

Knowledge, Attitudes and Perception of Tutors Towards Inter-Professional Education: A Case Study at Uganda Institute of Allied Health and Management Sciences

Nakayiza Joanittah¹, Isabirye Christopher¹, Muweesi Charles^{1,2}, Drateru Keren Carol¹, Mirembe Rose
Namaganda², Nabaterega Judith³ & Sserwadda Lawrence³

¹ Department of Pedagogical Studies, Health Tutors' College Mulago, Kampala, Uganda

² Faculty of Science and Education, Busitema University, Tororo, Uganda

³ Institute of International and Comparative Education, Zhejiang Normal University, China

Correspondence: Muweesi Charles, Department of Pedagogical Studies, Health Tutors' College Mulago, Kampala, Uganda; Faculty of Science and Education, Busitema University, Tororo, Uganda.

doi:10.56397/RAE.2024.03.01

Abstract

With the increasing acknowledgment of the benefits of interprofessional education in the training of the health workforce, the awareness and attitudes of tutors towards this emerging concept are paramount for effectiveness in bringing out the intended outcomes. This study assessed the knowledge, attitudes and perceptions of tutors towards interprofessional education at the Uganda Institute of Allied Health and Management Sciences. A cross-sectional descriptive mixed study design was adopted and questionnaires were administered to health tutors of the different programs at the Uganda Institute of Allied Health and Management Sciences. Findings revealed that the majority (77.8%), of the tutors lacked knowledge of the concept 63% demonstrated positive attitudes and perceptions towards IPE. It was concluded that despite the tutors' paucity of knowledge of IPE, their attitudes and perceptions are positive, implying that if they got adequate training and facilitation upon IPE and its practices, they would gain awareness and better their confidence in facilitating and supervising training and managing conflicts that would arise during implementation of IPE. It was recommended that the National Council of Higher Education (NCHE) with support from the Ministry of Education and Sports interest themselves in this innovation and offer training to the tutors as IPE is considered in the pipeline for a better healthcare workforce production, capacitation and strengthening.

Keywords: attitudes, inter-professional education, perceptions

1. Introduction

The health workforce which entails health workers like doctors, nurses and allied health professionals is one of the six building blocks of the healthcare system. This block needs strengthening if achieving universal equitable access to quality healthcare is to be achieved (Kithuci, 2022). Therefore, producing healthcare professionals alone isn't enough, but producing those professionals with the right and adequate competencies to respond to the dynamic needs of the population is key (WHO, 2013). How these professionals are trained therefore cannot be ignored as it will determine the kind of health workforce released for practice (Kithuci, 2022).

The WHO (2013) stated that one of the ten recommendations of the Commission on the education of health professionals for the 21st Century is the "promotion of interprofessional and trans-professional education that breaks down professional silos while enhancing collaborative and non-hierarchical relationships in effective teams." According to Byakika et al. (2015), evidence has accumulated to the effect that interprofessional

education (IPE) enables effective collaborative practice which in turn enhances the quality of health-services delivery, strengthens health systems and improves health outcomes. The IPE model brings together students from two or more professions in health during all or part of their training to learn about, from and with each other which leads to the creation of a shared understanding and synergy. IPE aims to equip learners with the knowledge and skills they need to work effectively as part of a healthcare team providing client- or patient-centred healthcare.

In Uganda, the IPE approach has been taken up by health training institutions like the Makerere University College of Health Sciences, through programs like community-based education services (COBES). However limited engagement is noted with the other tertiary health training institutions like the Allied Health training schools (Nawagi, et al., 2023). *Uganda Institute of Allied Health and Management Sciences (UIAHMS)* enrolls students in over twenty-two (22) different professional programs at diploma level, post-basic level and certificate levels, with a school population of an average of one hundred (100) students per program, which is a big contribution to the health workforce, yet IPE training is not implemented. This compelled the researcher to conduct a study on the knowledge, attitudes and perception of the tutors towards IPE and its practices as an already established approach for a more efficient and effective healthcare workforce production and delivery.

1.1 Statement of the Problem

Many educators around the world are prompted to adopt new models for educating health professionals that better reflect on the diseases of the populace they will serve and yet use the available limited resources (Rodgers & Hoffman, 2010). IPE is an important pedagogical approach for preparing these health professionals (Kithuci, 2022). Hinderer et al. (2016) in their study on faculty perceptions, knowledge and attitudes towards IPE and its practices, emphasize that faculty's having adequate knowledge, positive attitudes and perceptions of IPE would create confidence in the tutor to implement, supervise and manage any challenges that would arise during implementation of the competence.

Despite IPE being advocated for by WHO, IOM, CAIPE and other partners as a better way of training health workers, it has not been widely adopted (Kithuci, 2022). Some medical training schools in Uganda, especially at the university level like the Makerere College of Health Sciences are making these changes to teach in teams (Kimera, 2022). However, this is not happening to allied training schools like UIAHMS. These allied training institutions produce several health workers of different professionals for example, according to Emukule (2022), UIAHMS, graduated eight hundred seventy-one health workers from twenty-two programs.

By incorporating IPE in training, the spillover effects of IPE would include improved communication skills, teamwork, collaborative practice at the workplace and eventually producing a well-prepared workforce which would result in improved health services delivery, yet working with the same resources like curriculums (Kithuci, 2022). It's therefore paramount that tutors have knowledge of this approach and possess positive attitudes towards IPE. This study therefore aimed to assess the knowledge, attitudes and perception of tutors towards interprofessional education at the Uganda Institute of Allied Health and Management Sciences.

1.2 Specific Objectives

- 1) To assess tutors' knowledge towards interprofessional education at UIAHMS.
- 2) To examine the tutors' attitudes towards interprofessional education at UIAHMS.
- 3) To determine the tutors' perceptions towards interprofessional education at UIAHMS.

1.3 Research Questions

- 1) What knowledge do the tutors at UIAHMS have towards interprofessional education?
- 2) Which attitudes do tutors at UIAHMS have towards interprofessional education?
- 3) How do tutors at UIAHMS perceive interprofessional education?

2. Literature Review

2.1 Knowledge of Tutors Towards Interprofessional Education

Chitsulo et al. (2021) in their study on faculty knowledge and skill needs on IPE at the College of Medicine and Kamuzu College of Nursing at Malawi University, revealed that faculty's level of awareness, knowledge and understanding of the benefits of IPE, determines readiness to implement the competence. Furthermore, Chitsulo et al. (2021) continue to indicate that in that study, all the tutors shared that they were not trained in implementing IPE approaches, and showed a common concern that a lack of training in IPE, implies a lack of knowledge on competence and 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 build confidence.

Furthermore, Kithuci et al. (2021) conducted a study about the knowledge of faculty on IPE from Jomo Kenyatta public university in Kenya, and the findings revealed that faculty demonstrated good knowledge of IPE with a score of 9.62 \pm 0.2. However, when asked to define IPE, participants misinterpreted IPE to mean shared learning. More was noted from this study that, the participants' school, academic position and expertise level did not significantly influence knowledge. The recommendation from this study was to sensitize faculty on IPE. Similarly, a study conducted by Byakika et al. (2015) on situation analysis of inter-professional education and practice for ethics and professionalism training at Makerere University College of Health Sciences, revealed that tutors were knowledgeable about the concepts and benefits of interprofessional education.

2.2 Attitudes of Tutors Towards Interprofessional Education

An attitude is a mindset or a tendency to act in a particular way due to both an individual's experience and temperament. Typically, while referring to a person's attitude, one tries to explain his or her behaviour. Attitudes are a complex combination of things we tend to call personality, beliefs, values, behaviours and motivations (Pickens, 2016). Hoffman & Redan-Bentley (2017) on a comparison of faculty and students' attitudes towards teamwork and collaboration in interprofessional education at the College of Allied Health Professionals at Western University, USA agreed with Listeri (2018) upon the faculty's attitudes as a great barrier towards interprofessional teamwork and collaboration, he finally recommends understanding of the attitudes of the faculty as an indicator to need for faculty development and training on attitude change for the effective realization of positive outcomes of IPE.

Hinderer et al. (2016) from the University of Salisbury USA, from their study on the faculty perceptions, knowledge and attitudes towards IPE among various allied programs in the three (3) rural campuses revealed that the faculty were willing to engage and learn about IPE as they perceived it as beneficial to teamwork, collaborative practice and could help break professional walls among professionals. All these studies would reveal positive attitudes towards IPE and interprofessional health care teams (IPHCT) among faculty.

According to Kithuci (2022), the study conducted about the attitudes of tutors towards IPE and associated factors among faculty at Jomo Kenyatta Public University in Kenya, revealed that the faculty had overall positive attitudes towards interprofessional education in areas of clinical placements but negative attitudes towards interprofessional education in classroom setting. Behavioural change training and IPE sensitization to avert negative attitudes among faculty were recommended. However, a study conducted in Nigeria by Ajibade et al. (2023) about the teachers' attitudes towards improving inter-professional education and innovative technology at a higher institution of Ekiti State College of Health and Technology emphasized that the teachers' willingness to participate in interprofessional education is closely linked to their attitudes about it, and findings of the study revealed that the attitudes of these teachers of Ekiti college on IPE in academic contexts was negative ($30.82 < 75\%$) in the total attitude score ($121.45 > 75\%$).

Teacher's attitudes were not influenced by their age, gender, academic rank, or level of competence. Teachers with positive opinions toward interprofessional education were more likely to have used it at the college ($P = 0.147$). As a result, while teachers of Ekiti College had a generally positive view of interprofessional education, they had a negative view of subscale 3-interprofessional education in academic contexts. The scholars suggested training in behaviour change and IPE awareness for these teachers to avoid negative attitudes.

2.3 Perception of Tutors Towards Interprofessional Education

Perception is how something is interpreted, understood or regarded. More to that, perception consists of three elements among which is the interpretation of a scenario according to its pros and cons (Pickens, 2016). Dallaghan et al. (2016) in their study on the faculty attitudes about interprofessional education reported that the faculty perceived IPE implementation as possible but likely to be challenged by factors like rigid curriculums of these different programs, hardships in curriculum harmonization, lack of motivation by the faculty, different school schedules and calendars among these different academic programs. In the western Pacific region, a study about the attitudes of medical school deans by Lee et al. (2012) revealed that the faculty perceived IPE positively and further listed factors like rigid school curriculums, insufficient funding of these exercises, knowledge and attitudes gaps of faculty on IPE and its practices, limited time vis-a-vis the expected content to cover and inadequate administration support as barriers to IPE implementation.

Bridges et al. (2011) in the study on interprofessional collaboration and IPE among faculty at the University of Florida and the University of Washington, USA revealed positive IPE and IPEC perceptions among faculty. The faculty further reported spillover benefits on the learners like job satisfaction, better resource utilization in terms of materials and human resources and better understanding of each other hence less rivalry and conflicts at work.

In a nutshell, findings from most of these scholars indicated faculty's lack of knowledge in interprofessional education and minimal faculty involvement in prior training on IPE, but there are noted positive attitudes and perceptions towards IPE competence after analyzing the expected positive impact on healthcare delivery and

comparing with the likely challenges during IPE implementation. However, there is limited literature about the knowledge, attitudes and perceptions of tutors towards IPE from Uganda and allied training schools to be specific.

3. Methodology

A cross-sectional descriptive mixed study design was used whereby only the teaching staff of Uganda Institute of Allied Health and Management Sciences irrespective of their gender who were on the premises during the data collection period were involved in the research. A quota quota-stratified sampling method was used to obtain a sample population of 52 tutors from different programs. Questionnaires of both open and closed-ended questions along with a Likert scale were used to collect qualitative and quantitative data. Permission to conduct the study was sought from the principal tutor of the institute, and research assistants were identified and trained on how to handle the exercise. The questionnaires were pretested by a pilot study at the same institute, and necessary adjustments were made to the final data collection tool. The questionnaires were coded. Each participant freely consented before the exercise and was handled anonymously. The attitudes and perceptions of tutors were the dependent variables in the study while the knowledge and socio-demographics of these tutors were independent variables. Qualitative data obtained was narratively presented while quantitative data was analyzed by the statistical package of social sciences and presented in tables.

4. Findings

4.1 Knowledge of Tutors Towards Interprofessional Education

One of the objectives of this study was to assess the knowledge of tutors at UIAHMS towards interprofessional education. The findings of the study are represented in the table below.

Table 1. Tutors' knowledge towards IPE at the Uganda Institute of Allied Health and Management Sciences

Variables		N	Percentage(%)	N
Have you heard about interprofessional education?	Yes	12	22.2	45
	No	33	61.1	
Where did you get to hear about it	Place of work	7	13	7
	Conference	0	0	
	Training	0	0	
	Media	0	0	
Have you gotten any training about IPE	Yes	7	13.0	49
	No	42	77.8	
Have you engaged in any form of IPE and practices in your training?	Yes	7	13.0	54
	No	47	87.0	

Source: Primary Data.

From the Table above, the largest percentage of tutors had not heard about interprofessional education, 33(61.1%), neither had they gotten any training on IPE, 42 (77.8%) nor had they engaged in any form of IPE in the course of their training, 47(87%). However, of the few tutors who had heard about interprofessional education, 12(22.2%), only seven (7) had gotten training about IPE (13.0%) and had engaged in IPE in the course of their training. It's still these seven (7) tutors who confess getting to know about IPE from their workplaces. This therefore shows that the largest population of tutors at UIAHMS did not know IPE. When the few tutors who had gotten training on IPE were asked how long the training took, all of them didn't specify the duration, however, they were able to comment on what they knew about inter-professional education which included; IPE being a collaborative learning among learners of different professions, IPE being the teaching and learning that helps one to appreciate more of their profession, its abilities and the abilities of these other professions, IPE is the learning that encourages teamwork. Cost effective approach that involves using the available scarce resources like tutors to ensure effective teaching and learning. Most of the respondents commented on IPE as teaching and learning that boosts communication skills and teamwork. A few tutors out of those who stated they knew about IPE confused IPE for multi-professional/interdisciplinary education or core curriculum when they commented that IPE was a form of teaching and learning where learners from one program are taught by tutors of different programs.

4.2 Attitudes of Tutors Towards Interprofessional Education

Another objective of the study was to examine the attitudes of tutors of UIAHMS towards interprofessional education. The findings of the study are represented in the table below.

Table 2. Attitudes of tutors towards IPE at Uganda Institute of Allied Health and Management Sciences

S/N	Variables	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
1.	Interprofessional learning will help students think positively about other health professionals.	29(53.7%)	25(46.3%)	0	0	0
2.	Students in one professional group would benefit more if they engaged in IPE at clinical placement than during classroom sessions.	34(63.0%)	20(37.0%)	0	0	0
3.	Undergraduate healthcare students don't need to learn together.	0	0	17(31.5%)	9(16.7%)	28(51.9%)
4.	Learning with students from other health professionals helps learners to become more effective members of a healthcare team.	20(37.0%)	34(63.0%)	0	0	0
5.	Interprofessional learning will help students to understand their professional limitations.	7(13.0%)	30(55.6%)	17(31.5%)	0	0
6.	Team-working skills are essential for all healthcare students to learn.	21(38.9%)	32(59.3%)	1(1.9%)	0	0
7.	Patients receiving Interprofessional care are more likely than others to be treated as whole persons.	16(29.6%)	21(38.9%)	17(31.5%)	0	0
8.	Interprofessional learning better utilizes resources.	28(51.9%)	17(31.5%)	9(16.7%)	0	0
9.	Students like courses that include students from other academic departments.	11(20.4%)	9(16.7%)	34(63.0%)	0	0
10.	Interprofessional efforts weaken course content.	0	0	9(16.7%)	16(29.6%)	29(53.7%)

From the above table, all respondents agreed that IPE would help students think positively about other health professions, 29(53.7%) strongly agreed yet 25(46.3%) agreed to the above. A big percentage of tutors 34(63.0%) strongly agreed that students in one professional group would benefit more if they engaged in IPE at clinical placement than during classroom sessions. Tutors agreed that learning with students from other health professionals helps learners to become more effective members of a healthcare team and that it not only helps them but also helps students understand their professional limitations, 30(55.6%). The majority of tutors 32(59.3%) agreed that team-working skills are essential for all healthcare students to learn for effective healthcare delivery, and respondents 28(51.9%) also strongly agreed that IPE learning would better utilize the limited educational resources. A big percentage of Tutors 28(51.9%) strongly disagreed that undergraduate health care students don't need to learn together, many respondents 28(53.7%) strongly disagreed that Interprofessional efforts would weaken the course content.

However, a large percentage of Tutors 34(63%) weren't sure whether students liked courses that included students from other academic departments, and some tutors 17(31.5%) were also not sure if undergraduate health care students needed to learn together.

4.3 Perceptions of Tutors at UIAHMS Towards Interprofessional Education

The majority of the tutors 51(94.4%) perceived that interprofessional education is relevant in health training institutions with a few tutors 3(5.6%) who didn't agree with its relevancy unfortunately, none of these few respondents justified their response. When tutors who responded that IPE was relevant to health training institutions, were tasked to justify their responses, many ideas came up among which included; IPE helps to create awareness of specialties other than their own, IPE further helps to utilize the ever-limited education resources like human resource, respondents commented that since education is dynamic, new teaching modalities are necessary and IPE is a new modality. Tutors commented that IPE saves on the costs of revising the curriculum, but rather utilises the available to better effect the content. One respondent also emphasized that "IPE has proven positive outcomes in the few medical schools that are affecting it worldwide, if included in our health training schools, it would do wonders". Tutors were asked about the perceived benefits of interprofessional education and many of their responses were; that IPE results in improved holistic care of patients, boosts teamwork and cooperation among different professionals, IPE leads to improved and focused referral system for patients, and improved efficiency in resource utilization. Respondents further noted improved interprofessional and intra-professional relationships at workplaces, boosted communication skills, enabled development of critical thinking skills amongst learners and eventually led to job satisfaction. When these tutors were further asked about some of the perceived challenges likely to be faced during the implementation of interprofessional education, numerous responses were received as follows; scarcity of resources like funds to hire content experts to train tutors such that IPE can be effectively implemented, IPE being an innovation, there is a big knowledge and attitude gap amongst tutor. More respondents noted that it may be hard to harmonize the curriculum since these different programs have different schedules and calendars. "It may involve revising of the curriculum which is an expensive venture and worst of all when some of these curriculums have just been revised, therefor this may face a lot of resistance from the administrators and the upper hands". "Whenever there is change, there is expected resistance brought about due to lack of experience on the matter, therefor tutors need to be educated and motivated enough for them to embrace the change".

And finally, "Extremely large classes, since these other professions are equally growing in numbers, which would eventually overwhelm the tutors, and effectiveness would be lost".

5. Discussion

5.1 Knowledge of Tutors Towards Interprofessional Education

The tutors' knowledge about IPE was demonstrated to be low since the majority of the respondents had never heard about interprofessional education, nor had they ever experienced any form of IPE in their due course of training. This is contrary to the findings of Kithuci et al. (2021) in their study about the knowledge of faculty on IPE from Jomo Kenyatta public university in Kenya, where the findings revealed that faculty demonstrated good knowledge of IPE. Similarly, findings from this study contradict with findings from a study by Byakika et al. (2015) from the situation analysis of inter-professional education and practice for ethics and professionalism training at Makerere University College of Health Sciences which revealed that tutors were knowledgeable about the IPE concepts.

A recent study from Malawi by Chitsulo et al. (2021) in their study on faculty knowledge and skill needs on IPE at the College of Medicine and Kamazu College of Nursing in Malawi University revealed that that study, tutors shared that they were not trained in implementing IPE approaches, which is in agreement with findings in this study since the majority of the tutors had no prior training on IPE. Some tutors' responses in this study revealed that there is some existing confusion between IPE and interdisciplinary education when tutors explained IPE as a form of training whereby learners from the same profession are taught by tutors from other professions, which is not the case for IPE. Interdisciplinary education is a kind of training currently being practised in allied health training schools like UIAHMS, which implies that these tutors must have been trained under the same training, they are conducting the same training and are confusing this newer innovation, IPE, to the latter. This is in agreement with findings from the study by Kithuci et al. (2021) in a study about the knowledge of faculty on IPE from Jomo Kenyatta public university in Kenya which also revealed a misinterpretation of IPE for shared learning or interdisciplinary education.

5.2 Attitudes of Tutors Towards Interprofessional Education

Surprisingly, despite a lack of adequate knowledge of IPE, these tutors demonstrated positive attitudes towards this innovation, this is evidenced by their strong agreement with seven (7) out of eight (8) positive outcomes of interprofessional education presented on the Likert scale. This is in agreement with Hinderer et al. (2016) who

stressed that the faculty of some of the medical schools in the USA possessed positive attitudes and were willing to engage in IPE after realizing the positive outcomes of IPE. Findings from majority (63%) of the respondents demonstrated a positive attitude towards interprofessional education when conducted in clinical placements than during classroom sessions, this is revealed when they strongly agreed that students in one professional group would benefit most if they engaged in IPE at clinical placement than during classroom sessions, which is in agreement with Kithuci et al. (2022) in the study on integrating interprofessional education in the training of health professionals at Jomo Kenyatta university of agriculture and technology.

5.3 Perception of Tutors Towards Interprofessional Education

The perception of tutors towards IPE was generally positive. Tutors were much more willing to implement interprofessional education upon realizing the positive outcomes attached to this innovation. When tutors were asked about some of these benefits, they responded in agreement with scholars like Bridges et al. (2011) in the study on the interprofessional collaboration and IPE among faculty at the University of Florida and the University of Washington, USA who stated; IPE fosters teamwork and collaboration amongst professionals, leads to improved quality of training and personal development, brings about job satisfaction, enables better resource utilization and leads to reduced medical errors due to improved communication skills.

The majority of respondents after realising the benefits of this innovation, were able to outline the challenges likely to be faced during the implementation of IPE, and their responses were in agreement with Scholars like Dallaghan et al. (2016) in the study about faculty attitudes about interprofessional education at Nebraska medical centre, USA who indicated challenges like rigid curriculum and curriculum harmonization, limited finances and other resources like human capital and infrastructure and knowledge and attitude gaps among tutors. From this study, tutors further stated other perceived challenges during IPE implementation as limited time to conduct IPE activities which is also in agreement with scholars like Lee et al. (2012) in the study about the attitudes of medical school deans toward interprofessional education in Western Pacific Region countries.

6. Conclusion

Tutors at UIAHMS have a paucity of knowledge about interprofessional education but with positive attitudes and perceptions towards interprofessional education. Most of these tutors find IPE relevant to be incorporated into health training institutions and are willing to participate in its implementation.

7. Recommendations

It is recommended that the National Council of Higher Education (NCHE) in conjunction with the Ministry of Education and Sports interest themselves in this new approach, by providing training to these tutors such that slowly this approach is put into practice maybe shortly when it can be fully adopted. Further research on the allied health student's knowledge and perceptions towards IPE is recommended, to boost the limited literature which would eventually inform the responsible bodies on how to effectively implement IPE in these training institutions.

8. Implications

Due to the increasing demand for effective service delivery in the healthcare system, it's no longer enough for health workers to be professionals but also interprofessional, this implies the significance of the health training institutions to adhere to the WHO (2013) recommendation of transforming health profession's education with IPE as one of the thematic areas. Tutors interesting themselves in the knowledge of IPE would bring about competency and confidence in training learners using this approach for effectiveness and ability to manage any challenges likely to arise during IPE implementation.

References

- Bridges, D. R., Davidson, R. A., Odegard, P. S., Maki, I. V., & Tomkowiak, J., (2011). Interprofessional collaboration: Three best practice models of interprofessional education. *Medical Education Online*, 16(1).
- Byakika-Kibwika, P., Kutesa, A., Baingana, R. et al., (2015). A situation analysis of inter-professional education and practice for ethics and professionalism training at Makerere University College of Health Sciences. *BMC Res Notes*, 8, 598.
- Chitsulo CG, Chirwa EM, Wilson L., (2021, April). Faculty knowledge and skills needs in interprofessional education among faculty at the College of Medicine and Kamuzu College of Nursing, University of Malawi. *Malawi Med J.*, 33(Postgraduate Supplementary Iss), 30-34. doi: 10.4314/mmj.v33iS.6. PMID: 35509988; PMCID: PMC9023029.
- Dallaghan, G. L. B., Hoffman, E., Lyden, E., & Bevil, C., (2016). Faculty attitudes about interprofessional education. *Medical Education Online*, 1, 1-6.
- Emukule, F., (2022, December 01). Over 800 graduate from the Uganda Institute of Allied Health and

- Management Sciences. Newvision, pp. 1-2.
- Hinderer, Katherine, Klima, D., Truong, H. A., Rangel, A. G., Brown, V., Talley, W., Dougherty, P., & Joyner, R. L., (2016). Faculty perceptions, knowledge, and attitudes toward interprofessional education and practice. *Journal of Allied Health*, 45(1), e1-e4.
- Hoffman, J., & Redman-Bentley, D., (2017). Comparison of faculty and student attitudes toward teamwork and collaboration in interprofessional education. *Journal of Interprofessional Care*, 26(1), 66-68.
- Kimera, I. D., Wanyina, S., Muddu, M., Bwayo, D., Namusoke-Magongo, E., Sewankambo, N. K., & Semitala, F. C., (2022). Online interprofessional education for in-service health-care providers improved HIV performance indicators at health facilities in Uganda: a targeted training approach. *The Lancet Global Health*, 10, S24.
- Kithuci, R. K., (2022). A model for Integrating Interprofessional Education in the Training of Health Professionals at Jomo Kenyatta University of Agriculture and Technology (Doctoral dissertation, JKUAT-COHES).
- Kithuci, R. K., Makworo, D., Mutisya, A., Simba, J., & Mburugu, P., (2022). Attitudes towards interprofessional education and associated factors among faculty at the college of health sciences in a public university in Kenya: a cross-sectional study. *The Pan African Medical Journal*, 42.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).