Implementing a Nursing Research, Education, and Practice Program Using Participatory Action Research

Presenter:

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Introduction

The lack of adequate mentorship to support research capacity among nursing faculty remains problematic with far reaching consequences in the profession.

This affects the conduct of research in practice environments, the delivery of nursing research courses, research mentorship for nurses and the advancement of nursing faculty in many universities.

(Edwards et al., 2009; Moore et al., 2012)

Introduction

Mentorship of junior researchers by senior researchers is an important strategy in curtailing low rates of nurse-led research in LMIC such as Jamaica. (Edwards et al., 2009)

Student/faculty collaborative projects have been effective in increasing students' research interest and the growth of the profession.

Through this collaborative process students are able to see the applicability of research and faculty members can enhance their own research skills.

(Kennel et al., 2009; Kessler & Alversom, 2014)

Aim

This program of study aimed to plan and implement activities designed to:

- Facilitate the learning experience of nursing students in a research methods course
- > Build research capacity among junior nursing faculty
- > While collaborating with clinical staff to determine the quality of nursing documentation at three Jamaican hospitals

Objectives

This study sought to:

- 1.Enhance the learning experience of final year nursing students in a research course by allowing them to participate in elements of the research process, including data collection, data analysis and research dissemination process
- 2. Mentor junior nursing faculty in the conduct and pedagogy of nursing research
- 3. Collaboratively identify and explore practice issues which required research inquiry (audit of nursing documentation at three Jamaican hospitals)

Methods_ Pre-step

Participatory action research was use to design the research project.

- ➤ We elicited feedback from students at both undergraduate and graduate levels and faculty delivering research methods courses as part of a new four-year undergraduate nursing curriculum.
- ➤ Clinical staff and administrators at a large teaching hospital were asked to highlight practice areas of concern. The team (students, faculty and clinical staff) settled on "nursing documentation" and a review of the literature was pursued.

Methods_Pre-step

- > Faculty and students from four schools of nursing, participated in the program of study.
- > A team approach was used to obtain IRB approval, institutional approval and permission from the Ministry of Health Jamaica to conduct an audit of nursing documentation.
- > Using a multi-level stratified sample of 245 client's records from three Jamaican public hospital were audited.
- > The audit instrument reported nurses' documentation of client assessment, nursing standards and discharge planning and teaching.

Methods_Action Phase

- > Students registered in the Research Methods course delivered on four campuses attended 2-day workshop for training on nursing documentation and data collection.
- > Each student audited 2-3 clients records at selected hospitals visited for clinical experience.
- > Data collection was done under the direct supervision of faculty who audited at least 10% of records.

Methods_Action Phase

- > Students were required to analyze data at the level of hospital by conducting descriptive and inferential statistics using SPSS, Version 19 and complete poster and oral presentations of the findings in a mock research conference to which nursing leadership was invited.
- > Aggregated data collected from each school were then analyzed by faculty members and manuscript submitted for peer reviewed publication.
- > Each faculty was assigned specific tasks; track changes in Microsoft Word and group meetings (face to face and online) facilitated the writing process.

Methods_Action Phase

Clinical staff:

- > assisted in the problem identification for the project
- > endorsed the data collection instrument
- > provided valuable support for the project by assisting with administrative issues which arose during the project implementation phase
- > Senior clinical staff attended mini-conference presentations where strategies to address findings of the project were explored
- > Facilitated dissemination of findings at the hospital board meetings

Methods_Evaluation

- > <u>Course assignments</u> included a written scholarly description of the results of the data analysis and a discussion of the findings.
- > Students were also required to <u>complete poster and oral presentations</u> of the findings which were presented in a mock research symposium (attended by clinical staff).
- Four focus group discussions facilitated feedback from students (3) and faculty members (1) to determine the quality of the learning experiences.

Cyclical reflection and data analysis

- > Project Leader and one Research Assistant coordinated of the project. They communicated with individual sites and met weekly to discuss feedback from faculty and students, as well as personal reflections and observations.
- > All data extraction sheets were then collected and entered into SPSS® and aggregated data collected from each hospital were analyzed by faculty members using descriptive and inferential statistics.
- > Qualitative data were transcribed and main themes identified.

RESULTS



Students Learning Experiences

During the oral presentations student displayed moderate to high levels of confidence in making presentations, aptly presented tables and figures utilizing the 6th edition APA guidelines and gained valuable experience in responding to questions from the audience.

Students effectively used the literature to strengthen the discussions of the audit findings (reflected in the course assessments & presentations).

More importantly they engaged each other in vibrant discussions and appeared to have enjoyed the experience; applauding loudly at times.

Results of the focus group discussion and observation students

Students felt involved in the process and acknowledged that research "takes time, effort and commitment".

They demonstrated adequate data collection skills, identified additional variables which could strengthen the instrument as well as the importance of the ethical principles of research.

Appeared enthused about the high clinical relevance of the study; evidenced during the dissemination of findings.

Results_Faculty Experiences

Faculty observed the process of drafting and implementing the study Successfully completed manuscript for peer reviewed publication.

Variations in the level of research competences were noted which was reflected in the level of participation in the writing process.

Faculty reported they felt supported by faculty mentors and requested continued research capacity building....

And complained about limited time to conduct research.

Results_Application of evidence based practice

- Findings from the audit245 patient records from three hospitals were audited
- 60% had incomplete patient biographical data on admission e.g. clients' family history
- -Within 72 hours of admission less than 15 % of records had evidence of discharge planning or patient teaching

Clinical Nurse Leaders attended oral and poster presentations of findings of the documentation audit.

Mini research conference facilitated vibrant discussions about the implications of poor documentation and proposed strategies to address same.

The perceived benefits of the project



Increased research interest and self efficacy among students

Strengthened relationships with clinical partners and project addressed practice issue in clinical setting.

Increased research capacity among faculty and an effective way for nurses to increase peer reviewed publications which can be replicated

Limitations

Challenges included the significant lead time and collaborative effort required for planning such an intervention.

The process was labor intensive especially on campuses with large class sizes.

The scope of documentation audit was limited as only the presence or absence of specific entries were noted (not the quality of the entries).

Discussions

The study provides support for the inclusion of undergraduate student nurses as active members of a research teams.

(Niven et al. 2013; Kessler & Alverson 2014)

This early initiation of undergraduate students to practical research experiences helped to advance research self-efficacy and interest and may motivate nurses participation in clinical research and pursue graduate studies .

Discussions

Mentoring in nursing is essential for socializing nurses into research and subsequent development of professional knowledge.

(Lev, Kolassa & Bakken 2010)

These activities improved research self-efficacy of faculty and are likely be beneficial to the participating nurses

(Edwards, et al. 2009)

Benefits include the ability to conduct larger studies which may attract greater funding oppurtunities and in increased publication rates.

Discussions

In this program of study the improved relationship between the school of nursing and clinical partners, facilitated the identification of a highly relevant research problem.

The collaborative approach resulted in an efficient method of data collection and completion of the dissemination phase.

While this action research approach yielded overwhelmingly positive results it is highly labour intensive and requires significant project management support.

(Moore, Crozier and Kite, 2012)

Conclusion

This participatory action research project yielded positive learning outcomes for students and allowed faculty to gain experience in the conduct of research.

The study was highly beneficial to the clinical sites through the dissemination of the study results which highlighted weaknesses in the nursing documentation across Jamaican hospitals.

We believe this approach should be considered for the delivery of other research courses given the associated benefits.

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