

Developing a model of evidence-based public health practice that makes sense for the Pacific

James Rarick, MPH

Corresponding Author: James Rarick, MPH, Cancer Information Service, Pacific Region, National Cancer Institute, Cancer Research Center of Hawai'i, 1236 Lauhala Street, Suite 502, Honolulu, HI 96813. Tel: (808) 564-5919, Fax: (808) 586-3009, Cell Phone: (808) 224-8214; jrarick@crch.hawaii.edu. Administrative Assistant: Shirley Nishiyama, Tel: (808) 586-5853, snisiya@hawaii.edu, shirley@crch.hawaii.edu.

Abstract

The new paradigm for public service organizations is summed up in the phrase "evidence-based practice," a concept grown from its origin in clinical medical practice to include a broad range of disciplines, including non-clinical approaches to disease prevention and health promotion. From a "global" perspective, this movement reflects the modernization policies of national governments that are intended to ensure effectiveness and increase accountability of publicly funded programs.^a It has also been fueled by rapid developments in information technology and the burgeoning growth in evidence-based research that forms the foundation of the movement. As the concept of evidence-based public health (EBPH) is exported to the Pacific, it will be imperative to keep in mind the historical and political forces that have shaped this movement, as these have important implications for attempts to advance the use of EBPH in Pacific Island communities. This commentary describes the basic format and evaluation results from an early attempt to introduce EBPH to public health workers in the Pacific at a two-day workshop conducted at the Pacific Global Health Conference, June 13-14, 2005. This article will conclude with recommendations for developing a culturally competent model for promoting EBPH practice among public health workers and policy makers who serve Pacific Island communities. (PHD 2007 Vol 14 No 1 Pages 57 - 65)

Introduction

The Pacific Global Health Conference (PGHC) is a biennial conference, which brings together academics, educators, policymakers, and practitioners from across the Pacific to share research, discuss current issues, develop strategies for the future, and increase avenues of communication across the widespread geographic and cultural area that comprise the Pacific Islands. The event is sponsored by the Hawai'i Public Health Association in collaboration with several regional, national and local partners interested in building public health capacity within the Pacific Region.

The U.S. Centers for Disease Control and Prevention (CDC) played a key role in the 2005 conference planning effort, including coordination and support for a two day pre-conference workshop on EBPH that was geared specifically to chronic disease program managers in the U.S. Associated Pacific Islands (USAPI): American Samoa, the Republic of the Marshall Islands (RMI), the Federated States of Micronesia (FSM), the Republic of Palau, Guam and the Commonwealth of the Northern Mariana Islands (CNMI). As a major funding agency

for public health activities in the USAPI, the CDC is interested in promoting greater use of evidence-based strategies that could lead to improved health outcomes. The workshop was conducted by Ross Brownson, PhD, Beth Baker, PhD, and Leslie McIntosh, MPH, each of whom is affiliated with the University of St. Louis, School of Public Health. The PGHC Steering Committee and CDC's National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP) hosted conference calls between the workshop instructors and chronic disease managers in several of the Pacific Island jurisdictions prior to the training in an attempt to tailor the workshop to meet local needs. A somewhat condensed version of the workshop was developed, consisting of seven modules designed to provide hands-on opportunities for participants to develop the skills needed to apply EBPH principles in their daily work.^b A summary of each module's content follows.

Descriptions of Module Content (A)

Module 1 provided the course overview and introduced participants to the basic concepts of evidence-based decision making, including a review of both the similarities and important distinctions between evidence-based medicine and EBPH. While medical studies often rely on randomized clinical trials (considered the most scientifically rigorous of epidemiologic studies), public health interventions tend to be complex, programmatic, and are often context-dependent.^c Consequently, there are fewer studies of the effectiveness of public

health interventions than there are for medical practice. Attendees were also shown several applications within public health practice that were based on strong evidence, along with several that were based on weak evidence. The last part of the module defined some of the barriers to evidence-based decision-making in public health settings.

Module 2, covered the steps for developing an operational statement for a particular public health issue, which includes setting priorities for public health and developing a concise statement of the problem, issue or policy in terms that are measurable. Module 3 focused on quantifying the issue, provided a short review of the basic concepts of descriptive epidemiology, and concluded with a review of several major sources of public health surveillance data, while also providing an opportunity for participants to access data from on-line sources. Module 4 provided participants with instruction and hands-on practice in conducting literature searches, and emphasized the importance of conducting a systematic search process.

Module 5 covered two important aspects for developing program or policy options. First, this module conducted a review of the sources of information on various health programs in order to understand the criteria that may be invoked in choosing among options, and secondly, to understand the importance and basic approaches of economic evaluation. Module 6 explored various program planning models that could provide useful strategies and covered the importance of setting realistic and measurable objectives. Lastly, Module 7 allowed for evaluation of the program or policy to be implemented, covering the differences and unique contributions of quantitative and qualitative evaluation, and reviewing the basic concepts of measurement validity and reliability.

Workshop Evaluation Results (A)

Forty-three attendees representing 15 islands participated in the workshop. Overall, workshop evaluation scores were very good (8.7/10.0), with participants commenting that the workshop was clear, concise and easy to follow. Greater than 80% of workshop participants were satisfied with the workshop content, and 94% indicated that additional similar workshops

for Pacific Islanders should be taught in the future. When queried if they planned to use the information learned, 91% of workshop participants responded in the affirmative. Asked specifically how they planned to use the information in the six months subsequent to the workshop, the majority of responses fell into five categories: 1) information dissemination, 2) planning, 3) networking, 4) program improvement/modification, and 5) grant proposal writing. The modules cited as most useful were Module 5 ("Developing an Action Plan and Implementing Interventions") and Module 6 ("Evaluation of Evidence-based Programs"). The main concern expressed by participants was that the workshop was too short (the typical workshop was 3.5 to 4.5 days); many attendees also expressed interest in participating in follow-up training.

An important function for such a network could also be to review current models for teaching EBPH and consider what changes need to be made to ensure the development of culturally competent curricula congruent with the skills and resources available in various public health settings around the Pacific

Future Directions (A)

While the workshop evaluation indicated that most of the participants felt the information could be useful in their work in the Pacific, it is also clear that there is a need for an extended course to allow more time for participants to learn and practice the skills needed to apply the basic principles of EBPH. There are a number of key issues that should be considered in the future development and/or adaptation of this training curriculum in the Pacific. First, consideration should be given to the historical and political forces that have shaped the evidence-based practice movement, and to what extent these forces may or may not be relevant within the various local contexts. Some workshop participants suggested that the course be taught to department directors and policy makers, implying that there would be little expectation to adopt EBPH approaches until local leadership understands the direct benefits of doing so.

Secondly, the formal training of persons working in public health varies much more than it does in medicine, and this is particularly true for public health workers in many parts of the Pacific where much of the workforce has not had the benefit of formal training in core public health competencies. Building the capacity of public health workers to perform these core functions is critical to any attempt to promote EBPH practice at the local level. Key public health training institutions and public health advocacy groups serving the Pacific Islands might consider establishing a regional partnership modeled after the National Public Health Leadership

Development Network that was established under CDC leadership in 1991.³

An important function for such a network could also be to review current models for teaching EBPH and consider what changes need to be made to ensure the development of culturally competent curricula congruent with the skills and resources available in various public health settings around the Pacific. The development of such a network is anticipated to be an important topic of discussion during the 2007 PGHC conference, at which three major topic areas will be addressed: 1) workforce training and development; 2) evidence-based practice in the Pacific Islands; and 3) emerging health issues in the Pacific.

It is encouraging to note that EBPH course participants cited the modules on “Developing an Action Plan” (Module 5) and “Evaluating the Program or Policy”

(Module 6) as the two modules they were most likely to use and share with their colleagues in the Pacific. From a purely practical point of view, this could be a good start in building local evidence as to what works towards improving the health of Pacific Island communities.

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References

- a Godfrey M. What works: Evidence-based policy and practice in public services. Book Review. Health Soc Care Community 2001;9:504-5.
- b Brownson R, Gurney J, Land G. Evidence-based decision making in public health. J Public Health Manag Pract. 1999 Sep;5(5):86-97.
- c Rychetnik L, Frommer M, Hawe P, Shiell A. Criteria for evaluating evidence on public health interventions. J Epidemiol Community Health. 2002 Feb;56(2):119-27.

13 years ago in Pacific Health Dialog, M. O. Leary stated that, “The collection and storage of data in cabinets has been described as a “data cemetery.” We recognise that computers can make a good system more efficient but they will not make a bad system good.” PHD, 1995; 2 (1): 128.