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PROPOSED PROTOCOL FOR DEVELOPING AND INTEGRATING COMMUNICATION SKILLS CURRICULA FOR UNDERGRADUATE PROGRAMS AT THE PAPUA NEW GUINEA UNIVERSITY OF MEDICINE AND HEALTH SCIENCES

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ABSTRACT

The University of Papua New Guinea's School of Medicine and Health Sciences (SMHS) is transitioning into a stand-alone university. A new academic program proposed for immediate implementation is the Medical and Health Sciences Foundation Year with Communication Skills as one of the courses. Communication skills is a cross-cutting component taught throughout the undergraduate medical program. Other undergraduate programs are yet to develop communication skills as a core curriculum. This protocol is to guide the development of a core communications curriculum for each program in the PNGUMHS. Experts, stakeholders and faculty, from each program are identified to participate in the curriculum development process which is split into five phases. Phase 1 involves assessment and literature review conducted by faculty to assess current state of communication education in each program. Literature reviews focus on various instruments used in developing, integrating, teaching and assessment, including analysis of existing communication curricula and identifying communication competencies expected of graduates. Phase 2 involves identifying internal and external experts and stakeholders to participate in curriculum development. In Phase 3, information collected is synthesized to develop draft curricula for each program. Phase 4 involves the Delphi technique to make refinements and finalize the curricula. Phase 5 involves implementation and evaluation of each curriculum. The PNG National Human Resources for Health Strategic Plan 2021-2030 has identified, among others, two relevant challenges. 'The competency of health workers not aligned to population and health service needs' and 'curriculum for health professions training is not standardized.' Therefore, the finalized curricula are anticipated to serve as models in achieving competency-based standardized communication skills curricula for each undergraduate program.

Key Words: Communication skills curriculum, undergraduate health programs, core communication curricula, curriculum development process

INTRODUCTION:

The School of Medicine and Health Sciences (SMHS) of the University of Papua New Guinea (UPNG) is the country's leading higher education institution in the education and training of different cadres of health care professionals, - medical laboratory scientists, pharmacists, dental technologists, nurses, and medical doctors. The SMHS is currently in the transition phase to becoming a stand-alone university – The Papua New Guinea University of Medicine and Health Sciences (PNG UMHS). As such, one of the new academic programs proposed for immediate implementation is the Medical and Health Sciences Foundation Year (MHSFY) with Communication Skills as one of the courses. The MHSFY is designed to provide a pathway for students who want to pursue careers in the different health professions. It aims to equip students with the foundational knowledge and skills needed for advanced studies in medicine and other health-related degree programs. Successful completion of the program will allow students to progress to relevant degree programs in the PNG UMHS.

Communication skills is a cross-cutting component that is taught under the Professional Skills Domain (course) of the undergraduate MBBS program unlike the other undergraduate programs.

The communication skills taught are often related to reading and writing skills in which

students apply the skills in writing essays, reading research articles and writing literature reviews, writing research proposals and reports or writing laboratory reports which are also essential skills in health care practice.

However, a review of the literature indicates that there is great importance placed on patient centeredness in health care practice [1, 2]. Patient-centered care necessitates that communication skills be integrated throughout the undergraduate curricula for all health professions programs at all levels and not just at the foundation year level. While foundational communication skills are important, ongoing practice and refinement throughout the curriculum are necessary to address the diverse communication needs of patients and various healthcare settings [1-2].

Hence, the creation of a new Communication and Life Skills course for the new MHSFY program provides an opportunity to develop core communication skills curricula for each undergraduate program. This is a valuable and increasingly recognized opportunity for the new PNG UMHS to contribute in a significant way to the development of well-rounded, competent and compassionate health care professionals.

Furthermore, the new university is expected to meet the national standards for institutional registration that are stipulated in the PNG National Standards for Higher Education

Institutional Registration for PNG Higher Education Institutions, 2024 [3]. The specific standard relevant for this discussion is Standard 6: 'The Institution's Programs, Teaching and Assessment are Adequate to Achieve the Expected Student Learning Outcomes' with special focus on the Curriculum Development Policy [3]. This policy requires higher education institutions to outline comprehensive procedures for the design, review, and revision of academic programs to ensure alignment with the PNG National Qualifications Framework (PNGNQF), stated learning outcomes, industry standards, and emerging trends in the field [3]. The PNGNQF outlines stringent operational procedures for programming and institutional accreditation that the MHSFY program needs to follow [4].

METHODOLOGY

To develop communication curricula for the undergraduate programs, a systematic academic approach and the Delphi technique is used. The Delphi technique is a systematic iterative method for gathering and refining expert opinions to achieve consensus on specific issues [5].

Achieving consensus on communication curricula for the undergraduate programs is vital because it ensures broad agreement among experts on essential communication skills or skills needed by graduates from each health care profession in PNG. Furthermore, involving

experts from each health profession helps create a standardized curriculum that can be adapted and implemented across each program, not only at the new PNG UMHS but also at other higher education institutions offering the same programs. This reduces variability in training and ensures that all students receive a consistent foundation in communication skills. The input of diverse experts from various health professions also ensures that communication curricula are evidence-based, relevant, consistent and collaborative, ultimately contributing to better patient care and improved healthcare outcomes [5 – 7].

The curriculum development process is split into five (5) phases.

Phase 1: Needs assessment and review of literature:

The assessment is to identify gaps in the current curriculum and determine the specific communication skills needed by future health professionals [8, 9]. It involves defining the specific undergraduate programs for which the curriculum is intended, and which health professions will be involved in the curriculum development [10].

A total of 12 undergraduate programs are currently offered by the SMHS [11]. Faculty members will identify areas for improvement and integration of communication skills into their respective programs such as specific

communication competencies expected of graduates, exploring different curriculum models used in integrating communication skills into the curriculum such as horizontal integration (across different courses) and vertical integration (across different years); examining various methods used in assessing communication skills and examining how integrated curricula contribute to the development of well-rounded healthcare professionals with strong interpersonal skills [12 – 14].

Phase 2: Expert and Stakeholder Consultation and Input:

Both internal and external experts and stakeholders are identified and invited to take part in curriculum development. Internal experts and stakeholders include faculty with expertise in teaching communication in healthcare and administrators within the university. External experts and stakeholders include practicing clinicians, practitioners from other health care professions, community members, professional organizations, employers and regulatory bodies such as the PNG Medical Board that approves practitioner licenses. Understanding expert and stakeholder perspectives on communication needs and expectations and using this information to inform curriculum development can ensure that communication curricula are relevant, effective, and prepare students to meet the diverse communication demands of healthcare practice. The stakeholder engagement methods include mainly surveys

and interviews to gather diverse perspectives [15 – 17].

Phase 3: Synthesizing Information obtained from Phases 1 and 2.

The information collected are synthesized to identify the specific communication skills that are most relevant and align them with the learning outcomes for each program; select and adapt teaching methods that are effective in promoting communication skills development; choose assessment methods that are appropriate for evaluating the identified learning outcomes and align them with the chosen teaching strategies and tailor the curriculum to the specific context of each program taking into account the program's goals, resources, and the needs of the students and faculty. An initial draft of the communication curricula is developed for each program, to be further refined after the Delphi study [18, 19].

Phase 4: Delphi Technique:

The Delphi technique is a structured approach that provides a systematic and organized way of gathering and refining expert and stakeholder opinions through multiple rounds.

Expert and Stakeholder Panel Selection:

The same experts and stakeholders from phase 2 are invited again to review their suggested communication competencies that graduates should have acquired upon graduating from each program.

Snowball techniques are also used to ask participants if they know of anyone else with expertise in health communication who could be invited to review the draft competencies and provide more inputs [20 – 23].

Subsequent Rounds (Refinement):

Facilitators analyze the responses and create a summary of key communication competencies and present it to the participants in subsequent rounds to rate or rank the importance of the different competencies, using Likert scales or other quantitative methods. Participants are also given the opportunity to provide further comments and justify their ratings. The process is iterative, with the facilitator providing feedback on the group's responses in each round and refining the competencies based on the consensus or divergence of opinions [20 – 23].

Reaching Consensus or Defining Divergence:

The Delphi technique aims to reach a consensus among experts, but it can also be used to identify and understand divergent opinions. Consensus is typically defined by a pre-determined level of agreement which is 70% or 80% on the competencies.

This study will aim to reach the required level of agreement. However, if consensus is not fully achieved, the process helps to clarify the range of expert and stakeholder opinions on the competencies so they can still be used to inform the design of the curriculum [20 – 23].

Curriculum Design:

The final set of communication competencies, whether representing consensus or a range of views, is used to inform the design of the communication curriculum. The draft curricula developed in phase 3 for each program are reviewed and finalized for implementation.

The main focus areas for review include learning objectives (outcomes), content areas, teaching methods, and assessment strategies. The curricula are then integrated into the respective existing undergraduate programs, ensuring they are aligned with other relevant courses and clinical experiences [20 – 23].

Phase 5: Implementation and On-Going Refinement:

The integrated curricula for each program are implemented and evaluated to determine their effectiveness through ongoing assessment and feedback. The on-going assessment and refinement of the curricula will be done every three to five years based on information collected through the following feedback mechanisms to ensure they remain relevant and effective.

Student feedback: Faculty involved in teaching communication collect and analyze student feedback to identify areas for improvement and ensure the curriculum remains relevant to students' needs [24].

Faculty Input: Faculty members who teach communication skills provide insights into the challenges and successes of the integrated curriculum [25].

Expert and Stakeholder Input: Practicing healthcare professionals, including the experts and stakeholders who participated in the curriculum development process, are invited to provide feedback on the communication skills required in real-world settings. Their input will help align the curriculum with current best practices and address gaps in training.

Incorporating new research findings: New research findings are incorporated and the curriculum adapted to address emerging challenges and communication needs in healthcare [7].

DISCUSSION:

Communication skills of the different cadres of health care professionals can be cultivated and honed through education and training. Communication skills courses can be introduced in undergraduate health education programs and taught through the entire duration of the programs to assess continuous demonstrated improvements in students' communication skills. Internationally, the teaching and assessing of interpersonal and communication skills are now accepted as an integral component of medical and related health education programs [26].

For example, there is widespread acceptance of behavioral sciences and in particular, communication skills as an important component of dental education in the UK, US, Canada and New Zealand. In the United States, communications skills training is an important cornerstone of dental education [27].

In India, most dental schools are reported to have added health communication in their curricula which helps in teaching and assessing competencies in communication skills among dental students [28].

Across Europe, 121 communication experts from 15 professional fields and 16 European countries participated in developing a health professions core communication curriculum (HPCCC) framework for all undergraduate European health care education through a consensus process [7]. This framework is currently used as a guide for teaching communication inter- and multi-professionally in undergraduate education in health care across Europe [7]. These and many similar initiatives undertaken by other countries are often in response to policy directives from either their national governments or international organizations such as the World Health Organization. One such document is the *WHO Global Strategy on Human Resources for Health: Workforce 2030* which emphasizes the critical role of education and training in strengthening the health workforce to meet current and future health system needs [29].

A policy option suggested for WHO member states to consider is the *'adoption of transformative strategies in the scale-up of health worker education'* which requires a coordinated approach to link human resources for health (HRH) planning and education and encourage inter-professional education and collaborative practice [29]. In response to this policy option, Papua New Guinea's National Department of Health (NDOH), an Island WHO member state in the Western Pacific region has developed a national document titled *National Human Resources for Health (HRH) Strategic Plan 2021-2030* [30].

The Plan has six (6) strategic objectives with strategic challenges and proposed interventions clearly outlined for each strategic objective. The strategic objective relevant for this discussion is *objective 5: improve the capacity of the education institutions to produce competent health professions*. This strategic objective focuses on the need to up-scale the production of competent health workforce by adopting a common competency-based education framework to ensure that graduates are fit for practice. It also focuses on improving efficiency in instructional design and teaching, allow implementation across the nation, facilitate curriculum assessment and allow response to change. Among other strategic challenges identified under this strategic objective, two relevant challenges for this discussion are

'competency of health workers not aligned to population and health service needs' and *'curriculum for health professions training are not standardized* [30]. The finalized curricula developed from implementing this proposed protocol are anticipated to serve as models in achieving competency-based standardized communication skills curricula for each undergraduate program at the new PNG UMHS.

CONCLUSION:

A meticulously planned and coordinated collaboration with key experts and stakeholders and the new university in planning, developing, implementing and evaluating health workforce education and training programs ensures that the national standards and procedures are met. Compliance with national policies and procedures ensures quality assurance of the academic programs which in turn guarantees quality educational and training outputs for the local health workforce needs [5].

The proposed protocol assures comprehensiveness of an academic program which is a key factor in attracting students who seek a well-rounded and robust academic experience. It can also attract a diverse and talented faculty, leading to a more vibrant and engaging learning environment. Attracting students and talented faculty are crucial factors in a highly competitive higher education landscape [5].

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