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Interprofessional Education: A Concept Paper

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ABSTRACT

Introduction: When individuals of different professions learn together, the experience can change their attitudes, and reduce stereotypes between professions within the medical field. Interprofessional Education (IPE) is increasingly being recognised as a valuable tool of training health professionals to improve health care and patient outcomes.

Methods: Key tenets of Walker and Avant's eight step concept analysis method was used (Walker and Avant, 2005). A search of literature was carried out to review the varying definitions of IPE and collaborative practice. Literature was sought from dictionaries, PubMed and Google scholar.

Results: IPE occurs when there is 1) Active involvement by two or more members of a health care team; 2) experiential learning and socialization process; 3) participants learn with, from, and about one another; 4) andragogic experiences; 5) a knowledge and value sharing process, and; 6) collaborative patient-centred care. Antecedents of IPE includes issues related to patient safety and quality of care. In order for IPE to occur, there must be willingness on the part of all health care professionals to change the way they educate and practice. Interprofessional learning is the most important and direct consequence of the process of IPE. Students trained in an IPE approach use effective communication understand their roles and responsibilities, have increased mutual respect and trust, and increased job satisfaction and subsequently impact patient outcomes positively.

Discussion: The goal in IPE is to develop health professionals to be competent collaborative patient-centered practitioners. Students will be more likely to become collaborative interprofessional team members who show respect and positive attitudes towards each other thus improving patient outcomes. If the seven principles of IPE exist then there is a higher chance that the programme being implemented is IPE.

Keywords

Interprofessional Education Collaborative Practice, Interprofessional practice.

Introduction and Background

Many health systems throughout the world are fragmented and struggling to manage unmet health needs, It has been observed that when individuals of different professions learn together, the experience can break down the professional wall between them, change their attitudes, and reduce stereotypes between professions within the medical field [1]. Interprofessional Education (IPE) is increasingly being recognised as a valuable tool of training health professionals to improve health care and patient outcomes. The purpose of Interprofessional Education is to prepare health

professions students for Interprofessional Practice (IPP) by teaching collaborative practice competencies within the context of Interprofessional Teams. Health care professions have historically trained in "silos" with little emphasis on team dynamics. Collaborative practice competencies (the knowledge, attitudes, and behaviours) must be integrated into health professions curriculum. Effective health care teams are a factor in improved patient safety and quality of patient-centred care [2-4]. The aim of IPE is to develop interprofessional practice (IPP) skills which are considered to best meet the needs of clients. IPP occurs when professions actively collaborate with each other with the main aim of improving the quality of client care [5]. The development of skilled educators is an evolutionary process and should be based on the premise of educating collaborative, reflective practitioners

capable of functioning effectively in an interprofessional healthcare team [6].

Collaborative practice competencies fit well within several common health care domains: professionalism, communication, and systems-based practice [7]. To be purely IPE the focus must be on collaborative practice competency development and culminate into opportunities to apply or practice with students from other professions. Key mechanisms for effective IPE include principles of adult learning and staff development to improve group facilitation.

Evidence is available on the potential efficacy of interprofessional education (IPE) to foster interprofessional cooperation, improve professional satisfaction, and improve patient care. Effective teamwork can help accomplish improving patient experience of care, ultimately improving the health of populations. While the intention of the World Health Organization (WHO) is to implement IPE in all countries, there has been a slow uptake and little evidence within African countries of its efficacy. The reason for this slow uptake may be a lack of understanding of IPE and its principles. This review has been undertaken to understand IPE in an institution of higher learning where different health professions are trained. It is hoped that this enhanced understanding will stimulate appetite for integration of IPE into training programs and promote collaborative practice at clinical sites.

Methodology

As a guiding framework for the analysis, key tenets of Walker and Avant's eight step concept analysis method was used [8]. These steps involve concept selection, determination of the aim or purpose of analysis, identification of concept uses, determining the defining attributes, constructing a model case, identifying antecedents and consequences and finally defining empirical referents. A search of literature was carried out to review the varying definitions of IPE and collaborative practice. Literature was sought from dictionaries, PubMed and Google scholar. Phrases that include Inter professional education collaborative practice, collaboration, IPP, Multidisciplinary education and interdisciplinary education were used to identify relevant literature. PubMed and Medline international databases were used to identify papers with related articles. The papers that were considered were as follows: English language, Nursing, Medicine and other health related fields were identified and reviewed. Initially thirty papers were considered. These were screened by their relevance to the concept until we pruned them down to seventeen.

Results

Definitions of IPE

The term interprofessional education (IPE) can be divided into three elements: Inter-, professional and education. Inter refers to a prefix meaning "between" "among" "together" "during" and is used in the formation of compound words interprofessional. A related prefix intra- means within, for example, intra-professional. The term professional can be seen as an adjective meaning relating to a profession, describing the way one carries themselves

instead of an unprofessional manner. Professional can be a noun signifying a member of a profession or any person who earns their living from a specified professional activity like nurses, doctors and pharmacists. In this paper professional describes the type of education. When combined with Inter- it now means among professionals. Education can be described as the process of receiving or giving systematic instruction, especially at a school or university. It can also mean a discipline of education. In this paper education will be used as a process.

It seems that countries define IPE differently and its meaning has evolved over time. The Centre for the Advancement of Interprofessional Education (CAIPE) state that "Interprofessional Education occurs when two or more professions learn with, from and about each other to improve collaboration and the quality of care". The World Health Organisation defined IPE as occurring when students from two or more professions learn about, from, and with each other [9]. Although the two definitions appear similar, The CAIPE definition is more comprehensive since it adds a purpose (to improve quality of care) for the process of interprofessional education. Another definition of IPE states that it happens when students from different healthcare professions learn with, from and about each other to improve collaboration and quality of care [10]. This definition adds another component: "collaboration". IPE has been proposed as an important foundation in preparing health professionals for patient care within collaborative care environments. Professions that participate in IPE include nursing, medicine, pharmacy, social work, nutrition, physical therapy, occupational therapy, counselling, and dentistry.

Buring et al. [6] state that before development and implementation of an IPE programme there is a need to acquire a common definition of the term. They provide a comprehensive explanation of IPE which includes that: Interprofessional education involves educators and learners from 2 or more health professions and their foundational disciplines who jointly create and foster a collaborative learning environment. The goal of these efforts is to develop knowledge, skills and attitudes that result in interprofessional team behaviours and competence. Ideally, interprofessional education is incorporated throughout the entire curriculum in a vertically and horizontally integrated fashion. Understanding of IPE is also enhanced by stating what it is not. This will be further clarified in this paper through construction of a contrary case.

IPE is sometimes used or understood interchangeably with other terms: Interprofessional learning (IPL) is defined by the CAIPE "as occasions when two or more professionals learn with, from and about each other to improve collaboration and the quality of care" [11]. Intra professional education is a related term which refers to education that occurs when two or more disciplines within the same profession are engaged in learning together and subsequently collaborating in the workplace [12]. The ultimate goal of Interprofessional education is Interprofessional Practice (IPP): a collaborative practice which occurs when healthcare providers work with people from within their own profession, with people outside their profession and with patients and their families

[5,9]. Close to IPP is Interprofessional collaboration: a process of developing and maintaining effective interprofessional working relationships with learners, practitioners, patients/clients/ families and communities to enable optimal health outcomes [9].

Inter-professional education (IPE) is defined as “when students from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes” [9,13]. WHO further defined collaborative interprofessional practice (IPP), stating that it occurs when multiple health workers from different professional backgrounds work together with patients, families, care-givers, and communities to address the local health care need to deliver the highest quality care.

Operational definition: In this paper the operational definition is the modified WHO definition: Interprofessional Education (IPE) occurs when students from two or more professions learn about, from, and with each other to improve collaboration and the quality of care.

Defining attributes of IPE

A critical element of IPE is the availability of a conducive environment that would enable different health professional students to engage in learning opportunities and interactions that mould their behaviour in clinical situations. The nature and structure of these interactions and the partners involved are some of the attributes of IPE.

Attributes are descriptors that provide a mental picture of a phenomenon. Olenick et al. [13] state that for IPE to be present, the following 6 attributes must be present: 1 Active involvement (interactional) by two or more members of a health care team who participate in either patient assessment and/or management; 2) an experiential learning and socialization process; 3) a process where participants learn with, from, and about one another, both within and across disciplines, via the experience itself; 4) andragogic (non-hierarchical and de-centred) experiences; 5) a knowledge and value sharing process, and; 6) collaborative patient-centred care that strives for optimal health outcomes that are not content- or subject matter-driven.

From the definition, one of the attributes of IPE is the involvement of educators and learners from 2 or more health professions. The nature of interactions should be focused on the learner with the educational goal of providing the knowledge, skills, and attitude/values focused on patient-centred care.

A successful IPE learning opportunity should be a planned experience for all learners. It can include didactic instruction with or without a clinical experience, but it must be an intervention to assist the transformation of learners’ attitudes, knowledge, skills, or behaviour related to interprofessional care. In addition, an ideal intervention must include the opportunity for the students to perform some type of reflection as to their initial and changed perception of their role and value in interprofessional care [6]. Students should receive feedback on their ability to reflect on

their practice. Learning opportunities should be optimized to accommodate the programs of the various partners engaged in IPE; although, not every profession has to be involved in every IPE opportunity offered. Learning opportunities should be developed based upon the agreed learning outcomes for the students in the programs. A series of well-constructed and agreed upon outcomes incorporating knowledge, skills, attitudes, and behaviours will serve as the foundation for the development of the specific learning activities or approaches. It will also form the basis for the development of the requisite learning assessments.

Related concepts

To further understand the concept of IPE, it is important to briefly review concepts that are closely related and erroneously used interchangeably. Multidisciplinary education and interdisciplinary education are closely related to interprofessional education. In Figure 1 is an illustration that shows the clear distinctions between these concepts. Multidisciplinary involves several disciplines working side by side but with little to no interaction between them and unclear collaboration on patient management.

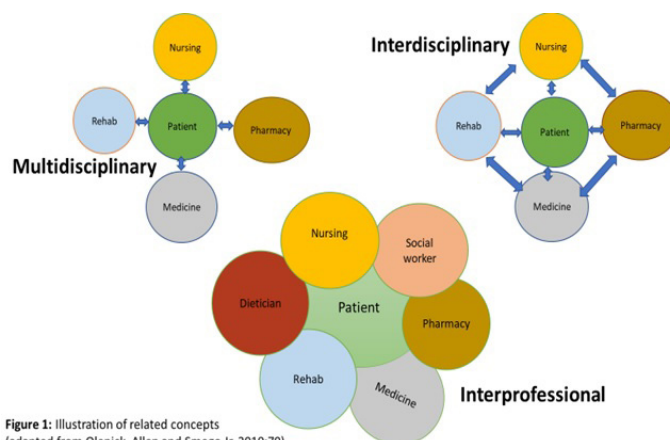


Figure 1: Illustration of related concepts (adapted from Olenick, Allen and Smego Jr, 2010:79)

Disciplines interact with the patient but not amongst themselves. On the other hand, in an interdisciplinary set up, disciplines work side by side but there is some interaction amongst themselves. In interdisciplinary education, although the disciplines practice together, there is little sharing of values and knowledge because there is no clear process and coordination of the disciplines. Each side stands alone indicating no shared accountability. In interprofessional learning, the disciplines are closely connected around the patient and amongst themselves [14,15]. Interprofessional practice includes cohesiveness of the disciplines including reflecting on and developing ways of practicing that provides an integrated and cohesive answer to the needs of the patient. This situation involves the disciplines coordinating and planning education which unifies values, knowledge and collaborative practice competencies before congregating on the patient as interprofessional teams [16].

Multi-professional education, another term which seems interchangeable with multidisciplinary education, refers to occasions when two or more professions learn side by side for whatever reason [17]. The same authors further state that IPE is a

subset of multi-professional education.

Antecedents Traditionally IPE is preceded by issues related to patient safety and quality of care. Furthermore, workforce shortages contribute to the lack of collaborative practice, lack of patient-centred care, and lack of knowledge related to professional roles in health care. In order for IPE to occur, there must be willingness on the part of all health care professionals to change the way they educate and practice. This requires shifts in tradition, education, and practice which will ultimately result in changing the current health care paradigm [18].

Parsell and Bligh identify, from theories and practical applications, the characteristics and conditions needed in order to achieve positive outcomes for interprofessional learning. These are grouped into four key dimensions: relationships between different professional groups (values and beliefs that people hold); collaboration and teamwork (knowledge and skills needed); roles and responsibilities (what people actually do), and benefits to patients, professional practice and personal growth (what actually happens).

Consequences of IPE: One of the many definitions of consequence given by the Merriam Webster dictionary is “something produced by a cause or necessarily following from a set of conditions”. Consequences of IPE therefore refers to the actions that follow the process of IPE. [13], cite interprofessional learning as the most important and direct consequence of the process of IPE. Students trained in an IPE approach have better interprofessional collaborative practice competencies compared to students without an IPE-training. They use effective communication and have improved understanding of professional roles and responsibilities. There is increased mutual respect and trust, and increased job satisfaction. This impact on the graduates has a positive effect on how they later work as interprofessional teams and subsequently enhancing patient outcomes (e.g. lower costs, decreased patient’s length of hospital stay and a reduced number of medical errors) reduces readmission rates [15,19,20]. On the impact of IPE on collaborative practice and patient outcomes, the Institute of Medicine concluded that patients received safer, high quality care when health care professionals worked effectively in a team, communicated productively, and understood each other's roles [21,22].

Discussion

Model case of IPE

A model case of IPE is an exemplary scenario that depicts all its attributes. The following epitomizes the attributes of IPE as outlined above by Olenick et al. [13].

Pharmacy student: I found the lecture very interesting. It all comes together when we discuss the process of communication and how patients perceive us.

Medical student: Oh yes, I also like the way the lecturer made it so practical. I did not realise that sometimes patients struggle to

understand our instructions.

Nursing student: Patients really do struggle especially when we speak fast using terms that they do not understand. Sometimes the information we give is too much.

Pharmacy student: For our project on communication skills, let us identify medical terms and practice how to explain instructions to patients.

Nursing student: Why not use the scenarios that we were given in class? Let us practice those in role play.

Pharmacy student: Fine. I’ll be the patient and I want to see how you will explain blood pressure to a patient in simple vernacular.

Medical student: Oh, that’s what’s done every day, I’ll be the nurse.

Nursing student: Alright, I’ll observe and give you feedback afterwards.

Medical student: Great, we’ll use the feedback to improve and exchange roles afterwards.

In the above case, three students from three different disciplines (nursing, medicine and pharmacy) have attended the same lecture on communication skills. They are actively involved in a discussion of the lecture. The students have voluntarily initiated a social reflection of an experience and this demonstrates key andragogic principles – learner centeredness, motivation and readiness to learn. The reflection experience enables students to learn from one another as they have acquired similar knowledge and need to practice similar skills. The students’ concern is not content- or subject matter-driven and they value each other’s contributions. The students are willing to practice roles other than their own, e.g. the medical student volunteers to play the role of a nurse. This ultimately leads to collaborative patient-centred care for optimal health outcomes.

Contrary case

In a contrary case, there is no semblance of IPE. While all disciplines in the Health Sciences may teach communication skills, it is all done separately. There is no interdisciplinary discussion of content or timetable in class. The practice in the clinical area is also not standard. Medical students will communicate with patients the way they were taught while nurses also approach the same patients with a different communication style. All these health professionals, nurses, doctors and pharmacists interact with patients on a daily basis and an average patient communicates with each one of them several times during their stay in hospital. Since the professionals do not collaborate, their communication is not likely to contribute to better understanding and better patient outcomes.

Borderline case

In a borderline case of IPE, the Health Sciences School has

decided to include IPE in its programmes. The school decides that communication is a generic skill that can be taught to Pharmacy, Nursing and Medical students together in the same lecture. After the lecture, all students go back to their disciplines to discuss and practice further. There is little interaction about the lecture amongst the different students who express their concerns about the application of what they have been taught in class.

Pharmacy student: I found the lecture very interesting but rather long. I feel we, as pharmacists, don't really need to spend so much time talking to patients.

Medical student: Oh yes, I agree. With us, it's really difficult because we have too much work to do. Nurses spend more time with patients so they should focus more on communication.

Nursing student: Patients really do struggle especially when we speak fast using terms that they do not understand. Sometimes the information we give is too much.

Pharmacy student: Yes indeed, especially with some of the instructions for medication. They also can't even pronounce the names of drugs. But well, what can we do, that's how it is?

This scenario is borderline IPE because the students were taught together and this has taken some effort in adjusting timetabling in order to get the students together. However, although the students have an opportunity to discuss the lecture, their thinking is compartmentalized to their disciplines and there is no effort towards complementarity.

Role of faculty

Professional development is necessary because faculty members often are sceptical about the value and benefit of IPE. There may be anxiety about the ability to facilitate diverse groups of interprofessional learners therefore educators need to understand that it's a shared responsibility and feel confident about their knowledge base and the approaches to IPE. Additionally, as faculty members learn to work together to plan, develop, implement, teach, and evaluate courses and student performance, they serve as critical role models to the health professions students in their classes. Faculty members teaching in an interprofessional environment need to have the knowledge, skills, and values to successfully teach in this unique setting. Instead of teaching in a "silo," faculty members will teach side by side with others who they may not know and will need to have the skills to adapt to both their colleagues and student participants. The healthcare system has a historical hierarchy among healthcare professionals that may yield power struggles when planning and teaching an interprofessional curriculum. Although we can assume that faculty members will have pertinent skills and knowledge in teaching, they may not have the skills necessary to perform IPE adequately.

Principles of interprofessional education

In 2001, CAIPE identified seven principles 'to guide the provision and commissioning of interprofessional education (IPE) and to

assist in its development and evaluation'. These principles, which seem to confirm the consequences of IPE, would be a useful model for its evaluation.

CAIPE's vision is that when IPE works well, it:

- improves the quality of care
- focuses on the needs of service users and carers
- involves service users and carers
- encourages professions to learn with, from and about each other
- respects the integrity and contribution of each profession
- enhances practice within professions
- increases professional satisfaction.

Conclusion

The specific goal in IPE is to develop health professionals who leave their training programs as competent collaborative patient-centered practitioners. Students trained using an IPE approach are more likely to become collaborative interprofessional team members who show respect and positive attitudes towards each other and work towards improving patient outcomes. The principles of IPE can be used to evaluate IPE programmes. If these seven exist in a programme then there is a higher chance that the programme being implemented is IPE.

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