

Review and Development of National Curricula for the Diploma of General Nursing and Certificate for Community Health Worker (CHW) Framework

Brief 3: NDOH Research Baseline Data Collection

Introduction

This brief provides an overview of the impact assessment baseline survey undertaken as part of the *Review and Development of National Curricula for the Diploma of General Nursing and Certificate for Community Health Workers (CHWs)* program funded by the World Health Organisation (WHO) and the Department of Foreign Affairs and Trading (DFAT) in partnership with Papua New Guinea's National Department of Health (NDoH).

The success of the National Curricula Review and Development program is contingent on the use of accurate and relevant baseline data to inform program activities, priorities, and directions. The purpose of the baseline survey was to gather data which would shed light on the effectiveness of the current curriculum, as well as highlight gaps in the skills and knowledge of current students, graduates, supervisors, and educators.



NDOH Researchers from Team Kerema

Data Collection Settings and Schedule

The Impact Assessment Baseline Survey was undertaken in 8 Provincial Health Authority (PHA) provinces in PNG. The provinces selected for the survey were Madang, East Sepik, Western Highlands, Simbu, Gulf, Northern (Oro), East New Britain, and New Ireland.

PHA hospitals, district hospitals, health centres and aid posts were identified as the primary settings within which the survey would be conducted.

The surveys were initiated on the 4th of October 2021 with a week-long trip to East New Britain conducted by Dr. Nina Joseph, registrar of the PNG Nursing Council. This was followed by trips on:

- 8th of October to New Ireland (Dr. Joseph and Mrs. Sulpain Passingan)
- 21st of November to Northern Province/Oro (Dr. Joseph and Mrs. Passingan)
- 21st of November to East Sepik (Dr. Russell Kitau and Dr. Julie Kep)
- 22nd of November to Gulf Province (Ms. Mary Kililo and Ms. Julie Dopsie)
- 31st of January to Madang (Ms. Kililo and Dr. Kitau)
- 31st of January to Mount Hagen/Western Highlands (Ms. Mary Roroi & Mr. Peter Apau)
- 31st of January to Simbu (Dr. Kep & Ms. Dopsie)

While baseline data collection was initially scheduled for completion in December 2021, health, safety, and logistical issues related to the outbreak of COVID-19 and the resulting community lockdown delayed travel to the provinces of East Sepik, Madang, Simbu, and the Western Highlands. However, the 6 researchers from the NDoH overcame these immense difficulties to complete the survey of all 8 provinces by early February 2022. The success of this endeavour owes much to the long-term relationships established between the National PNG staff and the WHO Collaborating Centre at the University of Technology, Sydney (WHO CC UTS). These relationships ensured that there was a constant and open dialogue between key stakeholders. As a result, logistical issues were identified early and mitigated. The capacity of both

teams to respond flexibly to the COVID-19 outbreak meant that they were able to undertake program objectives whilst simultaneously ensuring that local staff were as safe as possible.



NDOH Data collection in East Sepik province

Methods of Data Collection

Different data collection practices and approaches were workshopped in the months leading up to the baseline survey. This process involved writing up and submitting a research proposal to the Medical Research Committee (MRC), developing and piloting questionnaires, analysing the data collected in the pilot study, and evaluating and reworking the questionnaires in light of these assessments. The pilot study was conducted in the NCD Health facilities at Port Moresby General Hospital to test the validity and reliability of the survey tool.

The survey adopted a mixed-methodology approach. It used qualitative and quantitative data collection tools to generate a contextualised understanding of the experience, skills and knowledge of the educators, students, and other subjects collected in the sample. The questions focused on the knowledge, capacity, competency, and experiences of the survey subjects, and more specifically on the strengths and weaknesses of the Diploma of General Nursing (DGN) course and CHW Certificate IV course from the perspective of students and educators. A structured questionnaire of approximately 25 questions generated quantitative data using a Likert Scale format. In addition, qualitative data was generated through the inclusion of an open-ended question at the end of each response asking participants to briefly explain the reason for their rating.

Ethical clearance was sought and granted from the PNG Medical Research Advisory Committee to conduct the survey. Moreover, consent was sought and granted from the eight participating PHA provinces and the responsible church agencies for

NDoH researchers to conduct the survey in their respective settings. Finally, all participants gave their consent before engaging in the survey and all data was fully anonymised prior to analysis.

Survey Sample

The sample size for the study was approximately 200 subjects. The target was to include 50 nurse graduates, 50 CHW graduates, 50 clinical supervisors for nursing graduates, and 50 clinical supervisors for CHW graduates. However, due to the great enthusiasm of graduates and educators to be participating in the research, the sample size generated by the survey increased to 489 participants.

The nurse and CHW graduates included in the sample were those who had graduated between 2015-2020, and are currently employed within one of the 9 surveyed provinces. The clinical supervisors were the senior nurses or CHWs who supervised, mentored, or coached graduates in their professions. Approximately 216 surveys were collected from 5 provinces between October and November 2021. Additional surveys were collected from the remaining provinces in early 2022 once travel recommenced.

Next Steps

A comprehensive analysis of the baseline data is currently being undertaken by the research teams involved in the survey. The baseline analysis will allow researchers to accurately assess the effectiveness in the existing curricula, and to highlight gaps in skills and knowledge for current students, graduates, supervisors, and educators in the CHW and Nursing programs. To better support the most effective usage of the data, WHO CC UTS staff continue to support the NDoH researchers using the research tools to support data visualization and analysis to feed into the Baseline Report. This will inform the program design through evidence-based learning. The analysis of the data is predicted to be completed by March 2022.

The results of the impact assessment baseline analysis will likewise feed into a revised Faculty Development and Educators Needs Assessment Survey to be conducted by the WHO CC UTS and the NDoH research team in partnership with key nursing and CHW institutes in 2022. Together with the baseline analysis, it will provide foundational evidence and knowledge to build quality capacity programs for educators and faculty.