

THE UTILIZATION OF INTERPROFESSIONAL EDUCATION IN NURSING EDUCATION
TO CLOSE THE COMMUNICATION GAP AMONG HEALTHCARE TEAMS: AN
INTEGRATIVE REVIEW

by

Jillian Harvey

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Jillian Harvey

Greenville, NC

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Approved by:

Elizabeth de Jesús Toderick DNP, MSN, RN, CNE

Department of Advanced Nursing Practice and Education

Abstract

Aim: The aim of this integrative review is to explore relevant literature that identifies the significance of and current advancements in interprofessional education, in order to make needed recommendations for nursing education programs to intertwine IPE into undergraduate nursing curricula.

Background: Interprofessional education or IPE is when “two or more professions learn about, from, and with each other.” IPE first began in the late 1960s and early 1970s and has since become an increasingly important topic of research and nursing education.

Discussion: IPE has found to be beneficial in increasing undergraduate nursing students’ knowledge of other professions and increasing IPE skills such as collaboration and communication. Despite this, few articles within this integrative review demonstrated permanent implementation of IPE into undergraduate nursing curricula. The most common methods of IPE administration were found to be hands-on methods (such as through laboratory simulations) or mixed methods (through both hands-on and didactic learning). Although benefits were found for students when administering IPE, little evidence was found of how IPE translates into the health care workforce after its’ implementation in undergraduate nursing programs.

Conclusion: IPE is a necessary part of pre-licensure nursing curricula, as it has been proven to be beneficial. Educational institutions should attempt to implement IPE via hands-on methods to maximize potential IPE benefits. Further research is required to determine statistical benefits of IPE in the health care workforce after students have participated in IPE and graduated from their pre-licensure nursing program.

Introduction

Interprofessional education, also known as IPE, is defined by the World Health Organization (2010) as, “an experience that occurs when two or more professions learn about, from, and with each other.” Although IPE can theoretically be applied to any profession, in the context of this integrative review the term is being applied to undergraduate pre-licensure nursing students and other health care profession programs—such as respiratory therapy, occupational therapy, speech and language pathology, et cetera. Interprofessional education (IPE) has become an increasingly important area of interest in the realm of nursing education and research across the country.

Through a multitude of studies, IPE has been identified as a necessary component of nursing education to promote future interprofessional collaboration and to close the communication gap among healthcare teams. IPE has also been called upon by *The Future of Nursing 2020-2030* report to be included in an education reform that requires nursing programs across the United States to properly implement IPE. Yet, even with extensive research, many programs have failed to do such. As nursing education programs move into competency-based curriculums, it is critical for IPE to be identified as necessary and be treated as such. The purpose of this integrative review is to explore relevant literature that identifies the significance of and current advancements in interprofessional education, in order to make needed recommendations for nursing education programs to intertwine IPE into undergraduate nursing curricula.

Methods

Literature Search

A literature search was performed to identify articles relevant to the aim of this integrative review. The following inclusion criteria were used to guide the literature search and identify applicable articles:

- Published within the past 5 years
- Written in English
- Mention IPE and nursing education
- Scholarly or journal article
- Peer-reviewed article

After determining necessary inclusion criteria, several databases were used to identify relevant articles. These databases included:

- One Search
- PubMed
- CINAHL
- Clinical Key

Several search terms were used to find the *most* relevant and accurate articles for this integrative review. These search terms included: “interprofessional education” AND “nursing,” or “interprofessional education,” or “IPE” AND “nursing,” or “interprofessional education” “AND health care.”

Data Evaluation

Following the literature search, 15 articles (n=15) were identified that met the inclusion criteria to be used for this integrative review. Articles were then evaluated through the utilization of the

Johns Hopkins Research and Non-Research Evidence Appraisal tool. Each article (n=15) was assigned a quality rating and a level of evidence using the following guidelines:

Levels of Evidence:

- **Level I:** experimental studies, randomized controlled trials (RCTs), systematic reviews of RCTs with or without meta-analyses
- **Level II:** quasi-experimental studies, systematic reviews of a combination of RCTs and quasi-experimental studies, or quasi-experimental studies only, with or without meta-analyses
- **Level III:** nonexperimental studies; systematic reviews of a combination of RCTs, quasi-experimental and nonexperimental studies, or nonexperimental studies only, with or without meta-analyses; exploratory, convergent, or multiphasic mixed methods studies; qualitative study meta-synthesis
- **Level IV:** clinical practice guidelines, consensus panels/position statements
- **Level V:** integrative reviews; literature reviews; quality improvement, program, or financial evaluation; opinion of nationally recognized experts based on experiential evidence

Quality of Evidence:

- **High quality (A):** consistent and generalizable results; sufficient sample size for study design; adequate control; definitive conclusions; consistent recommendations based on comprehensive literature review with thorough references to scientific evidence
- **Good quality (B):** reasonably consistent results; sufficient sample size for study design; some control; fairly definitive conclusions; reasonably consistent

recommendations based on fairly comprehensive results that include some reference to scientific evidence.

- **Low quality (C):** little evidence with inconsistent results; insufficient sample size for study design; conclusions cannot be drawn.

Out of the 15 articles, 5 were found to be Level II evidence, 2 were found to be Level III evidence, and 8 were found to be Level 5 evidence. Also out of the 15 articles, 10 were found to be high quality, 4 were found to be good quality, and 1 was found to be low quality. This information is represented in the following tables:

Table 1: Articles and Levels of Evidence

Levels of evidence	Number of articles
Level I	0
Level II	5
Level III	2
Level IV	0
Level 5	8

Table 2: Articles and Quality Ratings

Quality rating	Number of articles
High quality (A)	10
Good quality (B)	4
Low quality (C)	1

After the data evaluation, 3 articles were deemed to be irrelevant and 1 article was found to be low quality, causing 4 articles to be removed from the integrative review.

Data Analysis

After data evaluation, 11 articles were analyzed to determine key findings. Articles were analyzed through utilization of the integrative review framework provided by Knafl and

Whittemore (2005). The following matrix was used to guide the analysis and synthesis of key findings:

- Author & title
- Publication year
- Study type/design
- Purpose of study
- Key findings/themes
- Conclusion

Discussion

Through utilization of the data analysis matrix, several key findings emerged among the included literature. These findings were as follows:

1. Every article out of the 11 included within the integrative review showed some form of benefit and/or significance of implementing IPE into nursing education. These benefits varied widely due to variations among types of studies performed, different styles of IPE administration, and differences in methods of appraising evidence. Some of the generalized benefits amongst the studies included an increase in nursing students' knowledge of other professions; increases in IPE skills performance, such as collaboration and communication; and self-reported increases in knowledge of communicating with other professions.
2. The most common methods of IPE implementation were found to be either direct, hands-on experience, either through a patient scenario simulation or through hospital/clinical-based experiences, OR a mixed methodology of both hands-on learning AND didactic learning.

3. Little evidence was found among the literature of how increased IPE knowledge among nursing students transfers into the health care workforce & patient outcomes, however, some articles did make inferences about these skills being beneficial. For example, Parsons et al. (2021) study of a clinical-based interprofessional care coordination model stated that upon implementation of their program, the community served by the interprofessional students experienced reduced Emergency Department visits and hospital admissions. Although no true correlation could be determined, one could infer the potential benefits of increased collaboration as a result of IPE.
4. There was little evidence among the articles showing permanent, continued implementation of IPE. Out of the 11 articles included within the integrative review, only 2 demonstrated evidence of continued IPE implementation—a study by Parsons et al. (2021) of a clinical-based interprofessional care coordination model and an article from Brashers et al. (2012) of the University of Virginia's Interprofessional Education Initiative.

Several recommendations regarding implementation of IPE have been formed based on the findings from this integrative review. The recommendations of this integrative review are as follows:

1. East Carolina University and other educational institutions should indeed begin integration of IPE as a permanent core competency into their undergraduate nursing curricula. IPE has been proven to be beneficial, despite its' lack of use in many nursing education programs, in this integrative review as well as other literature. This integrative review has revealed that IPE can increase nursing students' knowledge of the roles and skills of other health care professions, such as in a study done by Rowe et al. (2020) that

investigated the benefits of IPE among nursing and respiratory therapy students. Such knowledge could prove useful in a nursing student's future transition into the workforce as a new-graduate professional nurse—although proven, statistical benefits have been difficult to determine, as previously mentioned.

2. Educational institutions, including East Carolina University, should attempt to implement IPE utilizing hands-on methods, such as through simulation scenarios, as this has been determined to a widely-used and beneficial approach to IPE integration among nursing and other health care profession programs.
3. Further research should be done to investigate the ways that IPE truly impacts communication among health care teams in the workforce as a result of IPE education in undergraduate nursing curricula. Such research could further prove the need for IPE due to positive outcomes in health care. However, such research will have to address barriers such as HIPAA, locating former IPE participants, and proving causation as opposed to correlation.

Conclusion

IPE is a long-standing concept that has still yet to be properly and/or permanently implemented by many educational institutions across the country. In this integrative review, it has been found that IPE is truly beneficial and should be recognized as a core competency for undergraduate nursing students going forward. Further research is required to determine statistical benefits in the health care setting post IPE implementation in undergraduate nursing curricula in order to further demonstrate the usefulness of interprofessional education.

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