Interprofessional Education Context Analysis of a University in Ghana

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ARTICLE INFO

Article history
Received Sept 19, 2025
Revised Nov 18, 2025
Accepted Dec 15, 2025

Keywords
Interprofessional Education
Interprofessional Collaborative Practice
Context analysis
Health professions education
Curriculum development
Ghana

ABSTRACT

The benefits of interprofessional education, including helping health professionals to develop good interpersonal relations with other professionals, improved acquisition and retention of competencies, improved patient care outcomes, cost-effective care, and improved healthcare professional job satisfaction, outweigh the inputs needed to develop and implement it. The processes for developing and implementing IPE program vary from institution to institution because of the strong influence of the context on IPE program. A context analysis is therefore paramount in developing IPE program. This study presents the findings of a context analysis of a university, using qualitative descriptive research methods supported by semi-structured interviews. A total of 25 participants participated in this study: ten (10) academics, two (2) support staff, and 13 students distributed across six programs were interviewed in this study. We found that facilitators such as an already existing interdisciplinary module across all health professions, the interprofessional nature of the student population, existing collaborative practices, and the availability of resources that can be used for IPE give the university advantages. Meanwhile, challenges such as inadequate personnel, inadequate resources, and lack of IPE policy or program impede the development and implementation of IPE in the university. Leveraging the support of the Africa Interprofessional Education Network and other universities that have implemented the IPE programmed to develop and implement the IPE program will be essential. Finally, regulatory bodies should engage stakeholders in inserting IPE competencies as a require followed by for accredit after professions education programs in Ghana.

I. Introduction

The healthcare needs of the global population are evolving and becoming increasingly complex in response to changing health needs and advancements in healthcare, including the discovery of medicines and vaccines and the development of complex technologies and machinery for managing diseases previously considered incurable. Innovating how the health workforce is educated and trained to meet the evolving demands and complexities of the healthcare system is critical to keeping the system pace with the changing needs of the population. The siloed doctor-medical healthcare model is no longer effective due to numerous weaknesses, including increases in medical negligence and medico-legal claims resulting from poor healthcare services and patient outcomes (Keller, 2024; Kruk et al., 2018; WHO, 2010).

Interprofessional education (IPE) breaks the professional siloes and provides teamwork competencies that equip health professions students for interprofessional. Collaborative practice in their workplace (Guraya & Barr, 2018; Sezgin & Bektas, 2023; Vuurberg et al., 2019; Zenani et al., 2023). Many studies have demonstrated the benefits of interprofessional education, including enhancing health professionals' ability to develop good interpersonal relationships with other professionals, improving the acquisition and retention of competencies, enhancing patient care outcomes, providing cost-effective care, and increasing healthcare professionals' job satisfaction (Carney et al., 2019; Makic & Wald, 2017).

Interprofessional education (IPE) refers to students from two or more health professions learning from and about each other to build competencies that facilitate collaboration in the workforce (WHO, 2010). Although IPE has existed for many years, its development and implementation in health professions education programs have been delayed by unique challenges, regardless of the economic context. Issues such as a lack of leadership, poor stakeholder buy-in, insufficient capacity to develop and

implement curricula, and resource limitations were cited as challenges confronting IPE. Africa, a low-resource continent, has struggled to keep pace with the rest of the world in reaping the dividends of the IPE program (Frenk et al., 2010).

Although IPE methodology papers recommend learning from institutions that have developed and incorporated IPE into their curricula to facilitate the development and implementation of new IPE programs, the methodologies for IPE development and implementation vary from institution to institution due to the strong influence of context. However, the end goal has been the same across all programs to graduate collaborative-ready health professionals. Thus, this study aimed to investigate the facilitators and challenges of developing and implementing an IPE program in a university in Ghana.

II. Method

An exploratory, descriptive qualitative research methodology, supported by semi-structured interviews, was employed to investigate university-specific issues in the Ghanaian context that may hinder or facilitate the introduction of the IPE program. To understand the institutional context, it was necessary to explore it from the perspectives of stakeholders who experience it daily, hence the choice of an exploratory descriptive design.

A. Population and Sampling

The population for this study included academics, administrative and support staff, and students from the University of Ghana. Purposive sampling was used to select the University. The University was chosen because it has an IPE department but no IPE program, indicating a dedicated unit that can be used to implement the IPE program. Within the University, four departments (nursing, medicine, laboratory, and pharmacy) were included in the study. At the same time, a convenient sampling technique was used to recruit staff and students from the selected departments who met the inclusion criteria.

Participants in this study comprised two distinct groups: academic staff and students. Faculty members were eligible for inclusion if they possessed a minimum of five (5) years of teaching experience or had been actively involved in curriculum development processes within their respective departments. This criterion was established to ensure that participating educators had sufficient pedagogical exposure and institutional insight to contribute meaningfully to the study's objectives. In parallel, student participants were selected from the third (3rd), fourth (4th), fifth (5th), and sixth (6th) years of study within the Departments of Nursing, Medicine, Medical Laboratory Science, and Pharmacy. The inclusion of students from these academic levels was intentional, ensuring that all participants had accumulated at least 3 years of academic engagement at the University. This threshold was deemed essential to guarantee that students had adequate experiential knowledge of the institutional learning environment, enabling them to provide informed perspectives relevant to the research inquiry.

B. Data Collection

Participants were contacted by phone to determine the time and venue for the interview at the university premises, after they had consented to participate by signing the informed consent form. On the agreed date, time, and venue, a semi-structured individual interview guide was used to collect data from the participants. The interview guide was developed by the first author and reviewed by the other authors and the ethics review committee members. The data collection tool covered policies, physical resources, program structure, human resources, and existing curriculum issues that may promote or hinder the development or implementation of IPE programs at the University. The tool was pretested with two participants who were excluded from the actual study. The researcher administered individual interviews, ensuring confidentiality and privacy. Participants were interviewed at locations convenient to them. Data collection began on February 1, 2024, and continued until data saturation was achieved with the 25th participant on March 5, 2024.

C. Data Analysis

Qualitative data, in the form of audio recordings obtained from semi-structured individual interviews, were analyzed using the six-step thematic analysis technique with the aid of Atlas.ti version 24.1 (Braun & Clarke, 2013). The audio recordings were transcribed verbatim by the first author; the authors got acquainted with the data by repeatedly reading the transcripts. The first author and a co-coder coded three transcripts, and a meeting was held between the co-coder and the research team to compare the codes and reach a consensus on a coding system. The first author then recoded all the transcripts using the agreed coding system with the aid of Atlas. ti version 24.1. All the similar codes were grouped as sub-themes. Similar sub-themes were grouped into themes and described (Braun & Clarke, 2013). At the 25th transcript, there was no new idea that provided significant insight to change the findings.

III. Results and Discussion

The themes and sub-themes are presented as follows. Tables 1 and 2 indicate the demographic information of participants in the university. A total of 25 participants took part in this study: ten (10) academics, two (2) support staff and 13 students distributed across six programmed (Bachelor of Medicine, Bachelor of Surgery, Doctor of Pharmacy, Bachelor of Science in Nursing, Bachelor of Science in Midwifery, Bachelor of Science in preventive Nursing, and Doctor of Biomedical Sciences) were

interviewed in this study. Out of the 13 students who participated, most were female (54%); the others were at the medical level 400 (23%), nursing level 300 (30.7%), pharmacy level 500 (7%), pharmacy level 300 (15%), or medical laboratory level 400 (23 %).

Table 1. Demographic information of staff

No.	Staff	Gender	Department	Years of experience
	OOIRS	M	HPE and Innovation	6
	010SK	F	HPE and Innovation	2
	017DS	M	Nursing & Midwifery	5
	018MB	M	Biomedical Sciences	5
	019AD	M	Biomedical Sciences	6
	002AJ	M	General Nursing	6
	020DN	M	Biomedical Sciences	5
	003RN	F	Nursing & Midwifery	7
	009MA	M	Pharmacy	5
	005GD	M	Preventive Nursing	4
	025YA	M	Biomedical Sciences	7
	026NA	M	School of Medicine	5

Table 2. Demographic information of students

Student	Gender	Level	Programme
011Nl	M	500	Doctor of Pharmacy
012OS	M	400	Doctor Medical Laboratory Sciences
013KE	M	300	Doctor of Pharmacy
014ME	F	400	Doctor Medical Laboratory Sciences
015DD	F	400	Doctor Medical Laboratory Sciences
016SK	F	300	Nursing & Midwifery
007DY	F	300	Nursing & Midwifery
008SI	F	300	Nursing & Midwifery
006AD	M	400	School of Medicine
0230K	M	400	School of Medicine
022DB	M	400	School of Medicine
021PA	F	300	Doctor of Pharmacy
024AH	F	300	Nursing & Midwifery

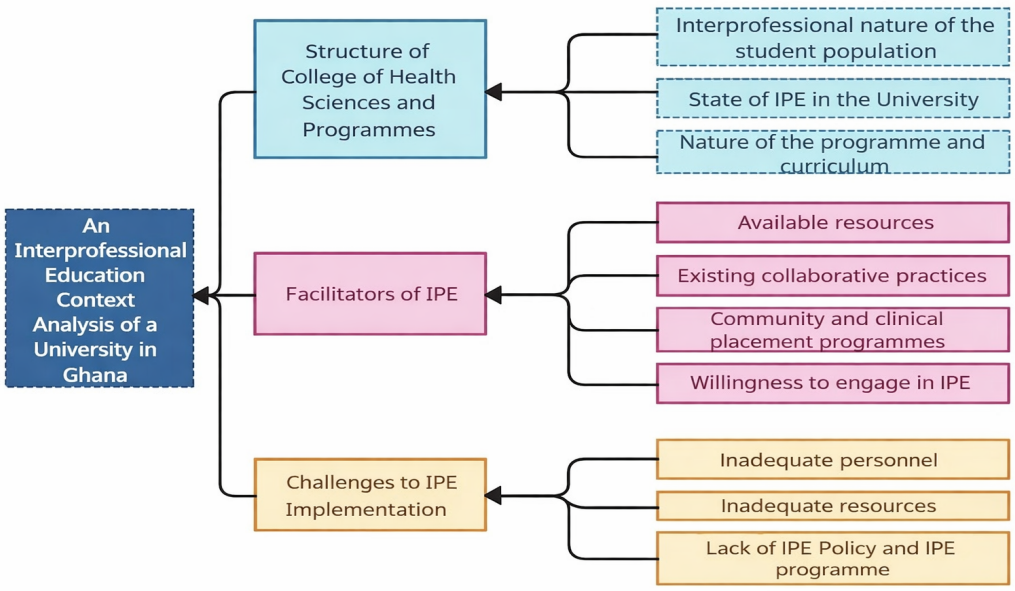

Fig. 1. Structure of Schools and programmes

Although the University has three campuses, the health science programs are centralized on one campus. All health professions students use the same clinical training facilities for their clinical placements, which serve as a learning and role-taking experience. This could allow students from all health science programs to interact sufficiently in class and clinical settings. Similarly, despite the schools hosting the health science program, the programs are administered separately.

A. State of Interprofessional Education in the University

Although there were programs and learning activities in which students interacted to varying degrees, especially during the Third Trimester Field Practical Program (TTFPP), IPE had not received the proper attention. There were no planned teaching and learning activities to ensure students learn from, with, and about each other. Neither were there any evaluative mechanisms designed to assess the IPE competencies. Additionally, the study participants

reported that there were no known IPE policies to guide the training of health profession students at the University. However, there was evidence that IPE concepts, such as teamwork, were embedded in some courses in the curriculum. There were no deliberate efforts to incorporate IPE into the curriculum.

'But it [IPE] is not an intentionally designed programme for the students to have that interprofessional relationship' (009MA).

'But then in terms of policy-wise, I have not encountered any policy that seeks to promote IPE' (017DS).

'So, we have specific topics that take care of that. For instance, therapeutic communication, as I mentioned, involves topics such as teamwork (004GD).

B. Interprofessional nature of the student population

The University admits many students each year to various health professions programs. These include Doctor of Pharmacy, Laboratory Science, Medicine, Nursing, Nutrition, Dietetics, Medical Imaging, and Midwifery. Since there are more than one program, they meet the requirements for IPE and offer a range of health professions to promote IPE and collaborative practice.

'...So, we have medical imaging, Nutritional Sciences, Dietetics, Pharmacy, and Medical Laboratory Sciences... We have the School of Nursing and Midwifery, so nursing and then midwifery as a programme' (018MB).

'All these programmes are run in isolation and independently of each other. Students are trained separately because the training durations differ from programme to programme. Pharmacy also has 6 years of experience in medicine and a Doctor of Laboratory Science (PharmD). The four years are nursing, community nutrition, and radiotherapy (020DN).

C. Nature of the programme and curriculum

The study participants stated that the university operates on a trimester system. Each trimester lasts about 13 weeks and is divided into blocks for some programs. Students from various programs attend lectures separately and have dedicated simulation laboratories for skills training, although these facilities are sometimes shared. Clinical rotation activities are also organized. Additionally, the university has opportunities to support the implementation of an IPE program. The participants indicated that various health professionals share campus facilities, including laboratories, lecture halls, accommodations, and the library. These shared spaces foster ongoing conversations and allow gathering at any time. Student groups meet in the hospital at the same time.

'But the trimester is made up of about 13 weeks. Moreover, within the 13 weeks, they will divide it into blocks for each medical student to do a particular course for each block (006AD).

'Yes. So, they usually go alone. However, because it is a university policy, in the third trimester, if you are in the clinical years, all of you will go to hospitals, and you could meet each other (025YA).

'But currently, as we speak, we are operating independently or separately. We have these isolated curricula for each department (017DS).

The university's curricula, however, undergo periodic reviews by the University and national accreditation and regulatory bodies to ensure they conform to the standards. It is understood that having IPE is not a criterion for certification.

'They may give two years accreditation and then three years, and then later they come to assess, and then if they are needed for reviews and amendments of some things in the curriculum, they recommend' (010SK).

D. Theme 2: Facilitators of Interprofessional Education

The University provides a supportive environment for developing the IPE program, offering opportunities to support its growth and implementation. These opportunities include available resources such as classrooms, boardrooms, and clinical skills labs, existing collaborative practices, community and clinical placement programs, and a willingness to participate in IPE.

'And looking through, yes, opportunity for interprofessional education, yes, they are there' (017DS).

E. Available Resources

The data collected indicated that the University had sufficient space, including classrooms and laboratories. Fortunately, a department was clearly established to oversee education-related programs for health professions. Such a department could easily assume the IPE program as done elsewhere. The existence of this department could facilitate the implementation of an IPE program in the institution.

'But now we have a place to contain all the groups. So, I can say the physical aspect is handled (001RS).

'So, as you identified, our department is the only department in the school of medicine that [health professions education and innovation] … So, if such a programme is going to be run, it would have to maybe fall on this department'. (010SK).

Additionally, the university had the potential to support the implementation of an IPE program. The participants indicated that various health professionals share campus facilities, including laboratories, lecture rooms, accommodations, and a library. They provided space for ongoing conversations and allowed for meetings at any time.

'Okay, yes, for the laboratory for the PharmD students, and then the medical students, we sometimes share the same lab for microbiology. Yes, we share the same microbiology lab (013KE).

F. Existing collaborative practices

Participants indicated that collaborative practices existed among both lecturers and students, although this collaboration was not consciously planned as IPE. Lecturers move from one department to another to teach students. Students on a clinical rotation were expected to participate in ward rounds with other facility health professionals.

'Because, as I said earlier, even within the Doctor of Medical Laboratory programme, … You have a lecturer coming from a different school to come and teach. So, that means there is a form of collaboration. The only thing missing is that you do not have the laboratory students sitting with the pharmacy students in one class.'(018MB).

'…So, it [Doctor of Medical Laboratory] is also a six-year programme, just like the Doctor of Pharmacy and medicine. As part of the component of the programme, they are also to do ward rounds during clinical attachment' (025YA).

It was revealed that there were standard courses mandatory for all health professions students, providing a platform for students to interact and learn from one another. Communication skills and information and communication technology were among the courses participants indicated were compulsory for all students in the health professions department.

'Yes. We take the same courses as other programme students, nursing students, laboratory students, and nutrition students… Those programmes are communication skills… information, and communication technology, ICT. (022DB).

G. Community and clinical placement programmes

In the third trimester of each year, students in nursing, pharmacy, medicine, laboratory technology, and nutrition are organized into groups and sent to either the community or the hospital for experiential learning. This mandatory program for all university students is called the 'Third Trimester Field Practical Program.' Students also participate in intra-trimester clinical activities during the first and second trimesters. Participants reported that during their work-integrated learning, they apply what they are taught in real-life clinical and community settings to prepare for the job market; although not explicitly designed as IPE programs, they are expected to interact with each other.

'Yeah, so we do intra-trimester clinical…so within the trimester, they have one or a two-week block for the clinical…'. (002AJ).

'…So, in this case, students from medical laboratories, nursing students, medical students, and pharmaceutical students come together to go to rural areas to stay with the people for some time and get to know them. So that is the only time I know we get to interact' (015DD).

H. Willingness to engage in Interprofessional Education

The participants were excited about developing and implementing an IPE program at their institution. Both staff and students expressed willingness to adopt an IPE program if it were introduced. Participants noted that they had readily available human resources to introduce IPE concepts to students, as some staff members have supported collaborative practice in their teaching. The students also expressed their readiness, believing it would prepare them for practice.

'... we are prepared because even for me, I teach that [collaboration] any time I am lecturing. That is part of the thing that I let them know that you do not work in isolation (019AD)

'Actually, we are very prepared for that. If only it comes. Because it will help the profession, we are prepared as students.' (024AH).

I. Theme 3: Challenges to IPE implementation

Participants cited insufficient staff and a lack of resources as institutional challenges that could hinder the University's development and implementation of the IPE program.

J. Inadequate personnel

Participants stated that the University lacked sufficient lecturers and staff to promote IPE. The participants also noted that the few staff and lecturers from various professions might be boxed into their professional silos and hold a sense of professional superiority, which could lead to the failure of the IPE program.

'Our staff strength is not adequate. We have 31 staff members, which is against a student population 7,000. So, there is a hooping gap' (017DS).

'For the lecturers, I would not say that we have enough' (013KE)

'The challenges that can hinder the programme [IPE] is that first, I will classify it as personal interests' (017DS).

K. Inadequate resources

The training of health professions students at the University is constrained by the limited resources during the preclinical and clinical teaching periods. Preclinical teaching is usually done at the University. The participants reported poor infrastructure, with insufficient lecture halls and those available being too small to accommodate the large number of students at the University. Additionally,

there was an inadequate supply of furniture to support staff and students in teaching and learning activities. Students are usually sent to various clinical sites for experiential learning. However, the number of sites was insufficient, resulting in congestion at the clinical sites. For IPE to be implemented, some resource injections will be needed. These may hinder the implementation of the IPE program, thereby contributing to the current workload.

'…the number one challenge I think we would have is with the resources' (020DN).

'Yes. So, to answer that, the preclinical school does not have enough facilities to accommodate all students in one room for lectures at the same time (022DB).

'…Moreover, chairs are not there. You can go; some students will stand for two or four hours. There will not be chairs (008SI).

Participants in the study reported that the infrastructure was inadequate, adding that such infrastructure would be necessary if IPE were to flourish. Others agreed that the required infrastructure was available, but it needed improvement. Some also felt that new facilities should be established altogether.

'Even without IPE, the resources are not adequate. If we must implement IPE, I suggest getting new facilities (0120S). So, I think the physical infrastructure can be improved (006AD).

'No. For human resources, that is a no-no. Moreover, for that one, I think we would need a human resource (021PA).

During clinical teaching, it was reported that there were inadequate skills laboratories to facilitate the training of healthcare professionals. The few available skill laboratories were also poorly equipped for their purpose.

'The clinical sites that we have available within the Tamale metropolis, the physical sites that we have available that we use for our training, are inadequate' (009MA).

'…and also, the clinical sites too, they can go, and they will be choked at one hospital because UDS is bringing midwifery students, other nursing trainees also come in for clinical, so the clinical site is choked' (014ME).

L. Lack of IPE Policy and IPE Program

The University lacked policies or guidelines on interprofessional education and collaborative practice. To support the development, implementation, and assessment of the impact of IPE programs at the University, a formal policy is necessary. Participants expressed a need to increase stakeholders' awareness of IPE's benefits. Additionally, approval from professional regulatory bodies would be needed.

'You see, there should be a policy direction. It must be a policy in the university (026NA). 'So, one of the challenges is how best the professional bodies or the licensure or the licensing regulatory bodies would be able to infuse it and accept it?' (026NA).

Further, the participants intimated that there was a need to train personnel to promote IPE within the institution and to develop an IPE curriculum that would include a completely new IPE course. Others thought IPE concepts could be incorporated into existing courses.

'I think the curriculum should be revised so that we can at least restructure it and know where to place IPE' (006AD).

'I think they should put IPE in the existing courses' (007DY).

This study aimed to explore the facilitators and challenges of developing and implementing an IPE program at a university in Ghana. Sixteen university stakeholders were interviewed, and the results were thematically synthesized.

We found that the structure of the University and the programs it implements provide a conducive environment with opportunities and challenges for the development and implementation of the IPE program within the University. The university context is unique, although it shares general sub-Saharan African characteristics, such as resource limitations, particularly in infrastructure, human resources, and consumables. Context plays a significant role in the development and implementation of IPE (Grand-Guillaume-Perrenoud et al., 2024). This is delineated by the Leicester Model of Interprofessional Education (Anderson & Lennox, 2009; Filies, 2017). Many studies on health professions education curricula are multidimensional and intricately linked to the national and University contexts in which they are implemented (Delawala et al., 2022, 2023; Thistlethwaite, 2012). The health sciences context requires students to acquire profession-specific knowledge prescribed by their regulatory bodies, as well as shared learning, which enhances students' professional and interprofessional skills and prepares them for collaboration in healthcare settings. Adequate attention must be paid to the categories of the health professions students in the institution and the professional requirements in the development of the interprofessional education program development and implementation to ensure that a good balance between the three components is maintained (Anderson & Lennox, 2009; Rodrigues et al. et al., 2023)

We found that the university offers interprofessional education activities within its health professions education program, although there is no formal IPE program. This is because the individual professional standards that influence training curricula require teamwork competencies that health professions students must acquire. Additionally, students are aware that they are

expected to work together in the clinical facilities and clinical practice environment in various ways. Similarly, some educators have stressed that the students must be prepared for collaborative practice. Capitalizing on common interprofessional competencies across individual health professions' curricula to implement formal interprofessional education programs is recommended (Brownie et al., 2023). Unfortunately, there were no regulatory requirements for interprofessional education. Research has found that prescriptions by regulatory bodies for interprofessional education as part of health science curricula have made great strides in the development of IPE globally (Mohammed et al., 2021)

The interdisciplinary TTFPP offers an opportunity to integrate an IPE program into an existing one, rather than developing a new one. Incorporating IPE into existing curricula has been recommended by many studies (Delawala et al., 2023; Mohammed et al., 2021; WHO, 2010), particularly when the institutional context provides the opportunity.

Inadequate human resources, a lack of policy, and insufficient IPE program and resources were the challenges that would confront the successful development and implementation of the IPE program at the University. Jungbauer et al. (2021) Indicated that implementing IPE effectively demands the availability of competent faculty to lead and coordinate interprofessional training programs during the academic calendar. Regrettably, these challenges revealed in this study are not unique to a university in Ghana. Bogosian et al. (2023) Also reported many challenges that saddle sub-Saharan African countries. Key among these challenges is the lack of teaching and learning resources, resulting in inadequate productive capacity among training institutions, insufficient human resources, limited finances, and poor leadership (Bogosian et al., 2023). This presupposes that educators of health professionals and patients must collaborate to address the challenges of implementing IPE effectively in training health professionals who will graduate with collaborative skills to provide high-quality patient care (Song & Nam, 2022).

Leadership efforts are essential to dismantle the existing silos within university training programs, fostering a more collaborative and integrated learning environment. Effective leadership should promote interdisciplinary engagement, encouraging students to learn from, with, and about one another through shared experiences, dialogue, and teamwork. By bridging gaps between departments and disciplines, leaders can cultivate a culture of openness, mutual respect, and collective growth—creating an academic atmosphere where diverse perspectives enrich learning outcomes and prepare students to address complex, real-world challenges collaboratively (Teodorczuk et al., 2016).

Additionally, the participants' willingness and interest in implementing IPE create an enabling environment for IPE to thrive. Thus, during the development of the IPE program, these resources must be considered key factors in sustaining its implementation. The fact that both lecturers and students were prepared to embrace IPE indicates that an IPE program could be successfully implemented if developed. Bridges et al. (2011) outlined the IPE model for Rosalind Franklin University of Medicine. They advocated that to create and implement an IPE program successfully; institutions should secure the commitment of departments and colleges to encourage students to participate in the course.

It is also necessary to engage the university's management to improve infrastructure for the effective implementation of an IPE program. According to Kiguli-Malwadde et al. (2020), IPE can be achieved through local resources as an educational approach for students in health professions. Regrettably, these challenges revealed in this study are not unique to a university in Ghana. Bogosian et al. (2023) Also reported many challenges that confront sub-Saharan African countries. Key among these challenges is the lack of teaching and learning resources, resulting in inadequate productive capacity among training institutions, insufficient human resources, limited finances, and poor leadership (Bogosian et al., 2023). This presupposes that educators of health professionals must collaborate to address patient challenges to the effective implementation of IPE in training health professionals who will graduate with collaborative skills to provide quality care (Song & Nam, 2022).

Limitations

The study examined the contextual factors of a university in Ghana to support the development and implementation of an IPE program. The university is a public institution with a mandate to serve underprivileged communities and emphasizes practical, research-based, and field-oriented training. Therefore, the results presented do not represent all universities in Ghana, particularly private universities. However, other researchers could also utilize the multi-method design employed in this study to analyze the context of different universities, thereby supporting the development and implementation of IPE programs.

IV. Conclusion

The university setting offers numerous opportunities to implement IPE programs. The environment is conducive to IPE, although many challenges remain for developing and executing such programs. It is possible to capitalize on available opportunities to overcome these challenges and establish IPE programs that are crucial to preparing competent, suitable health professionals in Africa. The third-trimester field practical program, which features hands-on activities and clinical work, existing collaborations, motivated staff and students willing to adopt IPE, and accessible classrooms and skill

laboratories, provides a strong foundation for developing an IPE program at the university. Therefore, an IPE program can be integrated into the third-trimester courses, which are mandatory for all students. Supporting this effort with assistance from the Africa Interprofessional Education Network and other universities that have successfully implemented IPE programs will be essential. Finally, regulatory bodies should involve stakeholders in incorporating IPE competencies as a requirement for accrediting health professions education programs in Ghana.

Author Contributions

"Conceptualization, AB, YH, and CDC.; methodology, AB, VM, YH and CDC; software, AB, YH, and CDC.; validation, AB, VM, YH and CDC; formal analysis, AB, VM, YH and CDC; investigation, AB, VM, YH and CDC; resources, AB, VM, YH and CDC; data curation, AB, VM, YH and CDC; writing-original draft preparation, AB, VM, YH and CDC; writing-review and editing, AB, VM, YH and CDC; visualization, AB and CDC.; supervision, VM, YH and CDC; project administration, AB;. All authors have read and agreed to the published version of the manuscript."

Funding

This research received no external funding.

Institutional Review Board Statement

Ethical approval was obtained from the host university's North-West University Health Research Ethics Committee (NWU-00038-23-A1) and from the National E-Research Research Committee of the setting, the Ghana Health Service Ethics Review Committee (GHS-ERC:015/07/23). Approval from the University under study was also obtained.

Informed Consent Statement

Informed consent was obtained from all participants before data collection commenced.

Data Availability Statement

Anonymized transcripts are available upon request.

Acknowledgments

We want to acknowledge Prof Janet Gross and Dr Alhassan Abukari for their support and critical reading.

Conflicts of Interest

The authors have no conflict of interest regarding this study.

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