

PROJECT REPORT

Development and implementation of the Bachelor of Nursing (Conversion) course in Vanuatu

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PUBLISHED

18 January 2022 Volume 22 Issue 1

HISTORY

RECEIVED: 24 November 2020

REVISED: 12 October 2021

ACCEPTED: 14 October 2021

CITATION

Townsend L, Lock L, Havery C, Rumsey M, Tasserei J. Development and implementation of the Bachelor of Nursing (Conversion) course in Vanuatu. *Rural and Remote Health* 2022; 22: 6543. <https://doi.org/10.22605/RRH6543>

ETHICS APPROVAL

Ethics not required as it is a description and analysis of the implementation of a program

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ABSTRACT:

Context: Vanuatu, a Pacific Island nation in the Western Pacific region, has to date educated its nurses by diploma program.

Research evidence in developed countries has consistently shown that nurses educated by bachelor degree improve patient health outcomes and reduce hospital length of stay. In seeking to improve health outcomes, the Vanuatu Ministry of Health decided to introduce a new Bachelor of Nursing degree to provide a skilled, safe nursing workforce for the provision of health care to its peoples^{1-3}. The curriculum for this degree was to be developed by Ni-Vanuatu nurse educators with the collaboration of educators from the WHO Collaborating Centre, University of Technology Sydney. However, it was first necessary to upgrade (from diploma to bachelor level) the qualifications of teachers and senior nursing practitioners who would lead the new degree course by introducing a Bachelor of Nursing (Conversion) course.

Issues: In order to design and implement a Bachelor of Nursing (Conversion) course that would be relevant for the educational and

Keywords:

curriculum development, nursing education, nurse educators, nursing workforce, Vanuatu.

healthcare context in Vanuatu and that would meet qualification requirements of the local regulatory bodies, it was essential to build collaborative relationships with key stakeholders in Vanuatu. A second key concern was to design a program that would cater for participants who were working full time, who were not all living in the same physical location, and who had limited access to internet technology and resources. The course also needed to take into account that participants were multilingual, and that English was not their first language.

Lessons learned: Lessons learned included the importance of coming to understand the sociocultural nexus within which this course was developed and implemented, as well as appreciating the constraints that affect nursing education within the Pacific.

FULL ARTICLE:

Context

The development of nursing education within Vanuatu is supported by two of the country's National Sustainable Development Goals outlined in *Vanuatu 2030: The people's plan*¹. First is the goal to 'increase higher education opportunities, including technical and vocational training ...' (Society Pillar 2.5); second, the goal to 'ensure that the population has equitable access to affordable, quality health care ...' (Society Pillar 3.3.1). These goals underpin the national vision of building capacity for healthcare provision through human resource development as laid out in the 2013–2022 strategy of the Secretariat of the Pacific Community Public Health Division². Training healthcare workers is essential for Vanuatu, where the current number in the population of 1.11 per 1000³ is well below the WHO recommended ratio of 2.3 per 1000⁴, or the more recent figure of 4.5 healthcare workers per 1000 of population needed to meet sustainable development goals and universal health coverage⁵⁻¹¹.

As well as increased number of healthcare workers, the preparation of a highly skilled workforce has been shown to be essential to high quality patient care¹²⁻¹⁵. While it is difficult to compare outcomes of hospitalised patients across countries, the level of nursing education has been consistently shown to bear a direct relationship to patient outcomes. As far back as 2003, Aiken and colleagues¹⁶ were able to demonstrate that having nurses educated at bachelor level was directly related to reductions in patient mortality levels, while the recent work of Cho et al¹⁷ demonstrated a positive relationship between bachelor-educated nurses and shorter length of hospital stay for surgical patients, which reduces the cost of healthcare service provision. Both factors are likely to affect satisfaction with, and outcomes of, health care; both relate to the level of nursing education experienced by nurses prior to registration.

Recognising the importance of improving its healthcare provision through a better educated nursing workforce, the Vanuatu Ministry of Health, funded through the Department of Foreign Affairs and Trade, contracted the WHO Collaborating Centre at University of Technology Sydney (CC UTS), in mid-2018, to lead the development and implementation of a Bachelor of Nursing curriculum. The WHO CC UTS has had a long and trusting partnership with Vanuatu

nursing colleagues, many of whom have attended South Pacific Nursing and Midwifery Officer Alliance leadership fellowship programs¹⁸. A fellowship visit by WHO CC UTS to Vanuatu in 2017 highlighted a nursing health workforce crisis and an urgent need to strengthen the quality of nursing education. When the Ministry of Health required the Vanuatu College of Nursing Education (VCNE) to upgrade their Diploma of Nursing to a bachelor degree, contact was made with two senior nursing professors who, supported by the WHO CC UTS team, were engaged to undertake this task. A curriculum development team was established that included representation from the Ministry of Health, the VCNE principal, the Principal Nursing Officer, senior teaching staff, the Vanuatu Qualifications Authority and the course steering committee. It was this team that guided the development and implementation of the Bachelor of Nursing (Conversion) (BN (Con)). This team quickly identified that the lack of bachelor qualifications held by the teaching staff of VCNE would prevent the current diploma-qualified teachers from working with future bachelor degree students. An alternative of first developing a bachelor conversion course and implementing that prior to the development and implementation of a full bachelor degree course in nursing was proposed and accepted by the Ministry of Health and funding agencies.

The course was delivered in Vanuatu's capital city, Port Vila. However, Vanuatu is a remote island economy¹⁹ and, even in the capital city, there is limited infrastructure, with minimal access to online learning platforms, research databases, computers and current textbooks. Furthermore, the content of the program had to cater for a healthcare system spread across numerous islands, many of which have very limited access to healthcare services.

Issues

The first concern was to ensure that the BN (Con) was tailored to the local context and in line with local policies and guidelines, so that any proposed course would meet country standards and requirements. The establishment of the course development team and the longstanding partnership between WHO CC UTS and senior nursing colleagues in Vanuatu enabled opportunities to speak frankly regarding current issues. Throughout the ensuing work, in-country partners, including the Vanuatu Qualifications Authority, were frequently consulted on the development of the BN (Con)

program, including the final course nomenclature, as it expressed intent and structure of the course. Throughout the development and implementation of the BN (Con), country leaders of health services and academic practice, key stakeholders and the funding agency were consulted and informed of progress made. The advice these groups gave was particularly important: the logic for and introduction of the conversion course prior to development and implementation of a 3-year bachelor course for nurses needed to be appropriately contextualised and well understood, and commitment to the development process secured.

The resultant curriculum was a four-component (subject) level 7 course requiring completion of 60 credits earned through participation in 600 learning hours. Although students would need to complete four components, five were initially prepared to give students internal choice of components. Decisions on the most advantageous content for course components were based on evaluation of educational and clinical practice needs and discussions with the key stakeholders. The components focused on nursing practice improvement through the development of safe, skilful management techniques; evaluation of specific clinical decision-making activities through the appraisal and use of research; development and refinement of current teaching/learning approaches; and, because of Vanuatu's history of environmental disasters, nursing care and management in disaster situations. The fifth component, not implemented in 2019, focused on developing learner knowledge of primary health care principles and practice as these relate specifically to the model of healthcare provision across Vanuatu.

Participants in the BN (Con) were selected with input from local stakeholders. Fourteen registered nurses made up the first student group of the course. Eight of the cohort were nurses primarily engaged in teaching activities at the VCNE and six were senior clinicians leading nursing practice in the healthcare institutions of the country.

A further issue was to ensure that the participants could complete the components alongside their regular workloads. The BN (Con) was therefore spread out over a year, with the first implementation taking place over two 15-week semesters in 2019. In-country sessions were timetabled in well-spaced blocks of 4 or 5 days so that participants could continue their regular work outside of the blocks. Block mode also catered for participants who lived outside Port Vila but could travel for intensive study weeks, and it allowed UTS academics to fly in for intensive learning and teaching weeks. In between blocks, participants could prepare and submit assessment pieces. When the sessional academics for each of the components were not in the country, students were supported with their learning through regular email contact.

A further consideration was to design learning and teaching activities that responded to the local context and that catered for multilingual students. Teaching and learning at the VCNE had been traditional teacher-focused approaches, and the deliberate decision to have the enrolled students experience previously unutilised/unknown student-centred learning/teaching methods was adopted. Rather than teach students theories of active and student-centred learning, activities were designed that enabled to students to participate in activities and then reflect on what and how they had learned, and how this way of learning might be applicable in their context. A range of learning modes was adopted

including face-to-face workshops, one-on-one activities, small-group sessions and workshops, independent out-of-class learning, some work-based learning and minimal online activities. To cater for the multilingual cohort, one of the UTS academics was a specialist in academic language and literacy, and learning activities were explicitly included in the teaching and learning component that helped students learn academic reading and writing practices (eg how to read journal articles and write summaries). Students were also provided with individual sessions to help them prepare their assignments because many had not previously completed the types of assignments required in the BN (Con).

In designing learning activities, it was important to work with the minimal teaching and learning resources available to educators in Vanuatu. The classroom had a small projector where slides could be shown, but there was no internet access in the classroom. Instead, in the teaching and learning component, participants engaged in low technology learning activities that only used sticky notes, butcher's paper, scrap paper and printed resources so they could assess whether they could adopt similar strategies in their teaching.

The lack of internet access significantly affected the teaching of the component, Research Evidence for Nursing, where students needed to learn the processes of searching medical databases for research evidence to answer a clinical question that they had designed. For example, internet access for students at VCNE was restricted to the small, one-room library and its immediate surrounds. UTS academics observed the difficulties students faced in searching databases when students needed to crowd into the library space and share computer stations when and where an internet connection was available. The only additional option for students to access internet connections was for them to stand very close to the library with an additional device. Limited funding also meant that it was crucial that the research database used was available free of charge and included the possibility of downloading clinical research papers that answered the clinical questions posed within the subject.

Another example of constraint occurred with the tentative introduction of an electronic management system (Moodle) as a repository for resources and an interactive point of contact for the students in the course. The limited resource budget of the school was a major factor in choice of learning platform because the platform needed to be free. Moodle was not often accessed by learners due to these limitations of access and familiarity. Similar issues have been found across the Pacific as reported in a study conducted by Rumsey and colleagues²⁰. Their findings, and other regional studies on Pacific online learning, recognised that very few opportunities existed for nurses to gain any continuing professional development, partly due to limited internet access. To address the issue of internet access within Vanuatu, electronic resources were provided to students on memory sticks by the WHO CC UTS team. Hard copies that supported learning were also provided.

To ensure that the BN (Con) was meeting students' needs, at the completion of each of the intensive teaching/learning blocks, students completed an evaluation survey consisting of open-ended questions and Likert scale questions. The same survey was used at completion of each in-country block. The component Disaster and Major Incident Management differed to the other three in that it was evaluated once only because the course was presented without a break between input weeks. In total, seven sets of surveys were

collected to evaluate the course. Overall, 97 evaluations were processed. Findings were shared with WHO CC UTS for feedback to the Department of Foreign Affairs and Trade, as the funding agency. Feedback from students consistently showed high levels of learning/knowledge acquisition, interest in and satisfaction with the course.

Having completed the BN (Con), the 14 participants are now in a position to pursue higher level postgraduate qualifications. In 2021, two students successfully enrolled in masters-level courses. The BN (Con) has enabled graduates to look to their next challenge, the commencement of, and teaching in, a 3-year Bachelor of Nursing course written collaboratively by Ni-Vanuatu colleagues, and WHO CC UTS educational advisors plan to begin in 2022.

Lessons learned

A range of lessons was learnt during both the development and first implementation of the BN (Con). The first lesson was that understanding the dominant issues and key processes within

country is crucial and in this case initially led to the request for a B.N. (Con) course development. In order to ensure appropriate project direction, commitment and outcomes, it was essential that positive, collaborative relationships were developed with key stakeholders and other interested groups, and that regular consultations occurred. Part of this consultation process included understanding the processes of course development and accreditation within country to ensure recognition of the qualification.

A second key lesson was to appreciate and respect the needs of the participants, and the constraints within which nursing and nursing education proceeded in Vanuatu. The teaching and learning activities, the assessment tasks and the content all needed to be tailored to the local context to ensure relevance for participants.

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