Salud, Ciencia y Tecnología. 2023; 3:461
doi: 10.56294/saludcyt2023461

ORIGINAL

Creating a Ground-breaking Interprofessional Education Program for Optimal Healthcare Delivery

Creación de un programa pionero de educación interprofesional para una asistencia sanitaria óptima

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Cite as: Mudhol B, Shahani S, Parveen S. Creating a Ground-breaking Interprofessional Education Program for Optimal Healthcare Delivery. Salud, Ciencia y Tecnología. 2023;3(S1):461. https://doi.org/10.56294/saludcyt2023461

Submitted: 27-05-2023 **Revised:** 30-06-2023 **Accepted:** 05-08-2023 **Published:** 06-08-2023

Editor: Dr. William Castillo-González
Associate Editor: Fasi Ahamad Shaik

ABSTRACT

Critical adjustments are needed in the health professions curricula to produce prepared graduates for the workforce. Our goal was to consider the applicability and use of the interprofessional education program (IPD) design for the Department of Health Sciences at North-West University in South Africa. This research used an ordered multidisciplinary design to create an IPD curriculum for a South African medical faculty. To summarize the global organization, development, and execution processes of IPD programs, a scoping review was done. An examination of IPD programs from institutions across five continents came next. The viewpoints of worldwide specialists on the creation and execution of IPD programs were subsequently investigated in a qualitative study. After that, the setting of universities was examined, and a draft IPD program was developed utilizing the data compiled from all earlier investigations. Faculty members were given the program to review and comment using an insignificant group technique. The IPD program development process was established in ten parts for the scoping study. Through each phase, manual and to-do lists were supplied for the subjective analysis of documents to assist educators in conceptualizing, creating, executing, and reviewing their IPD programs. Four themes were found during the personal exploratory, descriptive design transcript analysis. To prepare for full academic incorporation of the IPD into the teaching staff of Health care programs throughout subsequent development of the health science curricula, a three-year option IPD program was created. The established alternative 3-year IPD program will act as an example of how a credit-bearing IPD doctorate can eventually be incorporated into the academic programs of the Department of Health Sciences.

Keywords: IPD Program Design; Multi-Method; Health Care; Interprofessional Education.

RESUMEN

En los planes de estudio de las profesiones sanitarias se necesitan ajustes críticos para producir graduados preparados para la fuerza laboral. Nuestro objetivo fue considerar la aplicabilidad y el uso del diseño del programa de educación interprofesional (IPD) para el Departamento de Ciencias de la Salud de la Universidad North-West de Sudáfrica. Esta investigación utilizó un diseño multidisciplinar ordenado para crear un plan de estudios IPD para una facultad de medicina sudafricana. Para resumir la organización global, el desarrollo y los procesos de ejecución de los programas IPD, se realizó una revisión del alcance. A continuación se examinaron los programas de DPI de instituciones de los cinco continentes. Posteriormente, se investigaron en un estudio cualitativo los puntos de vista de especialistas de todo el mundo sobre la creación y ejecución de programas de DPI. A continuación, se examinó el entorno de las universidades y se

elaboró un borrador de programa de DPI utilizando los datos recopilados de todas las investigaciones anteriores. Se entregó el programa a los miembros del profesorado para que lo revisaran y comentaran mediante una técnica de grupo insignificante. El proceso de desarrollo del programa IPD se estableció en diez partes para el estudio de alcance. A lo largo de cada fase, se suministraron manuales y listas de tareas para el análisis subjetivo de documentos con el fin de ayudar a los educadores a conceptualizar, crear, ejecutar y revisar sus programas de DPI. Se encontraron cuatro temas durante el análisis de transcripciones de diseño personal exploratorio y descriptivo. Para preparar la plena incorporación académica del IPD en el profesorado de los programas de asistencia sanitaria a lo largo del desarrollo posterior de los planes de estudios de ciencias de la salud, se creó un programa IPD alternativo de tres años. El programa IPD alternativo de tres años establecido actuará como ejemplo de cómo un doctorado IPD con créditos puede eventualmente incorporarse a los programas académicos del Departamento de Ciencias de la Salud.

Palabras clave: Diseño De Programa IPD; Multimétodo; Atención Sanitaria; Educación Interprofesional.

INTRODUCTION

The majority of colleges and universities that have a healthcare profession focus have, up until now, trained students in silos, giving them the expertise and abilities that are unique to that field and essential for their professional practice. However, the ability for interprofessional collaboration, which is necessary for the best medical results, is limited by the isolation of specialized knowledge and skills. Interprofessional education (IPD) is incorporated into health professions courses to enhance patient care and foster stronger professional collaboration. IPD helps reduce medical mistakes when there is a disruption in interaction and cooperation among healthcare providers.[1]

Although there are numerous variations on what IPD is, in this study, an IPD program is restricted to a collection of intercessions and opportunities offered to students in the health professions to help them acquire from, about, and with one another to work effectively in working together healthcare teams for better healthcare outcomes. Giving the highest level of care to individuals, communities, and families is one of the key components of healthcare outcomes, including consolidated healthcare systems, improved satisfaction and security of patients, enhanced work processes and productivity, improved interaction routes, quicker care, and lower associated expenses.[2]

Both doctoral and graduate IPD courses were launched. The essential skills of collaboration and interprofessional training (CIPT) are extensively integrated into IPD along with additional components like moral conduct, collaborative management, and college degree college coursework. IPD concentrates on certain health issues and improving knowledge and abilities at the postgraduate level. Interprofessional skills will be developed through interprofessional knowledge and values during undergraduate and graduate IPD.[3]

Developing an IPD program is complicated because various stakeholder groups must be pleased, and institutional intricacies must be handled without context-dependent frameworks. Most studies on the application of IPD, so it is said, come from industrialized nations. It was revealed that there are restrictions on accessibility and release in poor nations. Barr12 stated that while IPD was evident in some developing nations, it was absent. Additionally, research has shown that IPD programs do not use the same frameworks or content.[4]

IPD programs have been influenced by the environment (institution and community) in which they were created and implemented globally. Additionally, global IPD networks' campaigning has resulted in some responses from organizations, such as the Africa Interprofessional Education Network (AfrIPDN).[5]

The programs for health-related professions need to undergo significant modifications to produce graduates who are prepared for the workforce and possess the requisite knowledge. Three campuses at Northwestern University offer health professions programs: Potchefstroom, Vanderbijlpark, and Mafikeng. The majority of the health professions programs are offered on the Potchefstroom campus. Through active research, social awareness, and moral action, NWU seeks to establish itself as a globally known African institution. This IPD program was created in response to a need at NWU to innovate to make teaching and learning more nationally and internationally recognized.[6]

The repository of information on the variables affecting the effective execution of IPD is enriched findings in this study.[7] It is discussed how the classifications that emerged, both positive and negative, affect the efficient delivery of IPD.

They transmit a novel viewpoint on IPD and healthcare teams that helps us comprehend the context for interprofessional work and how training for healthcare professionals may be changing to meet the demand for a collaborative workforce.[8] A strong IPD program can provide students with the skills they need to practice as collaborative healthcare professionals in the future.

The Interprofessional Socialization and Valuing Scale (ISVS-9) was used before and after the IPD session.[9]

Data from the pre-and post-questionnaires were contrasted equally within and between groups using mixed models with linear regression. Data concerning participant impressions and experiences of the workshop were analyzed using frequency and percentages. Responses submitted as free text were subjected to comprehensive qualitative analysis.

They examined how a ground-breaking inaugural interprofessional education workshop affected interprofessional socialization among medical, nursing, and pharmacy students.[10] According to existing research, assessments from this study support the implementation of interprofessional learning programs for fostering respect and confidence among healthcare students while encouraging collaboration and an understanding of their respective roles and duties as health professionals.

They contributed to the gaps in the literature concerning the function of health educators in basic interprofessional care and the potential difficulties that health education students may encounter when participating in practice-based IPD.[11] The lessons learned from the study can be applied to the design of workshops for interprofessional education to promote collaboration among healthcare professionals, including health educators. The results would also help professionals who want to include practice-based IPD in their educational curricula.

The analyzed data from the semi-structured group interviews using a qualitative content analysis method.[12] A patient who had undergone surgery and was sent home with many medical problems was depicted in the virtual patient case. To explain the duties of various health providers' in-home care, the virtual patient featured text files, short movies, and links. Ten interprofessional groups of 39 students from four distinct study programs—nursing, physiotherapy, occupational therapy, and medicine—assessed the virtual patient.

They investigated the attitudes and views of IPD at a Saudi institution for specialized health sciences.[13] This study is a cross-sectional survey at King Saud bin Abdulaziz University for Health Care and King Abdulaziz Medical City, which are both located in Jeddah, Saudi Arabia. The Nebraska Interprofessional Education Attitudes Scale (NIPDAS) and The Student Perceptions of Interprofessional Clinical Education-Revised (SPICE-R) were two pre-designed, self-assessing surveys utilized in this study. According to the study's findings, collaborative learning should be implemented because learners and healthcare providers view IPD favorably and have been prepared for it. It is advised that IPD be included in the curriculum to enhance cooperation and healthcare results.

The study aimed to understand how the views of oral healthcare students had changed about interprofessional learning and teamwork following a year of employment in a student-run dental clinic (SRDC).[14,15] Improvements in beliefs regarding Interprofessional Education (IPD) during participation in the SRDC were measured using the Readiness for Interprofessional Learning Scale (RIPLS). Dental hygiene students showed a considerably healthier perspective on group projects and communication than dentistry students. If beneficial thoughts affect conduct throughout professional practice, more study is needed.

They discussed creating and actualizing a healthcare ethics IPD course in Germany for medical and nursing students.[16] This study focused on medically challenged people, examining an educational Interprofessional Collaboration Geriatric Case Competition (IGCC) experience. They aimed to evaluate the IGCC participants' overall IPD (Interprofessional Education) experiences and their opinions and understanding of older adult populations. The Facts on Aging Quiz was used to measure knowledge, and the Carolina Opinions on Care of Older Adults (COCOA) survey was utilized to measure views. An experimental, conceptual method was used to investigate the IPD experience's themes. Implementing IPD focusing on medically underserved groups can: improve student learning, impact the standard of care, and open doors to employment with these particular populations.

The evaluation of the planned IPD program in terms of suitability and execution for programs for health-related professions at NWU was the main goal of this study.

METHOD

This IPD software was created using a progressive multi-method research strategy. Within the diverse research paradigm context, an original and adaptable multi-method design combines two or more different research methodologies in a single investigation in a logical, simultaneous, or convergence manner. Creations utilizing several methods are more flexible than mixed-methods approaches to research because they can include one, two, or more study techniques from both constructivist and interpretive standards. The specific research techniques employed in multi-method investigations are independent studies with creatively integrated outcomes. The findings from earlier phases of the study are used as data or tools for the next one in a progressive multi-method design. There were five stages in the design of this multi-method study.

A preliminary examination of the nature, development, and execution procedures of IPD programs internationally was part of phase one. In phase two, materials that analyzed IPD programs overseas were qualitatively analyzed to help institutions conceptualize, execute, and assess their IPD programs. The third phase included an ethnographic interpretive analysis that examined the viewpoints of foreign experts on the creation and execution of IPD programs, as well as the difficulties encountered. The researchers created a draft

IPD program in step four using the findings from phases one, two, and three. In step five, the draft IPD program was examined for suitability and implementation ability by chosen FHS professionals.

Scope assessment

The expanded framework, as provided, served as the guide for the comprehensive assessment, which synthesized the nature, expansion, and execution phases of IPD programs for establishments of educational excellence. The scoping assessment process summarized the amount and variety of information in a research field. Various versions of the terms were used to search the subsidiary of Scopus, Thomson, and Medline databases. 34 studies' data was put on a surface with an information array. Objective integrating was performed on the information before it appeared on the observation array.

Analysis of qualitative documents

In the current part of the study, IPD programs were examined worldwide using the defined qualitative document analysis (QDA) method to help organizations conceptualize, execute, and assess their IPD programs. The QDA is used to evaluate and analyze the material for its depth of meaning and the progress in scientific knowledge to measure or examine documents. Searches were done on institutional websites around the world that have IPD integrated. Utilizing an established list, the openly accessible information was obtained onto an Excel spreadsheet and then subjected to topical content analysis.

Qualitative exploratory, descriptive design

Key informant interviews (KII) were used in the qualitative exploratory, descriptive design to elicit opinions from IPD professionals regarding the execution of IPD programs and the difficulties faced. For this study, specialists were chosen using a purposeful sample method. Sixteen of the specialists agreed to get involved then we spoke with them. With the opinions of the expert's permission, the discussions were audio recorded. The transcriptions of the interviews were written and used using ATLAS. Ti software to systematically analyze the data. The data was initially provided after processing to verify the degree of precision of the documents.

The IPD program's development and evaluation

Triangulation of data

The IPD program was developed by synthesizing the results from all three stages (scoping literature research, QDA, and subjective exploration describing layout). By evaluating sources of information, conclusions, detectives, and methodologies, triangulation strengthens the validity and reliability of study results by guaranteeing that the biases inherent to each technique, detective, data source, or technique of inquiry are examined. In order to confirm the systematic validity of a thorough investigation of a complicated singularity like IPD, it is also required to triangulate the results from several sources and verify their accuracy. After then, the results were contrasted, collected, and interpreted. By examining the uniformity of the data-gathering methods used in the first three phases, credibility was to be established.

Context analysis

The IPD software was positioned into the FHS using situation assessment. The undergraduate health science programs listed in NWU's 2022 Yearbook 17 were examined to identify shared courses into which the IPD program may be implemented. The researcher first identified the programs that will be used. The researcher then created a map of all the programs offered on the university's three separate campuses, showcasing shared components among various undergraduate health science programs run by the FHS in NWU (table 1). Depending on the situation's specifics, it was then decided whether to make the IPD program mandatory or optional.

Table 1. Identical modules among the NWU's many health schools

No.	Common Module	Psychology	Human movement sciences	Physiology	Occupational hygiene	Pharmacy	Social work	Dietetics
1	WVGWM-223	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	PS-322	Yes	No	Yes	No	No	Yes	No
3	PS-321	Yes	Yes	Yes	No	No	Yes	No
4	FLGX-313	Yes	No	Yes	Yes	No	No	No
5	PS-212	Yes	Yes	Yes	No	No	Yes	No
6	PS-111	Yes	Yes	Yes	No	No	Yes	No
7	PS-121	Yes	Yes	Yes	No	No	Yes	No
8	FLGX-113	Yes	No	Yes	Yes	No	No	Yes

https://doi.org/10.56294/saludcyt2023461

9	FLGX-213	Yes	No	Yes	Yes	No	No	Yes
10	PS-311	Yes	No	Yes	No	No	Yes	No
11	FLGX-328	Yes	No	Yes	Yes	No	No	No
12	FLGX-329	Yes	No	Yes	No	No	No	Yes
13	FLGX-224	Yes	No	Yes	No	No	No	Yes
14	PS-221	Yes	Yes	Yes	No	No	Yes	No

Implementing the draft program

The draft IPD program was developed using a progressive multi-method research strategy. The draft was developed using the analysis of context and the combined information from the baseline evaluation, QDA, and KII. Then, carefully chosen FHS employees from NWU were chosen depending on their qualifications to examine the draft IPD program for suitability and implementation ability.

Analyzing the proposed program

The specialists from the NWU's FHS were carefully chosen, and a primary qualitative method was employed to collect solutions and recommendations utilizing the nominal group technique (NGT). Ten experts agreed to take part. However, only eight showed up for the session. The notional group discussion's purpose and the draft IPD program were submitted to the experts for consideration one week prior. A Centre directed the Nominal Group Technique (NGT) for the Centers for Prevention and Control of Diseases document on "gaining confidence among participants through the nominal group technique."

The experts were given some time to consider their opinions and recommendations on each element of the proposed program. The professionals offered their thoughts and provided each option for discussion. Ideas were debated for inclusion or exclusion, and a decision was made by vote. The components of the program provided the analytical framework. Using an orderly evaluation of delighted, the investigator examined the data. The findings were applied to the faculty's initiative's conclusion.

RESULT

Scope assessment

The use of models, theoretical frameworks, and resources was discovered to be how IPD programs were created. After completing the analysis, the researcher created 10 steps for the IPD program development process. These steps included getting institutional buy-in, forming an IPD team, engaging stakeholders in the IPD, learning from other organizations, articulating shared IPD content across various curricula, designing an IPD program or curriculum based on the framework, hypothesis, and ethical standards, sharing the program for donor inputs, finalizing and seeking accreditation/approval for the program, implementing the program, and continuously involving stakeholders in evaluation.

Analysis of qualitative documents

A step-by-step guide and to-do list were supplied to educators for conceptualizing, organizing, carrying out, and reviewing their IPD programs after the data on IPD programs from six institutions was analyzed. We discovered that to secure participation in developing an IPD program, stakeholder and moderator engagement is necessary. Although the nature, breadth, and level of IPD programs vary depending on the environment, they all contain the core IPDC competencies. IPD programs needed to be improved regularly, and there was a pattern with staff and student assessments while there were not enough community reviews.

Design qualitative exploratory descriptive

IPD for higher learning: Staff and student participation, difficulties and prospects, assessment, and quality improvements in IPD programs were the four topics that were found. Some programs required IPD components to be licensed, making staff and students' participation a requirement. The deans of several health schools performed important roles in merging IPD and hiring faculty. The newly hired academics then promoted the program and frequently worked together to create and run the program. The conclusions indicated that the IPDC competencies must be incorporated into IPD activities.

IPD distribution on virtual platforms was considered, and some specialists promoted community-based IPD activities. The difficulties found were categorized as logistical, financial, and human issues. There were opportunities for staff and students to collaborate internationally, share knowledge and resources, for more research and publications, and for individual participation in relevant networks. Additionally, it was advised that impact studies be performed on communities and that teachers and students be evaluated.

IPD program's creation and evaluation

Triangulation of results: it was discovered that IPD was most frequently utilized according to the WHO definition. Idea conception, creation, and dissemination helped a multi-stakeholder partnership—the execution of IPD, which was advertised as an application or a module. The three phases were interconnected by themes including cooperation, IPDC abilities, recreations and investigations, primary medical care roles and duties, teamwork, sharing knowledge, promoting wellness, interaction, the leadership of teams, and IPD theory and research. Activities, including case studies, neighborhood initiatives, world cafe simulations, and cutting-edge games like The Amazing Race, conveyed the ideas. The combined findings highlighted the difficulties in terms of the physical, economic, and human realms. Resources, student involvement, and maintaining student interest were all emphasized.

Analyzing the Context

Programs featured: analysis was conducted using the Department of Healthcare Sciences Graduate 2022 yearbook, NWU's medical profession programs, once the results from each phase had been combined. Based on its results and whether it adequately represented the IPD principle, each program underwent a rigorous analysis. Based on the requirements for inclusion, the researcher disqualified several programs: (a) must demonstrate an IPD idea, concept, or topic; (b) must be at least three years long for proper exposure; and (c) the program must contain a greater number of health modules than programs from non-health institutions. As a result, 14 programs that did not adhere to IPD standards were disqualified.

Cross-campus Initiatives: Bachelor's degree, the only programs provided at the Western Cape Mafikeng and Vanderbilt Park institutions are an Associate of Social Welfare and the Bachelor of Health Sciences with Distinction in Psychologist. The shared degree programs across the educational institutions in the city and the Mafikeng were the Bachelor of Health Sciences with Athletic Training and Human Beings Movement Technologies and the Bachelor of Nursing.

Cross-program modules: all health care programs included a second-year, second-semester WVGWM 223 module (know and comprehend the health world), formerly WVGWM 222, which included certain IPD (interprofessional group work and teamwork) components. Programs for building a draft IPD program had to meet several specifications, including those for IPD abilities, IPD ideas, and patient-centered care. As directed by the supervisory team, the researcher conducted a more thorough analysis of the FHS modules to determine which ones attempted to teach the core IPD.

All programs share IPD ideas. Only WVGWM- 223 is present in all health schools, as shown in Table 1. Only four schools shared individual modules, while one module (PS 121) was shared across five programs. As a result, it is now challenging for IPD inclusion to be implemented into the curricula at NWU due to the current setting. As no consistent module was running throughout the programs, the researcher chose to identify shared IPD thoughts among those chosen programs and then create the IPD program through concepts. Figure 1 displays the interprofessional principles included in the various sections.

Voluntary vs. required IPD program for the NWU. IPD programs were either required by law or not. IPD programs that were made mandatory were mostly used in undergraduate health education. These (goal, target audience, experience, and evaluation) tended to be increasingly official and detailed. IPD programs that are optional may also be implemented, albeit each program’s duration, structure, and schedule may vary. Additionally, employee education and program evaluations might need to be more thorough than mandatory programs.

The researcher concluded that a mandatory program was not appropriate for NWU after learning about the many difficulties that NWU would encounter while intending to establish a mandatory IPD program. The foundation for the decision was the information gathered, the evaluation and summary, and the conclusion that a mandatory program would not be acceptable. The program would run all year long and not be credit-bearing. Students could receive accomplishment documents. It might be made a mandatory module after mass curricula are adopted after it is first introduced as an optional item.

Draft Programes

The IPD program at NWU was planned systematically for the FHS. The program for the conference was designed using the results of the exploratory examination, the QDA, and KII. FHS while carefully evaluating the surroundings. The goal was to use current content to Obtain IPD results creatively rather than adding additional work to the undergraduate health professions courses. The context of NWU led to the development of an optional curriculum. The program was established in three-year segments, with each segment’s content including common concepts, modules representing the ideas involved, the level’s objectives and evaluation standards, suggested IPD activities, and the materials required to carry out those activities.

https://doi.org/10.56294/saludcyt2023461

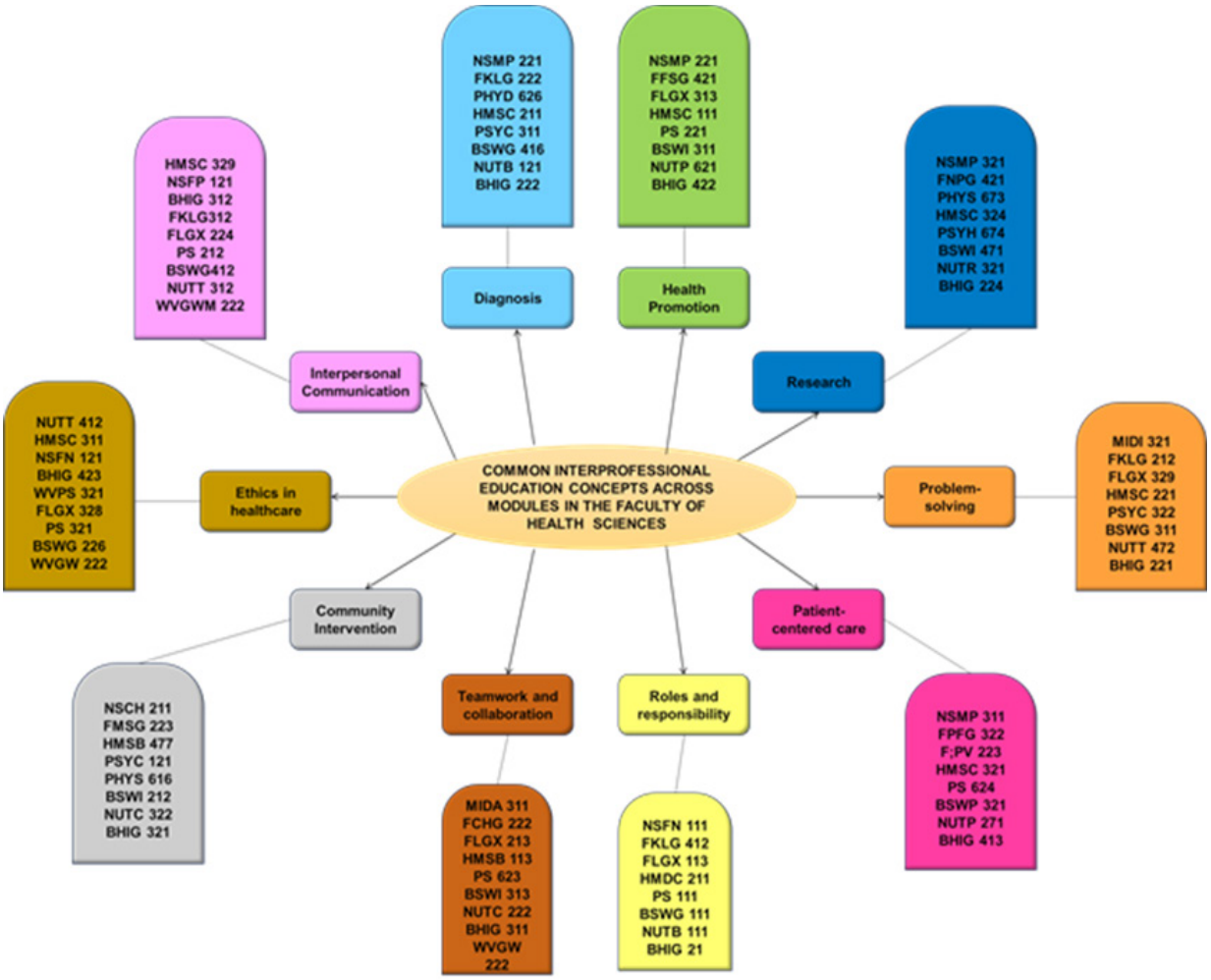

Figure 1. The NWU's health professions courses have been combined to better execute the essential ideas through IPD activities. (Note: SM descriptions are provided for the module codes.)

Programme evaluation

Professionals concurred that smaller-group activities would be preferable based on IPD activities' nature. While smaller groups could participate in person, larger groups (from the three campuses) may find some themes more relevant. Conversations in person would be more productive, analysts concurred. Even still, certain circumstances, such as monetary concerns and difficulties with student transportation, would prevent involvement from all the sectors in several people seated together.

Researchers concurred that before engaging in interprofessional teamwork, students for IPD 1 ought to be instructed in research that comprehends their rehearsal area. For instance, a frequent action for IPD 1 could focus on communication, teaching students about its elements and how to interact with people through communication. Since there was little Student involvement in the fourth year, it would be appropriate to implement IPD at three-year levels. Table S1 in the SM shows that the consequences 'e' and 'f' for IPD 1 were combined, and the outcomes 'g' and assessment 'g' were switched. For IPD 2 and IPD 3, the results and evaluation standards remained the same. The professionals concurred that the additional action should shift. (clinical simulation) to IPD 3 because just One IPD 1 activity (global cafe) received approval. Research, community engagement, and health promotion were among the IPD 2 initiatives. A case study, a clinical simulation, and the Amazing Race were among the IPD 3 activities. The resources stayed the same by the agreed-upon activities. The experts concurred that the IPD unit in charge of the program should choose and approve the number of hours required for each activity.

"I referred to recognize with the steps, but I am not convinced we are in a place to propose a certain amount of hours; I think that will lie with the administrator, particularly since I believe it was (expert 5) who stated the component contributes and program credits, will play a significant role here that we are powerless to influence, so I believe we ought to leave it for them to finalize." - Expert 2

The experts backed involving senior-level employees in the conversations and establishing an awards program, like the institution-wide awards for teaching excellence each year (ITEA), to encourage staff participation.

The program is then administered, and the group of volunteers recruits students. Staff members could also be engaged through IPD symposia or seminars. Authorities favored adopting the Interprofessional Education Collaborative's Fundamental Skills for Multidisciplinary Collaborate Practice and the World Health Organization's Agenda for Action on Multidisciplinary Training and Collaboration Practice to direct IPD policy and legislation.

"If executives and supervisors participate in the conversation, the program's implementation will go well." Expert- 3

Learners could be prompted to sign up for the IPD program on the Educational Information Systems (EIS). The IPD unit, which would oversee the IPD program, agreed with the experts that it must employ resources already available at the institution and may seek funds for transportation and refreshments. The following would be used to build the teaching and learning strategies in the various clusters: Case-focused instruction (CFI), game-based instruction (GBI), problem-oriented learning (POL), and collaboration-based education (CBE). Self-guided learning (SGL) was added because IPD 1 would be theory-based. Professionals chose these assessment methods, highlighting the difficulty in getting student replies. Experts acknowledged the necessity and significance of the program as well as the difficulties associated with its implementation. They also noted that enough data would be needed to demonstrate the program's viability.

"I appreciated the small-group session; it was nice to debate it in this way and get commitment and see various points of view. Excellent good fortune; indeed, it is not easy to implement the IPD, but I think it is very important and we require it, we truly require it, particularly at the Department of health sciences, so good luck." - Expert 7

The program's main goal was to allow students to build interprofessional expertise, abilities, and mindsets through theoretical and practical foundations for Integrated Professional Development and Collaboration Performance (IPDCP). The program had nine ends in mind and separated its 10 concepts into three distinct levels (IPD 1, IPD 2, and IPD 3), each with its own set of results and assessment (for learning) standards. IPD 1 is therefore experienced by first-year students, IPD 2 by pupils in second grade, and IPD 3 by pupils in third-grade students. Interpersonal communication, responsibilities and roles, medical ethics, cooperation and association, and a world teashop activity were all topics covered in IPD 1. Public diagnosis and communal well-being campaigns were included as an activity in IPD 2, including promoting health, conducting research, and engaging the community.

The execution of the program included the people in charge of the program, the laws and regulations that would guide the program, the management and promotion of the program, and the resources for IPDs 1, 2, and 3. The IPD unit in charge of the program would decide how many hours to allot to each activity, and they would then calculate how many hours were required to complete every task. Regular staff and student evaluations are necessary to improve the program and implement the appropriate recommendations.

CONCLUSION

IPD programs were contextualized globally to fit the community's current and local health requirements. In spite of the mandatory (credit-bearing) IPD courses being advised by international agencies, the NWU School of Health Professionals allowed for an alternative curriculum. However, the designed IPD program, which is optional and lasts for three years, acts as a percussion instrument for the eventual inclusion of an IPD program that offers credit into the curriculum for the Department of Medical Sciences. We anticipate additional context-specific issues when the entire execution of the program and suspect the guidance and researchers will be sufficiently encouraged to carry out the program. However, the NWU setting presents possibilities to overcome the typical challenges to the creation and execution of IPD programs. We suggest that other institutions use the methods used in this study to design their programs or modify them for their environment to spread IPD across the African continent.

Finally, to encourage the creation and execution of more IPD programs, regional networks like AfrIPDN need to step up their advocacy efforts on the continent. The continuation of the IPD programs will ensure that professional networks are growing and knowledge has been shared across the African continent.

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FUNDING

No financing.

CONFLICTS OF INTEREST

None.

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https://doi.org/10.56294/saludcyt2023461