

Developing a Self-Paced Continuing Training Program for Indigenous Health Workers – Learning Approach¹

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Abstract

Indigenous health workers are considered as main providers of primary health services to our indigenous communities especially in remote and rural areas. This paper explores benefits of supporting Indigenous health workers through health informatics, education and training programs in their practice location and more specifically in the use of a culturally appropriate self-paced CD ROM. It also explores the different learning approaches that will be adapted and their effects on the development of a continuous training program for Indigenous health workers.

The Problem

Indigenous Australian have a higher prevalence of most types of health conditions than non-Indigenous people^{1,2}. They face substantial problems in accessing appropriate primary health care services, due to large distances involved and the cost of logistics involved in transporting people to hospitals or clinics. There is a disproportionate incidence of severe and advanced disease³. Cultural barriers are also regarded as major factor in reduced access of Indigenous Australians to mainstream health services⁴. Lehmann & Sanders suggest that access to and coverage of basic health services to communities be improved through assisting community members to provide certain basic health services to their own communities⁵.

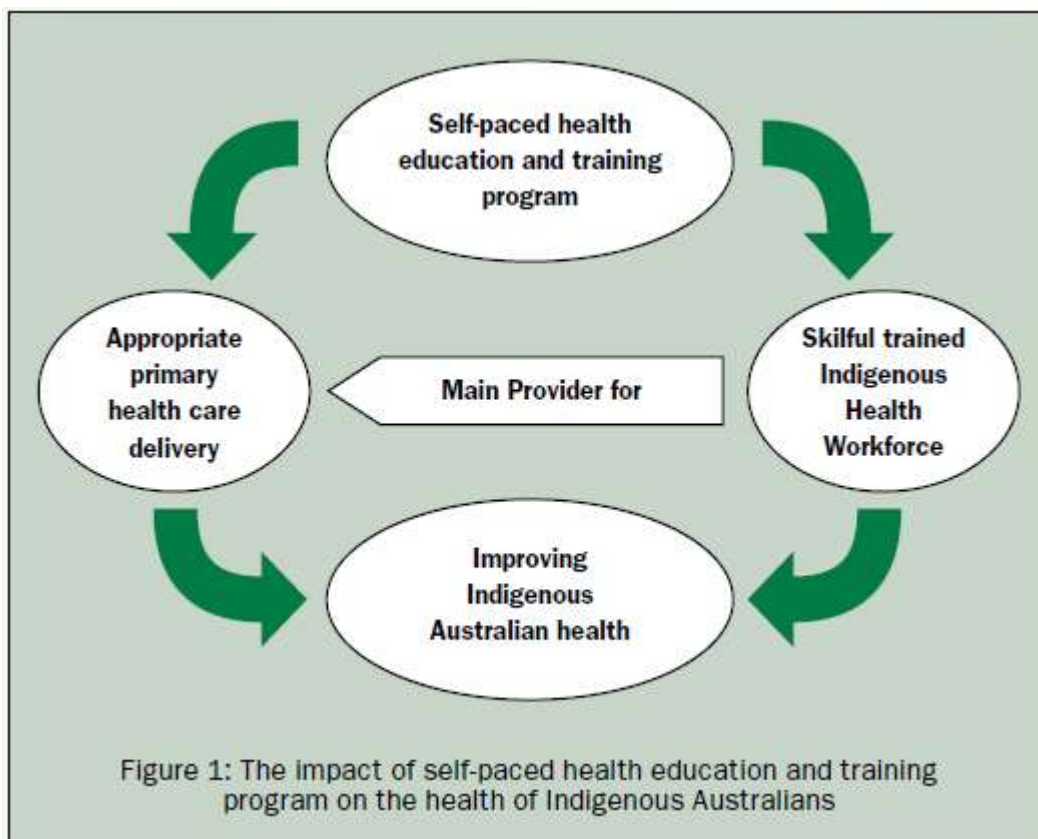
Recognition of the importance of the potential of Indigenous health workers is linked to their close association with, and detailed knowledge of the communities they serve, was documented by the National Aboriginal Health Strategy working party⁶. They are playing a very important role overall in health services and are considered key providers of primary health services to Indigenous communities, particularly in remote and rural areas. They are often overloaded with competing demands. The pressure to know a little about everything is a common theme⁷.

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Indigenous health workers operate under challenging conditions; distance, personal isolation, professional isolation and the pressures of maintaining health standards and complying with health regulations ⁸. There has been limited attention given to the maintenance and ongoing enhancement of their skills and knowledge following the completion of formal training⁹. A national review of Aboriginal and Torres Strait Islander health worker training (2000) identified a number of concerns in regards to continuous professional training. Many Indigenous health workers highlighted difficulties in accessing and attending education and training opportunities because they are required to leave home, family, and work to attend training courses in urban centers large enough to have training facilities ¹⁰. It can be a challenge to attend refresher courses, face to face training workshops, placement in clinical settings or updating seminars away from their community ⁹.

Suggested Solution

Adequately skilled Indigenous health workers are one of the keys to achieving any effective improvement in primary health care services for Indigenous Australians ¹¹. Facilitating the development of Indigenous health workers’ training pathways and constantly upgrading their skills to keep up-to-date with continuous changes are expected to provide benefits. Figure 1 illustrates the potential impact of self-paced health education and training program for improving Indigenous Australian health. This is through the availability of comprehensive, effective and appropriate primary health care services delivered by a trained Indigenous health workforce.



Expected Benefits

Four main benefits to Indigenous Health Workers will be anticipated:

- Developing an up-to-date continuing training program for Indigenous health workers to maintain and improve their capabilities, improve the quality of healthcare delivery and overall health outcomes.

- The program will be designed to be culturally appropriate, selfdirected, with easy instructions, straightforward, evidence based information resources that can be easily used by Indigenous health workers at their practice locations.
- Extending the traditional classroom training mode into a new learning environment and helping Indigenous health workers to build up self confidence through allowing them to use new learning technologies in their jobs.
- Developing an interactive CD ROM which will provide a basic software engine which can be used as a template for similar CDs on different health topics. An on-line component for updated course content, and link to the Indigenous Health Info Net will be designed in the program as a means of keeping Indigenous health workers up-to-date with news relevant to their fields and training.

Program Development

An issue that may be more important than the details of program content is the soundness of the learning approach ¹². This paper discusses the way a training program will be developed regarding the learning approach which will be adopted and the procedures for the program planning.

Learning Approaches

Choosing the appropriate learning approaches to be used in the program development will depend on the type of learner targeted and their needs. In the search for a learning approach which might be suitable for Indigenous health workers' continuous professional education there are three approaches will be adapted.

1. Adult Learning Approach

Three underlying assumptions have been stated in the report of Donald H Brundage (1980) about the application of adults learning principles to program planning:

- The more an adult learner can be involved in the planning related to his/her own learning activities, the more productive those activities will be,
- Program planning by experts or by teachers with no learner involvement tends to lead to subject-centred programs and theoretical problems and
- Program planning carried out largely by learners with teacher assistance tends to lead to problems-centred programs ¹³.

The national review of Aboriginal and Torres Strait Islander health worker training 2000 for improving Indigenous health workers access to education and training recommended their participation in planning the development of training packages ¹⁰. Employing the adult learning approach in the program planning will help to accommodate Indigenous health workers' needs and goals, and facilitate learning activities rather than imposing standards for performance and content ⁷.

2. Population Health Approach

The term "Population health" focuses on population as entities not only on individuals. Using a systematic population focused approach can have a great effect on individual health outcomes than individual care ¹⁴. This approach can be realized through emphasizing health promotion and disease prevention strategies at a population level and stressing the underlying social, economic, biological, genetic, environmental and cultural determinants of health of the whole population during program planning ¹⁵. The population health approach fits the Indigenous Australian view for their health; they see health more holistically-as including the social, emotional, spiritual cultural wellbeing of the whole community ¹⁶.

A population health approach in the training program planning will be adopted in the structure of the program to ensure the population health perspective as well as the individual clinical perspective in included. The program content will focus on how to treated patients within appropriate guidelines and

protocols as well as describing how to improve living conditions, nutritional status, environmental conditions, socioeconomic factors and any other risk factors that contribute towards a particular disease.

3. Medical Education Approach

A common approach in developing education and training programs is to collect existing material and to assemble what appears most useful and interesting¹⁷. Designing a course for health professionals should have aims or goals, meet the needs of the learners, patients and society. Kern's (1998) design of a six-step approach for developing medical education curricula will guide the program planning. These are:

1. Problem identification and general needs assessment;
2. Specific needs assessment;
3. Defining goals and objectives;
4. Determining the educational strategies and the designing activities;
5. Implementing designed activities; and
6. Evaluation and feedback¹⁸.

It presents a step-by-step method, technique or way of developing training or educational courses.

Program Planning

The first step in program planning is to identify, clarify and clearly define the problem through general and specific needs assessment. If this step is not carried out and the needs are determined through an assumption the resulting programs will not be as effective. General and specific needs will be assessed through qualitative in depth semi structured interviews with Indigenous health workers.

In order to better understand the Indigenous health workers' training needs and to identify features that would make training more attractive, we will use an informal flexible approach, throughout the study, which will allow the participants to express their knowledge, experiences, opinion and concerns about the availability of continuous formal training as well as how to achieve their own learning goals¹⁹.

Formal discussions with Indigenous health workers' general managers and health training educators will also be held. The discussions will address the training organization's perceived need for, and willingness to integrate, the proposed training program into their courses.

1. Problem identification and General Need Assessment

Identification and critical analysis of the needs of Indigenous health workers for a continuous professional training program especially in remote and rural areas, requires an analysis of the current approach of Indigenous health workers in general. The assessment will focus on the problems of the Indigenous health workers and their managers (stakeholder) regarding lack of formal training and the need for a continuous training program, and the expectations of the training organization. This is followed by the identification of an ideal approach through a review of the published literature and reports by national and international agencies on the need for improving Indigenous health workers professionalism. The difference between the ideal approach and the current approach represents a general needs assessment¹⁸.

2. Specific Needs Assessment

An assessment is required to evaluate the need of Indigenous health workers for a self-paced training program to develop selfdirected, lifelong learners. The benefits of such a program will depend on the prediction that Indigenous health workers have access to suitable information technology. This prediction will be also assessed as a specific need assessment by focusing on IT literacy and the availability of IT resources for Indigenous health workers. Various aspects of the program goals, objective, content and design will also be considered.

3. Defining Goals and Objectives

The establishment of clear program objectives is essential to facilitate effective program design, and to help in determination of the learning resources required. They are also considered the measurement of the evaluation for the program^{7,18}.

The results of the general and specific needs assessments will be used to develop the goals and objectives of the training program. While the assessment for the need to an educational professional training program is the main concern, we will be also interested to identify the learning process accepted by participants throughout the interview. The objective could be either related to the learning process used in program development or relevant to the program outcomes through specifying the characteristics of those outcomes like for example building the required knowledge and fostering the needed skills.

4. Determining the Educational Strategies, the Designing Activities and the Program Content

Educational strategies, designing activities and program content will be developed to achieve the goals and to be fitting with the defining objectives of the training program. It will be based on stakeholder consultations through a focus group study and questionnaire.

The focus of these consultations will be on involving the stakeholders in determining the designing activities and program contents. By using this collaborative approach and involving the stakeholders in this process, allowing all of them to have an input into the program design, greater dedication is provoked.

Educational Strategy

On the basis of applying the Adult Education Approach, it appears to be reasonable to support the use of self-paced medical information resources on CD ROM as a non traditional educational strategy. This choice is supported by Donald H Brundage in his report about adult learning principles and their application to program planning that adults do not learn productively when under severe time constraints. They tend to learn best when they can set their own pace¹³. A self-paced training (SPT) program is a promising innovation; especially for health care settings located far from a training facility in areas with poor transportation and other infrastructure. It offers the learners the ability to use a computer independently or with fewer interactions²⁰.

The CD ROM will have limited instructions while being as straightforward to use as possible with a full learner control of content. This is because as the program will not require completion of a certain topic before jumping into the next topic making it easy for learners to be freely and easily search for specific information. This type of program has many limitations associated with behaviorism however it holds user attention much longer than the traditional methods of learning²¹. Stakeholders will again be involved in this process.

Program Design

The training program will be designed to provide Indigenous health workers with examples of clinical appearance through multimedia techniques and supporting further understanding of diagnosis, treatment and preventing procedures.

Five main cores under which the CD content will be designed with different learning objectives distributed throughout are:

1. Introduction and general information about a specific disease
2. Diagnosis
3. Treatment (What to Do?)
4. How to prevent, Individual and population approach
5. Search engine.

Learning Content

The main purpose of the program is to provide Indigenous health workers with basic information, which should be used to facilitate improvements in Indigenous health workers practical knowledge and skills and improve their ability to undertake simple medical procedures, recognize the symptoms of disease, or administer medical aid. Medical information will include both preventive and curative element.

Medical content and any accompanying literature should take into account the Indigenous learning styles and environmental and cultural differences. Also, a particular consideration should be given to the Indigenous Australian' concept of health ²².

The most important criterion by which the learning content and medical resources will be selected is that they focus on practical information. Medical learning resources which meet this criterion are World Health Organization (WHO), Medscape, U.S Agency for International Development (USAID), and Centers for Disease Control and Prevention (CDC) Division of Tuberculosis Elimination (DTBE) ²³.

5. Implementing Designed Activities

This stage is the stage of interpretation of the program content into material production to create the model. The Model's planned delivery is through a specialised training organisation.

6. Evaluation and feedback

Evaluation can be achieved through enabling interested individuals and groups to participate in critical debate about the program in order to consider whether objectives were being met. An evaluation will be developed for the training program regarding program design and content and will be based on the program objectives. Information and argument for program evaluation using focus group studies will be collected, followed by individual surveys and terminal follow up questionnaires. It is important to explain to participants why their feedback is required and to leave them time to complete their evaluation following the focus group study.

Conclusion

The proposed plan is to develop a post graduation culturally appropriated self-paced training program for Indigenous health workers to be used in their practice locations and delivered on CD ROM. Adult learning, population health and the medical education approach for developing curricula will be used as methodologies for program development.

The General and specific needs will be assessed through qualitative in depth semi structure interviews with Indigenous health workers; a formal discussion will be held with the Indigenous health workers' general manager and training medical educator.

The program will have well defined goals and objectives, concerning the learning process and the outcomes. A non-traditional teaching strategy will be employed by using self-paced medical information resources on CD ROM. Program's planned implementation will be through delivery and follow up through a specialized training organization. The program design and content will be evaluated using survey, focus group study, and follow up questionnaire which will be administered to participants in primary interviews.

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