Original Research

# Faculty knowledge and skills needs in interprofessional education among faculty at the College of Medicine and Kamuzu College of Nursing, University of Malawi

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## Abstract

**Background**

Undergraduate health professionals' education in Malawi is mostly provided through a uniprofessional approach, even though the World Health Organization (WHO) recommends interprofessional education (IPE) in order to prepare health workers for collaborative practice. Because IPE is not widely practiced in Malawi, faculty may not have the knowledge and skills required for successful IPE implementation.

**Aim**

To explore perceived needs for knowledge and skills related to IPE among faculty in undergraduate health professional programs at the University of Malawi - Kamuzu College of Nursing (KCN) and College of Medicine (COM).

**Design**

A qualitative exploratory descriptive study capturing the perspectives of purposively selected participants was conducted at the University of Malawi KCN and COM. Data were collected through in-depth interviews (n = 16) and focus group interviews (n=20). Data analysis was done using qualitative content analysis.

**Findings**

Faculty perceived the need for being knowledgeable in IPE and understanding its benefits. The need for training in IPE was perceived as key to increasing faculty members' confidence for IPE. Faculty also perceived the need for enhanced skills in interpersonal relationships, communication, and facilitation of learning, conflict resolution, and clinical teaching in order to successfully implement IPE.

**Conclusion**

Faculty perceived the need to be knowledgeable about IPE, its benefits and the need for enhanced skills related to IPE. The need for formal training in IPE was perceived key for successful implementation of IPE. These findings provide information which can help to identify faculty training needs for IPE and to design faculty training activities.

Key words: Interprofessional education, faculty perceptions, IPE skills, qualitative research

## Introduction

The World Health Organization1 recognizes IPE as a strategy that can strengthen health systems and respond to the increasing complexity within the health and social care sectors. IPE occurs when students from two or more professions learn about, from and with each other to enable effective collaborative practice, quality care and improved health outcomes. Evidence has indicated many potential benefits of IPE for faculty members, students, health professionals, and patients.[1–5] IPE promotes " real world" experience and insight for students, promotes input into program development by faculty from different professions, reduces the human resources for health (HRH) crisis in low-resource countries, facilitates task shifting, promotes collaboration and teamwork, increases staff morale, promotes retention of workers, and improves patient safety and outcomes.

Anecdotal reports show that IPE is not well established and there are no formal programs encouraging interprofessional learning in undergraduate health professional programs in Malawi. Most undergraduate programs follow a uniprofessional approaches. With traditional uniprofessional education approaches, educational activities occur only among students within the same profession, in isolation from other professions, and the curriculum content and structure follow strict disciplinary lines.[6,7] This approach leads to strong identification with one's own profession and a corresponding reluctance to engage with other professions. Additionally, the uniprofessional-based education structure is associated with problems such as mismatch of competencies to patient and population needs; poor teamwork; narrow technical focus without broader contextual understanding; persistent gender stratification of professional status; episodic encounters rather than continuous care, and weak leadership to improve health system performance.[1,8,9]

The introduction of IPE in health professional education, requires faculty members to assume new roles in leading or delivering interprofessional curricula.[10] Developing IPE curricula and sustaining IPE is a complex process and careful preparation of instructors for their roles in developing, delivering and evaluating IPE is important.1 Evidence has shown that IPE facilitators must be well trained and possess the necessary knowledge, skills and attitude for effective implementation. Facilitators for IPE learning activities must have a clear understanding and definition of the IPE concept; understanding of key interprofessional principles, how the IPE program is designed and implemented and the understanding of the role other professions in the provision of patient centered care. They also need to have an

understanding of the theory underpinning group dynamics and teaching strategies.[1,11–15] Additionally, skills in facilitating group social interactions, transformational leadership, building relationships, building trust, ,managing conflicts, clinical teaching and effective team communication skills are important for successful implementation of IPE.[11,12,14,15] According to the World Health Organization1 facilitation of learning is an essential skill for an educator to successfully implement IPE. Facilitating learning involves guiding team formation, valuing each profession's unique contribution, asking questions that stimulate critical thinking, providing constructive feedback, and managing any potential conflicts among students[11]. Facilitation enables students to "learn with, from and about each other"[16], and encourages student interaction and group cohesion[11]. However, many faculty members have little or no knowledge and exposure to IPE activities and feel ill-prepared to face the challenges of this curricular innovation .

IPE is a new concept in Malawi. Most faculty members in Malawi were trained in uniprofessional educational systems and learning contexts. As a result of this, many faculty members may have insufficient knowledge and skills to teach using the principles of IPE and may be uncomfortable with this approach. No studies were identified that have been conducted in Malawi about faculty perceptions of the skills needed for IPE. This paper presents findings from a larger study exploring faculty readiness for interprofessional education (IPE) in relation to education of undergraduate health professionals in Malawi. The findings reported here relate to faculty perceptions about needs for IPE knowledge and skills in the training of undergraduate health professionals at the University of Malawi KCN and COM.

## Methods

### *Research Design*

This qualitative exploratory descriptive study was carried out to explore faculty perceptions about needs for IPE knowledge and skills in the training of undergraduate health professionals at the University of Malawi KCN and COM. This study design was appropriate for the study because IPE is a new concept in the education of undergraduate health professionals in Malawi, and no previous studies on IPE in health professional education were identified. The qualitative exploratory descriptive design focuses on exploring perception rather than experience[18,19].

Additionally, the design is based on the assumption that many interpretations of reality exist, and that what is offered is a subjective interpretation strengthened and supported by reference to verbatim quotations from participants[18].

### *Study Setting*

The study took place at two colleges within the University of Malawi: Kamuzu College of Nursing (KCN) and the College of Medicine (COM). These two colleges were chosen because they are the major colleges in the country that provide higher education to health professionals in different disciplines.

### *Sample size and sampling methods*

Purposive sampling was used to recruit a sample of 36 faculty members including 5 deans, 11 department heads, and 20 lecturers from the University of Malawi undergraduate nursing, midwifery, medicine, and pharmacy programs. Sample selection criteria included participants who had knowledge about undergraduate health professional education, no previous experience in using IPE approaches, and at least 2 years of experience in their positions. Participants were invited to participate in the study by face-to face, phone, or email contact to ask if they were willing to participate in the study. The participants were also asked if they had participated in facilitating IPE learning activities before. Only those who said they had no experience were asked to participate in the study. Once the participant agreed to take part in the study, an appointment to conduct in-depth individual interviews was scheduled. Department heads helped to recruit participants for focus group interviews, and to arrange the venue for these interviews.

## Ethical review and approval

The study was reviewed and approved by the University of Malawi College of Medicine Research Ethics Committee (COMREC) (certificate number is P.11/16/2079). Permission to conduct the study was also obtained from the deans of the programs participating in at the study sites. Written consent was obtained from individual participants. To ensure privacy and confidentiality, codes were used on the interview guides instead of participants' names.

### *Data collection*

Data were collected by the researcher through semi-structured individual interviews using a semi-structured interview guide from 16 deans and heads of department. Each participant had one interview session which lasted 45 minutes on average. In addition to in-depth interviews, three focus group discussions using a topic guide were conducted with 20 faculty members. Each focus group lasted 70 minutes on average. The individual and focus group interview guides were in English and were pretested at the KCN to ascertain clarity of the questions. The interviews were recorded digitally and transcribed verbatim. The study was conducted from March 2017 to January 2018.

### *Ensuring rigor*

Trustworthiness was enhanced following the criteria proposed by. 20

To bolster credibility, the researcher spent sufficient time speaking to and building a rapport with the participants during data collection in order to have an in-depth understanding of their views about the needed skills for IPE. Dependability was enhanced by keeping complete and detailed records of all phases of the research process. To enhance confirmability, an audit trail which included raw data, interview transcripts topic guides, methodologic and reflexive notes and drafts of the final report was maintained to allow an independent researcher to draw conclusions about the data. Transferability was enhanced by providing a thick description of the context, study participants and research process to enable other researchers to make their own judgements about the study's relevance for other settings. Audio recording of the interviews, verbatim transcription and excerpts from the participants' narratives helped to bolster authenticity of the research findings.

### *Data Analysis*

Qualitative content analysis was used to analyze data from both in-depth and focus group interviews. Data analysis was done following a step-by-step approach as guided by Krippendorf[21]. The researcher listened to all interviews, transcribed each interview verbatim, and then reviewed each interview transcript text repeatedly in order to gain an

in-depth understanding of the interviews. The researcher generated inductively through an open-coding process, and clustered the codes under categories and sub-categories. The researcher then identified concepts around which data were assembled into blocks and patterns[22,23].

The data analysis involved a rigorous and reflective process of going over every word, phrase, sentence and paragraph in the text to elicit participants' meanings. The process was done repeatedly, starting on different pages of the text each time to increase the stability and reliability. The coded material was condensed into concept domains to further extract the sense of the data[23,24]. Themes, patterns and relationships were then derived from the codes to provide meaning to the codes[22,23].

## Findings

The key findings in this study highlight the perspectives of faculty about knowledge and skills that they perceived are needed for implementing IPE. The findings are presented under the following main themes that emerged: (a) Perceived IPE Knowledge Needs which has two subthemes; "Understanding IPE" and "Training for IPE."(b) Perceived IPE Skills Needs, which has the following subthemes; Interpersonal and communication skills", "Teaching and facilitation Skills," "Information and technology (IT) skills," "Clinical / professional skills," "Conflict resolution skills."

### *Perceived IPE Knowledge Needs*

#### *Understanding IPE*

Participants perceived being knowledgeable about IPE and understanding the benefits of IPE as some of the readiness characteristics relating to academic behaviours and practices that would facilitate readiness for IPE in an individual. One participant said:

*"I would think that being knowledgeable about interprofessional education, accepting that it can happen and being able to understand the benefits of interprofessional education because sometimes if people think that this cannot happen, then that will bar the possibility of implementing interprofessional education,*" (Key informant 13).

#### *Training in IPE*

All participants shared that they were not trained in implementing IPE approaches, and showed a common concern that lack of training in IPE would be a cause of lack of confidence and failure in faculty to implement IPE. Hence, all of them emphasized the need to undergo some sort of formal training in IPE and a transition period that would help them to build confidence.

#### *One participant commented that:*

*"We do have the characteristics in terms of qualifications, work experience, competencies. All we'll need to do is the mentoring or the transition period because we are used to teaching individual disciplines…….. We need to have that transition period of training as faculty…….*" (P7).

### *Perceived IPE Skills Needs*

#### *Interpersonal and Communication Skills*

The findings revealed that good communications skills in form of documentation skills, listening skills, report-writing skills, and presentation skills were frequently mentioned as being important for IPE. Faculty also perceived that they needed to have basic literacy in information communication and technology (ICT). These skills would empower faculty to effectively communicate with students and improve the teaching and learning process. One participant commented:

*"Good interpersonal skills which we normally lack, because how you relate even with the fellow faculty members, with these students who are from various backgrounds also matter a lot as far as education is concerned,*"(P19).

#### *Another faculty member commented:*

*As a faculty member, communication is a very important skill which you should have to be able to articulate issues. Another skill……. something to do with ICT as faculty you should be able to have skills in terms of how you can deliver your teaching materials, or even communicating, group discussions on certain issues using even the social media, can add value to the teaching and learning process,*" (P 6).

Related to this theme other skills were; report writing, reading, listening, presentation, motivational, and counselling skills.

#### *Teaching/Facilitation Skills*

Most participants perceived teaching and facilitating skills as important for faculty readiness for IPE and to have a fruitful discussion with students of diverse professional backgrounds and to teach large groups of students effectively, using various teaching methods. One participant commented:

*"I think facilitation skills, because if you have large groups, you need to know how to facilitate a fruitful discussion so that one would be an important skill to have,"* (Key informant 4).

Participants perceived that faculty must have skills to teach using the following teaching methods to be appropriate for IPE approaches: lecture, ability to facilitate discussions in smaller groups, demonstration and return demonstration, student-centered, problem-based, workshops, coaching, social media, interactive, critical thinking, and innovative methods such as case study. However, some participants felt that teaching methods are the same for the uniprofessional education approaches as well as the interprofessional approaches. One participant explained that:

*"I think the teaching methods are the same, and the way one would teach a nursing student would be similar to a medical student; probably, in undergraduate because I would think most of the education materials would be basic for example anatomy and physiology; so the way you do the lectures, the demonstration would be similar to all the students. So I don't see there would be much of a difference in terms of teaching methodologies,*" (Key informant 6).

Another participant commented:

*"Critical thinking; these days we are talking of problem-based learning; creating scenarios; how do we make scenarios that are relevant to the nurses; that are relevant to clinicians; that are relevant to physiotherapists; that are relevant to pharmacists? So we also need aspects of critical thinking for us to be effective in the delivery of this interprofessional,*" (Key informant 5).

#### *Conflict Resolution Skills*

Conflict resolution and problem-solving skills were perceived as necessary to solve problems that would emerge from dealing with students and professionals of different disciplinary backgrounds. Skills for managing students from diverse professional backgrounds and teamwork were also perceived as needed for IPE. This is what one participant commented:

*"Members of staff should have conflict resolution skills because where you have people from different backgrounds they are bound to have some conflicts so members of staff should develop skills on how to resolve conflicts,"* (Key informant 11).

### *Clinical Skills*

Clinical/professional skills and practical experiences were perceived as important for readiness for IPE to enable the faculty members to have a better understanding of how the clinical area functions and the roles that different professional groups, including students, play in the delivery of patient care. One participant commented:

*"They should have clinical skills; not just the experience of teaching but practical experience,"* (Key informant 16).

## Discussion

IPE is a new concept as regards to the training of undergraduate health professionals in Malawi, as such; there is scanty information about IPE. Thus the findings of this study provide an insight of faculty perceptions about their need for knowledge and skills that would facilitate successful implementation of IPE. The study findings underscore the need for faculty to have knowledge and skills that are necessary for IPE. Faculty perceived the need to have various skills to be important for the successful implementation of IPE. Paramount among the skills were interpersonal and communication skills, teaching and facilitating skills, conflict resolution skills and clinical/professional skills. The study findings also revealed the need for faculty to be knowledgeable about IPE and undergo formal training in IPE. Faculty play a pivotal role in the development of IPE because they are involved in the development and delivery of health professionals curricula[1].The need for faculty to be given opportunity to gain knowledge and skills for effective IPE implementation has been highlighted in the literature[1,11,15,25].

Study revealed that participants perceived the need to understand IPE and to undergo training in IPE. Faculty felt that they needed to be knowledgeable about the IPE concept and the benefits of IPE because this would facilitate the possibility of implementing IPE. Faculty also perceived that undergoing training in IPE would assist them to gain confidence as regards the implementation of IPE, because they are used to teaching students from individual disciplines. These findings are consistent with study findings by Egan-Lee[12] which revealed the need for conceptual clarity of interprofessional terms as many educators initially struggled to understand the core principles underpinning IPE and IPC. It is important that faculty feel confident and secure about their knowledge base of IPE and sure of their ability to facilitate diverse groups of interprofessional learners[26].

Similarly, Derbyshire[11] found that participants perceived the need for developing a clear understanding of IPE principles, theory and policy alongside a good understanding of the IPE curriculum as important for the successful IPE implementation.

The findings of this study also showed that faculty perceived the need for training in IPE so that they learn how to implement this innovative approach in education for healthcare professionals. These findings concur with findings from other studies exploring faculty perceptions of IPE[25,27]. Findings from a study done by Di Prospero and Bhimji-Hewitt[27] indicate that faculty perceived the need for formal IPE facilitation training prior to engaging in interprofessional learning activities to boost their confidence and facilitate the achievement of learning outcomes. Minimal skills in guided discussion as well as interactive teaching made the participants apprehensive and less confident to facilitate IPE learning activities. Similarly, Cant et al[25] found that teacher facilitators of IPE perceived need for applicable training before assuming the role so as to be more proficient in dealing with students who have multiple perspectives, skill levels and expectations. According to World Health Organization1 careful preparation of faculty for their roles in developing, delivering and evaluating IPE is important because for most educators, teaching students how to learn about, from and with each other is a new and challenging experience. Many health professionals had little or no exposure to IPE activities during their own training, and many clinical sites in which faculty oversee training lack robust or explicit examples of interprofessional team-based care[10]. Likewise, Buring et al[26] observed that most faculty members have not been trained to teach before being hired as educators. Instead, they teach in ways similar to how they were taught, learn on the job, and/or grow through faculty development programs. Considering the important roles that faculty members have in implementing IPE, it was necessary that this study be conducted to understand faculty perceived needs for knowledge and skills related to IPE.

In Malawi most faculty members do not specifically undergo formal training to prepare them for their educator roles. Most health professional educators are recruited from different areas of clinical practice, and are often not well-prepared for their educator roles. It is also important to take into consideration that most faculty members were trained using the uniprofessional approach and may have not experienced any interprofessional learning making them not to be familiar with the IPE concept.

Participants also perceived the need to have various skills for the successful implementation of IPE. These findings are consistent with those of other studies exploring academic perceptions of IPE. The need to have facilitation skills was common in these studies[11,17,25]. Cant et al[25] found that faculty felt that successful interprofessional teachers needed to apply specific facilitation skills to bring together students from more than one discipline to engage with each other in a meaningful exchange of knowledge, clinical skills or technical aspects of patient care. Findings by El-Awaisi et al[17] show that faculty perceived the need for having other skills such as organizing and leading IPE activities in addition to facilitating IPE initiatives. Participants felt that these skills would help to enhance their confidence in implementing IPE initiatives across the different health care curricula from the classroom to practice settings. Contrary to the findings of this study Derbyshire[11] reported different categories of skills perceived to be necessary for effective implementation of IPE. The ability to foster an IPE culture and the ability to draw on transformational leadership skills to manage unpredictability, group dynamics, relationships and behaviour skills were perceived as key to effective implementation of IPE. However, these skills were not identified by the participants in this study.

## Conclusion

Faculty members play important roles in designing and implementing IPE programs, and need to have knowledge and skills to enable them implement IPE. This study has highlighted the faculty perceptions about their need for knowledge and skills for IPE. Identifying faculty perceived needs for knowledge and skills for IPE is important because this information can help to identify faculty training needs. However there is need for more studies to be conducted to

assess faculty training needs on knowledge and skills for IPE. The information can be used to design faculty development programs before initiating IPE in Malawi.

## Study Limitations

The main limitation of this study is that data were collected from faculty members teaching undergraduate nursing, midwifery, pharmacy and medical programs from two higher lelearning institutions in Malawi. This entails that perspectives from other health professionals were not included in the study. It should also be noted that other institutions involved in education of undergraduate health professionals were also not part of this study, thus there is need for further studies that can include more institutions that are involved in training of undergraduate health professionals

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