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Building Leadership Skills and Promoting Workforce Development: Evaluation Data Collected from Public Health Professionals in the Field of Maternal and Child Health

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Abstract

Professional development, including training and leadership skill building, is important for maternal and child health (MCH) epidemiologists. Current workforce development and training opportunities vary, but lack an emphasis on linking leadership competencies with MCH epidemiology. This paper describes efforts at the annual MCH Epidemiology Conference (the “Conference”) to promote leadership activities and workforce development, and recommendations to enhance professional development. An evaluation of attendee opinions on Conference workforce development activities was conducted during the 2009 and 2010 Conferences (70 and 66 % response rates, respectively). Frequencies and percentages were calculated overall and by attendee profession. Qualitative responses to questions regarding workforce and professional development were classified by theme in 2009, and a categorical question was developed for the 2010 evaluation. A combined 38 % of Conference attendees in 2009 and 2010 were MCH epidemiologists and 62 % were other MCH professionals. Attendees recommended more support and access to training, mentoring, and resources including job opportunities. Continuing education (41 %), special knowledge and skills-building training (51 %), and development of online

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resources for training (57 %) were highly recommended by attendees. Career (47 %) and leadership (49 %) mentoring by senior-level professionals in the field were also highly recommended. Promotion of leadership can be achieved by integrating the concept of leadership into the Conference itself; by publishing and disseminating MCH epidemiologic research in scientific, program, and policy settings; and by communicating the importance of epidemiologic findings to stakeholders and other non-scientific audiences.

Keywords

Maternal and child health; Maternal and child health epidemiology; Leadership; Leadership training

Introduction

While workforce development is both emphasized and valued in the discipline of maternal and child health (MCH), continuing education provides limited opportunities for MCH practitioners to develop leadership skills outside the scope of identified job duties. Although public health leadership institutes offer mentored leadership training [1], these institutes emphasize general public health leadership rather than focusing on the MCH sub-discipline. Further, though such institutionally offered methodological skills trainings are available to MCH epidemiologists, rarely do these trainings integrate concepts related to advocacy for MCH populations (i.e., women, infants, and children) with analytic approaches. Although the development of core competencies for applied epidemiology [2], public health [3], and leadership [4, 5] identify the knowledge base and skills that epidemiologists and MCH professionals should attain, the implicit link between applied epidemiology, workforce development, and MCH leadership has not been emphasized. Few MCH epidemiologists are familiar with the MCH leadership competencies, though they are aware of the need for further training in the area of MCH leadership [6]. In a 2003 commentary addressing this gap in professional training, Greg Alexander, PhD, said:

“... we must continue to build our data capacity and use our data judiciously to expand our understanding, to question our assumptions, and to explore and evaluate new approaches. *Nonetheless, to move from data to effective action and change takes more than MCH epidemiology, it takes leadership.*” [7, p. 148]

MCH epidemiologists are building capacity [8] and using data more judiciously [9–12]; however, until very recently, little emphasis has been placed on publishing or publicizing successes in capacity building and data translation [13, 14]. Evaluating and translating data to program action is a skill developed over years of professional experience. Although the need for capacity building has historically been a priority, states remain at the initial stages of developing a planned process for teaching and instilling leadership skills in MCH epidemiologists [6, 15]. Furthermore, while competency in epidemiologic skills and methodologies are integral to practicing effective public health [8, 9], the area of leadership in workforce development is a less emphasized aspect of a MCH epidemiologist's professional development and education. Yet, it is an area in which MCH professionals and epidemiologists recognize that additional training is warranted [6, 16].

An annual conference specifically devoted to the research and practice of MCH and MCH epidemiology provides an ideal opportunity for introducing and reinforcing the MCH leadership competencies [5, 6], incorporating this knowledge into MCH epidemiology, providing professional development support, mentoring, and improving leadership skills. The annual Maternal and Child Health Epidemiology Conference (the “Conference”) supported by the Centers for Disease Control and Prevention/Maternal and Child Health Epidemiology Program, the Health Resources and Services Administration/ Maternal and Child Health Bureau (MCHB), CityMatCH, and the Association of Maternal and Child Health Programs, presents a potential forum for assessing leadership skills among MCH epidemiologists and other program, policy, administrative, and academic professionals [17]. The Conference lasts for 3 days with an additional 2 days of training for skills- and knowledge-building. Knowledge exchange between peers results in improved research activities in the field, expanded data use, increased opportunities for networking and mentoring, and informed decision making and policy change [14]. Although MCH leadership is not an explicit goal of the Conference, all conference-related activities incorporate leadership and workforce development as a key element in peer exchange. The purposes of this paper are to summarize Conference evaluation data on leadership and workforce development, assess how the Conference promotes professional development in maternal and child health leadership, and offer recommendations for future conference-related activities to increase MCH leadership skills and workforce development activities among epidemiologists and other professionals.

Methodology

Data from the 2009 and 2010 Conference evaluations were used to assess attendees’ professional roles and organizational affiliations; opinions on workforce development, mentoring, and job-related activities; and provide suggestions for improving conference-related activities. During both Conferences, assessment forms were available at the registration desk and during the Conference National MCH Epidemiology Awards session. In 2009, 297 of the 425 attendees (70 %) submitted evaluation forms by the close of the Conference. In 2010, a total of 303/459 attendees (66 %) submitted evaluation forms. For both conference years, frequencies and percentages were calculated for attendees’ professional roles (data shown for 2010 only).

For the 2009 evaluation, attendees were asked to comment specifically on how workforce development and leadership activities could be modified at the Conference to support increased professional development and mentoring of young professionals. The primary and secondary investigators (Kasehagen and Kroelinger) examined attendees’ responses regarding the integration of workforce development, leadership, and skill-building in MCH epidemiology at the Conference to identify underlying themes. Common themes and component responses were compared for consistency, and investigators discussed discordant coded responses to reach consensus.

To complement the qualitative evaluation data gathered at the 2009 Conference, the 2010 Conference evaluation included a quantitative question composed of common themes identified from the 2009 assessment. Attendees of the 2010 Conference were asked, “What

could the conference do to better promote young professionals and workforce development?” Respondents were asked to check all applicable items from an established list that included a range of options such as providing continuing education credits, career mentoring opportunities, online resource guides, and development of leadership workgroups. The responses were quantified for this article. No institutional review board approval was required as the data were collected for evaluative purposes only.

Results

Approximately 40 % of attendees who responded to the 2009 Conference assessment categorized themselves as epidemiologists; the remaining respondents defined their professional roles as administrator/manager, statistician/ researcher, health professional, or student. Similarly, in 2010, 36 % of attendees defined their professional role as epidemiologist (Table 1). Most attendees listed their primary organizations as state, community, or local health departments or universities. The remaining attendees listed their primary affiliation as a federal health agency, a nongovernmental organization, or a clinic.

Most 2009 attendee responses regarding ways to increase professional development and participation of young professionals were related to networking and communication during the Conference (Table 2). Conference attendees felt the mentoring session could be better organized, with more access to mentors and more information provided on potential professional opportunities. Additionally, attendees suggested creating a central location for job materials, including a place to post résumés and curricula vitae. Finally, attendees recommended developing a leadership workgroup and advanced mentoring opportunities, offering continuing education credits, and developing assessment tools to match skills to appropriate employment resources.

Similarly, 2010 Conference attendees identified several ways to promote workforce and professional development at subsequent Conferences (Table 3). Most respondents agreed that providing information about internships, fellowships, and job opportunities at the Career Mentoring Session for Students and Young Professionals (61 %); creating an online resource guide (57 %); and providing additional travel scholarships (57 %) would support professional development. Furthermore, respondents indicated that providing special knowledge- and skill-building sessions (51 %) and student-focused awards (49 %) would enhance Conference workforce development activities. Respondents also suggested (49 %) that establishing an ongoing mentoring forum for new and mid-level epidemiologists similar to public health leadership institutes would be an optimal way to provide opportunities to enhance professional development.

Discussion

Conference attendees indicated that leadership development could be better incorporated into Conference activities through award recognition and mentoring, and workforce development opportunities at the Conference could be enhanced, professional development activities could be better coordinated, and job opportunities could be better organized and advertised. Evaluation responses strongly supported incorporating attendee suggestions into

Conference activities to enhance the effectiveness of the Conference. In response, 2011 and 2012 Conference organizers enriched leadership and workforce development activities by offering a more defined Career Mentoring Session for Students and Young Professionals; a detailed and web-based job board; a National MCH Epidemiology Award for Excellence in Teaching and Mentoring; a Conference award for Best Manuscript; and further opportunities for continuing education and training (i.e., Continuing Medical Education credits/ Continuing Education Units).

The Council for State and Territorial Epidemiologists provides lists of competencies for several tiers of applied epidemiology. Though leadership is not highlighted as an individual competency, it is loosely integrated throughout the document [2]. For example, mid-level epidemiologists are expected to display leadership competency in epidemiologic planning and policy development, and senior-level epidemiologists are expected to understand the health department's vision in the context of an agency plan for community/state health planning, and to lead the epidemiology unit in preparing to address that plan. However, without explicit training in leadership, it would be difficult for MCH epidemiologists to develop these important skills through workforce training activities alone. Lack of appropriate leadership knowledge and skills can affect how MCH epidemiologists promote collaborations, strengthen partnerships, translate/interpret their data into programmatic action, and accomplish program objectives. Promoting the MCH epidemiologic perspective in agency strategic planning can be challenging, and the ability to lead community public health planning may be limited without leadership training. The Conference offers a forum to introduce epidemiologists to the MCH leadership competencies and begin integrating these concepts into practice. With the existing emphasis on professional and workforce development, mentoring of young professionals, enhancing MCH epidemiologic skills, and overall high satisfaction among attendees, the Conference is an ideal setting for leadership development.

Promoting leadership in MCH epidemiology through workforce development could occur in several ways. Leadership competencies could be incorporated into the Conference objectives; attendees could be encouraged to publish or disseminate practice-based work, policy recommendations, and peer-reviewed research; the impact of work in MCH epidemiology could be communicated at the Conference; and the Conference could provide a forum for mentoring early career and mid-level professionals by directly connecting them with senior-level MCH epidemiologists.

The following recommendations suggest ways the Conference planners could address the needs of attendees.

- *Recommendation 1:* Incorporate training in achieving the MCH leadership competencies as Conference objectives [5]. While the Conference Planning Committee envisions that “Participants will recognize the importance of bridging epidemiologic methods and MCH practice for effective program development, delivery and evaluation” [18 p. 5], an implicit commitment that the Conference program content will address knowledge and skills in the 12 MCH leadership competencies will aid MCH epidemiologists in becoming familiar with the

competencies and the important relationship between the competencies and their work. The development of an assessment tool, based on these competencies, would assist attendees in understanding their capabilities and deficiencies in relation to their current job responsibilities. Additionally, objectives of the knowledge- and skill-building sessions could be directly related to one or more of the MCH leadership competencies.

- *Recommendation 2:* Promote public dissemination of work presented at the Conference by encouraging presenters to publish or disseminate work presented each year, including practice-based work, policy recommendations, and program-specific analyses. Agencies and institutions that value MCH epidemiology emphasize publishing peer-reviewed research; however, work occurring in MCH public health practice, the translation or application of research to practice, and policy-related work are equally important to the MCH epidemiology field. Increasing the publication and dissemination of these activities enhance peer exchange among MCH epidemiologists and emphasize activities that require a strong leadership component: leading programs, engaging in better strategies in practice, and developing effective policy. As a further incentive, the MCHB, through the MCH Information Resource Center, offers support in manuscript drafting and publication to MCH staff working in state and local agencies [19].
- *Recommendation 3:* Communicate the impact on states and communities of work presented at the Conference by promoting on-line Conference archives and active weblinks. As leaders in MCH build expertise on scientific knowledge, MCH epidemiologists are in a position to provide leadership in decision-making based on epidemiologic evidence [5]. For public health leaders, not only is it important to understand the research implications of MCH findings, it is equally important to understand the impact of findings on MCH populations. Leadership training through workforce development tailored to MCH epidemiologists provides the foundation for communicating this vision both internally and externally to stakeholders.
- *Recommendation 4:* Provide mentoring support to new and mid-level epidemiologists in the field. The Conference setting provides the ideal forum for peer exchange among professionals. The Conference Planning Committee could promote innovative ways to support professional and workforce development by directly connecting senior-level MCH epidemiologists with those less experienced in the field.

By incorporating these workforce development recommendations into practice both at the Conference and at the individual level, the objective of integrating leadership into the practice of MCH epidemiology will be better achieved.

Our paper is subject to some limitations. Though all attendees were invited to participate in the evaluation, approximately 70 % responded. Non-responders may differ from responders, but the authors have no information regarding this group of attendees.

Conclusion

Leadership is a skill identified as necessary to achieve competency in MCH, but not highlighted as a priority. Leadership is an integral component of the workforce skills developed by young professionals as they move toward becoming senior-level MCH epidemiologists. The Conference offers an opportunity for peer exchange, networking, workforce development, and ongoing professional training. Promotion of leadership is achieved by integrating the concept into the Conference itself; publishing and disseminating MCH epidemiologic research in science, program, and policy settings; developing strong mentoring programs for early, mid, and late career professionals; and communicating to stakeholders the impact of epidemiologic findings on the direction of each agency's vision or mission. Enhancing leadership skills can better prepare the next generation of MCH epidemiologists and strengthen each individual scientist, agency, institution, and the discipline as a whole.

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Table 1

Primary professional roles of attendees—Maternal and Child Health Epidemiology Conference, 2010 (N = 302; Missing = 1)

Professional role	Number	Percentage
Epidemiologist	109	36.1
Agency/organization manager/administrator and program manager	56	18.5
Statistician, data analyst, and researcher	48	15.9
Student/post-graduate fellow	44	14.6
Health professional—nurse, physician, health educator, social worker, etc	18	6.0
Teacher/academic instructor	16	5.3
Other	11	3.6
Total	302	100.0

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Table 2

Qualitative Themes identified by attendees to promote Conference attendance by young professionals and to increase workforce development—Maternal and Child Health Epidemiology Conference, 2009

Overall theme types	Career mentoring	Job opportunities	Workforce development
Funding	Student discounts	N/A	Travel scholarships specifically for health department staff Discounted rates for trainings
Communication/Networking	Activities for emerging leaders	Internships with health departments	Slideshow/special plenary on career opportunities
	Student awards	Sessions on job searching	Multiple hands-on trainings
	Representatives from multiple schools of public health	Plan time and location to allow for job interviewing during the conference	Develop leadership workgroup similar to the MCH Epi Professionals Workgroup
	Matching directly with mentors	Develop a résumé/CV board at conference	Plan for advanced mentoring sessions
	Mentors should provide materials about their agencies	Flag poster/presentations of students looking for employment	Develop general tools to determine which agencies/institutions are an appropriate match to skill sets
Education	Have mentoring session set up in a job booth format	Social hours/opportunities for meeting every night of the conference	
	Breakfast session with identified mentors	Place to submit jobs or résumés/CVs on the Conference or Conference registration website Job section on Conference website Increase awareness of job board	
	Provide dedicated sessions for students/young professionals	Provide an instructive session on job search strategies, frequently asked questions, and self-marketing	Mentors should provide examples of experience, especially what has not worked Provide continuing education CEU, ^a CME, ^b CE, ^c and CHES ^d credits

^aContinuing education unit

^bContinuing medical education

^cContinuing education

^dCertified Health Education Specialist

Table 3

Attendee responses to ways of promoting workforce development at the Conference—Maternal and Child Health Epidemiology Conference, 2010 (N = 276; Missing = 27)

Statement	Number (Percentage)	
	Yes	No
Provide continuing education credit (e.g., CME, ^a CE, ^b CHES ^c)	114 (41.3)	162 (58.7)
Provide additional travel scholarships to young professionals	157 (56.9)	119 (43.1)
Create a student poster or oral presentation award	134 (48.6)	142 (51.4)
Invite representatives from schools of public health and governmental agencies to the Career Mentoring Session	130 (47.1)	146 (52.9)
Provide materials about internships, fellowships, and job opportunities (e.g., GSIP, ^d CSTE, ^e PHPS, ^f EIS, ^g etc.) at the Career Mentoring Session	167 (60.5)	109 (39.5)
Develop an ongoing, short-term mentoring program for new and mid-level epidemiologists similar to that of public health leadership institutes or the CityMatCH CityLeaders program	134 (48.6)	142 (51.4)
Create an online resource guide for training and employment opportunities	158 (57.2)	118 (42.8)
Develop a MCH leadership workgroup	81 (29.3)	195 (70.7)
Provide special knowledge- and skills-building sessions	142 (51.4)	134 (48.6)

^aContinuing medical education

^bContinuing education

^cCertified Health Education Specialist

^dGraduate Student Internship Program, Health Services and Resources Administration

^eCouncil of State and Territorial Epidemiologists Fellowship Program

^fPublic Health Prevention Service Program, Centers for Disease Control and Prevention

^gEpidemic Intelligence Officer Program, Centers for Disease Control and Prevention