• The proposed model realigns the concept of innovation in nursing practice, research and education with the current predominant theoretical and practice issues present in the business, economic and management fields.

• In examining the process of developing and applying innovative practices, administrators, educators and clinicians should be informed about its complexity as well as the inter-connectivity of elements necessary for a successful and sustained process of change.

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