A Proposed Model Curriculum in Global Child Health for Pediatric Residents

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ABSTRACT

OBJECTIVE: In response to the increasing engagement in global health (GH) among pediatric residents and faculty, academic GH training opportunities are growing rapidly in scale and number. However, consensus to guide residency programs regarding best practice guidelines or model curricula has not been established. We aimed to highlight critical components of well-established GH tracks and develop a model curriculum in GH for pediatric residency programs.

METHODS: We identified 43 existing formal GH curricula offered by U.S. pediatric residency programs in April 2011 and selected 8 programs with GH tracks on the basis of our inclusion criteria. A working group composed of the directors of these GH tracks, medical educators, and trainees and faculty with GH experience collaborated to develop a consensus model curriculum, which included GH core topics, learning modalities, and approaches to evaluation within the framework of the competencies for residency education outlined by the Accreditation Council for Graduate Medical Education.

RESULTS: Common curricular components among the identified GH tracks included didactics in various topics of global child health, domestic and international field experiences, completion of a scholarly project, and mentorship. The proposed model curriculum identifies strengths of established pediatric GH tracks and uses competency-based learning objectives.

CONCLUSIONS: This proposed pediatric GH curriculum based on lessons learned by directors of established GH residency tracks will support residency programs in creating and sustaining successful programs in GH education. The curriculum can be adapted to fit the needs of various programs, depending on their resources and focus areas. Evaluation outcomes need to be standardized so that the impact of this curriculum can be effectively measured.

KEYWORDS: competency-based curriculum; global health; international health; pediatrics; resident education

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WHAT'S NEW

This work provides a model curriculum based on consensus recommendations from a working group of global child health experts and directors of established pediatric global health tracks to help guide residency programs in developing global health curricula.

IN RECENT YEARS, global health (GH) has become an increasingly valued component of medical education. The Association of Pediatric Program Directors (APPD), for example, recently committed to improving global health education as part of their strategic plan.[1] Residents are demanding opportunities for training in GH because of the growing awareness of health care disparities, particularly in pediatric populations, between low- and high-income countries and the unacceptably high mortality rates in children younger than 5 years of age from largely preventable causes.[2,3] Although most childhood deaths occur in south Asia and sub-Saharan Africa, increased

global migration and travel have resulted in U.S.-based pediatricians caring for children in their local communities with diseases and social conditions once viewed solely as foreign medical problems.[2,4] In an increasingly interconnected world, GH education prepares trainees for work both abroad and at home.

Pediatric residency programs are responding to the growing interest in GH through the development and expansion of GH curricula, tracks, and fellowships. In 2007, Nelson et al[5] found that 52% of pediatric residency programs offered a GH elective, a significant increase from 25% of programs in 1996.[6] However, only 6% had formal GH tracks.[5] Although the format of GH training offered is variable, important components typically include a core global child health curriculum and associated clinical experiences, either at local immigrant and refugee, travel, or adoption clinics, and/or through international electives.[7–9]

The Accreditation Council for Graduate Medical Education (ACGME) has specified 6 general competencies to serve as broad domains for directing resident education. The AAP Section on International Child Health (SOICH) has proposed essential global child health competencies for pediatric residency programs that are aligned with the ACGME competencies.[9,10] Although at least one academic pediatric department recently published a description of the development of its GH curriculum,[11] and other groups have established guidelines for ethical practices in GH education,[12,13] no consensus framework has been established upon which to model the development of GH curricula within pediatric residencies.[14]

In this work, we describe critical components of the curricula from 8 U.S. pediatric GH tracks. We then use the information and our collective experience to construct a model curriculum for global child health. In doing so, we expand on the recognized core competencies and go further by proposing a practical curricular framework to assist residency programs in developing their own GH curricula. By defining these shared best practices and emphasizing a learning-centered approach, we hope to improve and standardize pediatric GH education.

METHODS

SAMPLE SELECTION

We followed a similar process in developing a model curriculum in pediatric global health as did Botchwey et al[15] in their model curriculum for a course on the built environment and public health. We defined a global health track as an official track or pathway offered by the residency program containing a formal longitudinal GH curriculum for a defined cohort of pediatric residents. We selected residency programs with GH tracks because these programs were most likely to have well-developed curricula in GH. Existing pediatric residency programs with GH tracks were identified in April 2011 through 3 search methods: 1) a database of accredited pediatric programs with membership in the APPD compiled through web-based searches by Nelson et al (10 pediatric and 8 interdisciplinary programs),[16] 2) a cross-sectional survey of pediatric residency programs with structured GH curricula, established international electives, pre-elective orientation, and post-elective debriefing conducted by University of Minnesota (24 programs; Campagna AM, St Clair N, John C., 2012, unpublished data), and 3) correspondence with pediatric GH program directors of previously identified programs, which yielded an additional 12 programs with GH tracks.

All identified residency programs with GH curricula were contacted, and through review of program websites and direct correspondence with program directors, these programs were examined to see if the following inclusion criteria were met: 1) track with a primary focus on pediatric residents, 2) implemented in 2009 or before (eg, programs that had graduated at least one class of track members), and 3) affiliated with an established field site (international or domestic). Interdisciplinary programs not targeted to pediatric residents were excluded because their core curricula may differ from those specific to pediatric residents, although some of the pediatric-focused tracks also shared portions of their curriculum with non-pediatric residents (such as med-peds residents, internal medicine residents, and medical students). The inclusion criteria were established prior to identification of programs and were reevaluated for appropriateness upon identification of programs.

DATA COLLECTION AND ANALYSIS

A detailed questionnaire was sent to the GH program directors of each of the 8 GH tracks that met our inclusion criteria. The questionnaire was distributed by email as a Microsoft Word document, and consisted of 35 open-response questions aimed to obtain additional details regarding program demographics, objectives, applicant selection process, curriculum development, international training experiences, administrative structure, logistical challenges, and evaluation processes. Any ambiguity was clarified through telephone interviews.

The information from the questionnaires was analyzed by the use of a grounded theory qualitative approach. The free-responses to the questionnaires were compiled into an Excel spreadsheet, which was then distributed to the authors for theme identification and analysis. The results of this qualitative analysis were then used to develop a model curriculum within the framework of the ACGME core competencies.[17,18] To enhance this core framework, the authors reviewed other leading education and learning taxonomies, including Bloom and Anderson's modified hybrid taxonomy of cognitive operation,[19] Perry's theory of undergraduate cognitive development,[20] and Fink's taxonomy of significant learning.[21,22] Learning goals for the model curriculum were developed according to the ACGME core competencies and Fink's taxonomy which includes: foundational knowledge (eg, understanding and remembering information and ideas), application (eg, being able to use knowledge in real-world settings), human dimension (eg, learning the personal, social, and ethical implications of your work), caring (eg, creating new feelings, interests, and values that motivate learning), learning