

GHEARD: An Open-Access Modular Curriculum to Incorporate Equity, Anti-Racism, and Decolonization Training Into Global Health Education

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ABSTRACT

Background Global health (GH) interest is rising among graduate medical education (GME) trainees, yet GH engagement is marred by the impact of colonization or racism, and there remains a lack of training to confront these challenges.

Objective To develop a modular, open-access curriculum that provides training in decolonization for GH GME and evaluate its feasibility and impact on learners' critical reflection on decolonization.

Methods From 2019 to 2022, 40 GH educators, including international and indigenous scholars from diverse organizations, created the Global Health Education for Equity, Anti-Racism, and Decolonization (GHEARD) curriculum. Using Kern's 6 steps of curriculum development, critical gaps were identified and shaped into 8 modules, including a facilitator training module. Learning objectives and activities were developed using strategies grounded in transformative learning theory and trauma-informed educational approaches. The curriculum was peer-reviewed and piloted at multiple national conferences and institutions to assess feasibility and effectiveness in fostering critical reflection on decolonization.

Results Pilot testing demonstrated GME implementation feasibility. Based on initial educator feedback, facilitator tools and an implementation guide were incorporated to enhance usability. Nearly all (59 of 61) trainees felt GHEARD was effective or very effective in encouraging reflection on decolonization, and 72% (32 of 44) felt GHEARD encouraged reflection on motivations for engaging in GH. GHEARD was launched as a free online resource in June 2023 and garnered 3192 views by December 2024.

Conclusions To our knowledge, GHEARD is the first comprehensive decolonization curriculum designed specifically for GME. Program evaluation indicates GHEARD is feasible to implement and effective in promoting critical reflection on decolonization.

Introduction

Interest in global health (GH) among graduate medical education (GME) trainees in high-income countries (HIC) is expanding.¹⁻⁵ GH experiences often foster careers centered on resource-denied communities (RDCs).^{3,6,7} Many trainees factor the availability of GH opportunities into their GME program selection,¹⁻⁶ driving the development of GH curricula

covering knowledge, ethics, cultural humility, pre-engagement, and debriefing.^{6,8-10}

However, GH faces historical and ongoing ethical challenges and systemic biases, often unaddressed in GH curricula.¹⁰⁻¹⁴ This field evolved from colonial medical systems rooted in oppression and white supremacy—systems centered on sustaining economic power and profit, which perpetuated systemic inequities.¹¹⁻¹⁴ Many US academic GH programs still rely on inequitable partnerships with RDCs that perpetuate colonialist tendencies.^{11,14-17} New pedagogies incorporating decolonization, anti-racism, and historical perspectives are essential to addressing systemic bias

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Editor's Note: The online supplementary data contains the surveys used in the study, further data from the study, and a visual abstract.

in GH.^{11,14-17} There is no unified definition of decolonization in medical education. We approached this project with 2 key broad paradigms of decolonization: “to decolonize is to reverse the legacy of colonialism through fundamental transformation of the structures, practices, and attitudes that have perpetuated inequities in health equity work”¹⁸ and “to decolonize education is to examine and restructure curriculums that were designed within a colonial mindset which centralizes the White, Eurocentric, male’s narrative.”¹⁹

While decolonization learner milestones²⁰ and some high-level guidance for decolonizing GH have been described, practical curricula for teaching decolonization in GME are lacking.^{8,11,14,20} Educators from the Association of Pediatric Program Directors (APPD), American Academy of Pediatrics (AAP), Consortium of Universities for Global Health (CUGH), and Midwest Consortium of Global Child Health Educators formed a large, international, interdisciplinary, grassroots curriculum development workgroup inclusive of global and indigenous educators to address critical educational gaps they had independently identified (FIGURES 1 and 2).^{11,15,16}

In this Educational Innovation article, we describe the development and program evaluation of a modular, peer-reviewed, customizable, open-access curriculum that provides training in equity, anti-racism, and decolonization for GME GH programs. The curriculum, entitled Global Health Education for Equity, Anti-Racism, and Decolonization (GHEARD), aims to center unheard voices from RDCs.^{11,15,16,21} It is designed for educators and trainees in GME GH programs in HIC.¹⁹

Methods

The GHEARD workgroup used Kern’s 6-step approach to curriculum development to develop, pilot, and disseminate GHEARD from 2019 to 2022.²²

Formation of a Diverse Collaborative Workgroup

Studies show a lack of diversity in leadership of US-based GME GH programs.^{11,15,16} We intentionally formed a diverse author group of trainees and faculty, including those with diverse intersectional identities (see online supplementary data TABLE 1) and those who are underrepresented in medicine (UIM).^{11,15,16} The curriculum author group comprises 40 individuals (32 faculty and 8 trainees) representing 18 institutions and 10 nations (including 5 indigenous nations) and includes physicians (across multiple specialties) and nonphysicians who engage in GH education, clinical practice, policy, advocacy, and research. Module workgroups were formed with at

KEY POINTS

What Is Known

Global health (GH) engagement continues to grapple with the lingering effects of colonization and racism, and there is a lack of structured training to address these challenges.

What Is New

A modular, open-access curriculum called GHEARD was developed specifically for graduate medical education, focusing on decolonization in GH, using transformative learning theory and trauma-informed approaches. Pilot testing demonstrated its feasibility for implementation and its effectiveness in fostering critical reflection on decolonization and motivations for GH engagement.

Bottom Line

Program directors interested in implementing GH training can find ideas in this article for a decolonization curriculum.

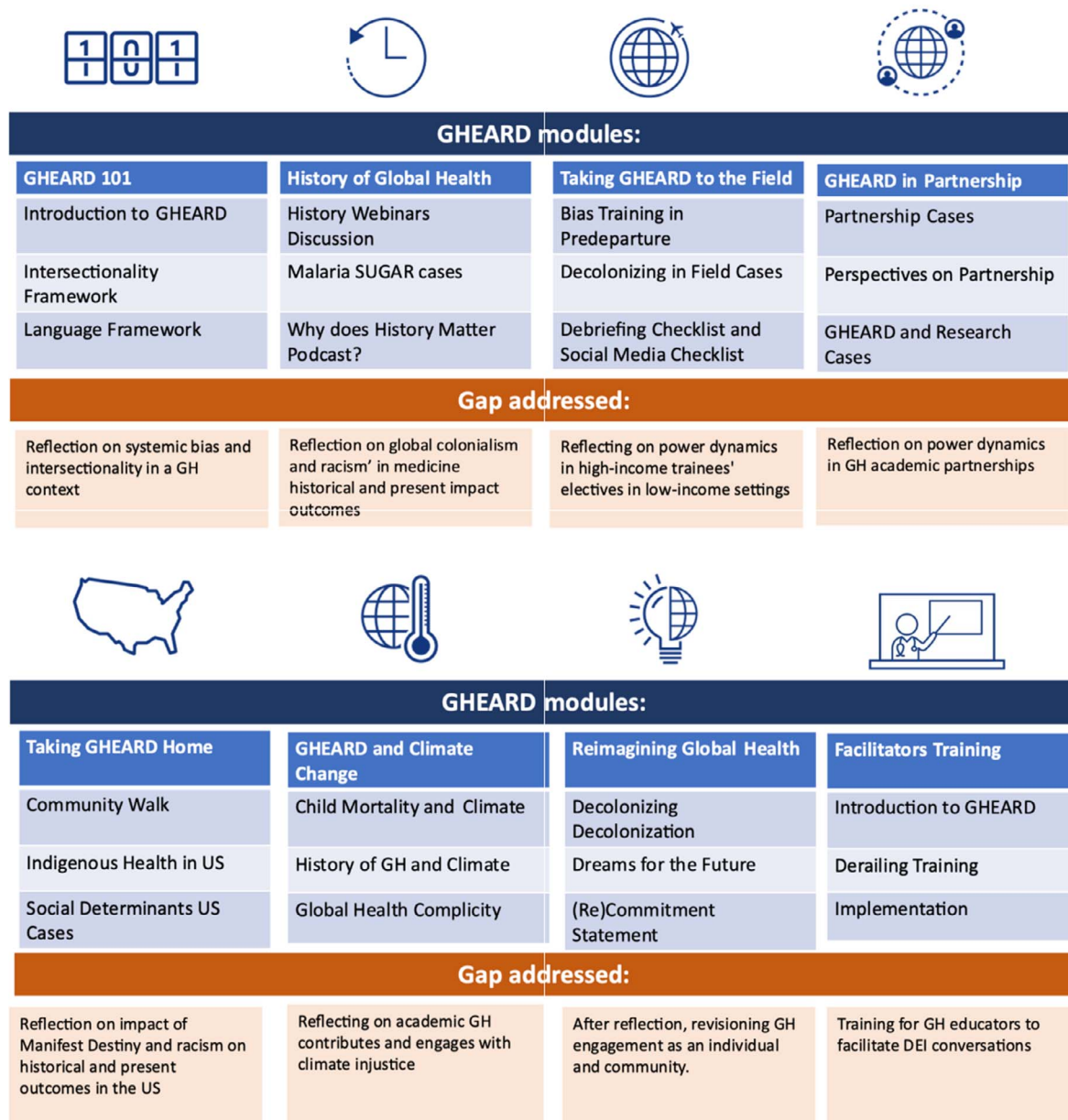
least one RDC and/or indigenous scholar, using a shared leadership model with a junior and senior leader allowing for intentional mentoring of junior authors.

Steps 1 and 2: Problem Identification and Needs Assessment

We completed a formal needs assessment survey¹⁵ during 2021 and 2022 to better understand the extent to which these topics were addressed in GME GH programs. The anonymous survey was distributed to 148 GME GH program educational leaders, with 65 programs responding (44%), representing 30 residency, 27 fellowship, and 8 institution-wide programs that included multiple specialties. We found that most programs had limited training on the history of GH, anti-racism, or decolonization.¹⁵ We reviewed literature and existing GH curricula.^{2-6,10,21} We explored existing approaches described in the literature for implicit bias and upstander training, intersectionality reflection, and training for facilitators. Most existing tools were not designed within a GH context or GME GH training.^{2-6,10,23} We identified existing GH ethics and pre-engagement curricula, but with limited focus on systemic bias or colonialism.^{6,8-11} The challenges of GH partnerships and climate injustice are well described, but there is a lack of practical curriculum.¹¹⁻¹³ Based on this information, we identified a list of 8 key gaps in GH education, which informed the content of GHEARD modules (FIGURE 1).^{15,16} To our knowledge, there are no comprehensive tools available to educators to address these gaps particularly within a mentored, interactive, reflective GME environment.^{11,16}

Step 3: Goals and Objectives

Our overall goal was to create a curriculum that (1) highlights the history of GH and present-day inequities; (2) cultivates critical reflection on bias,

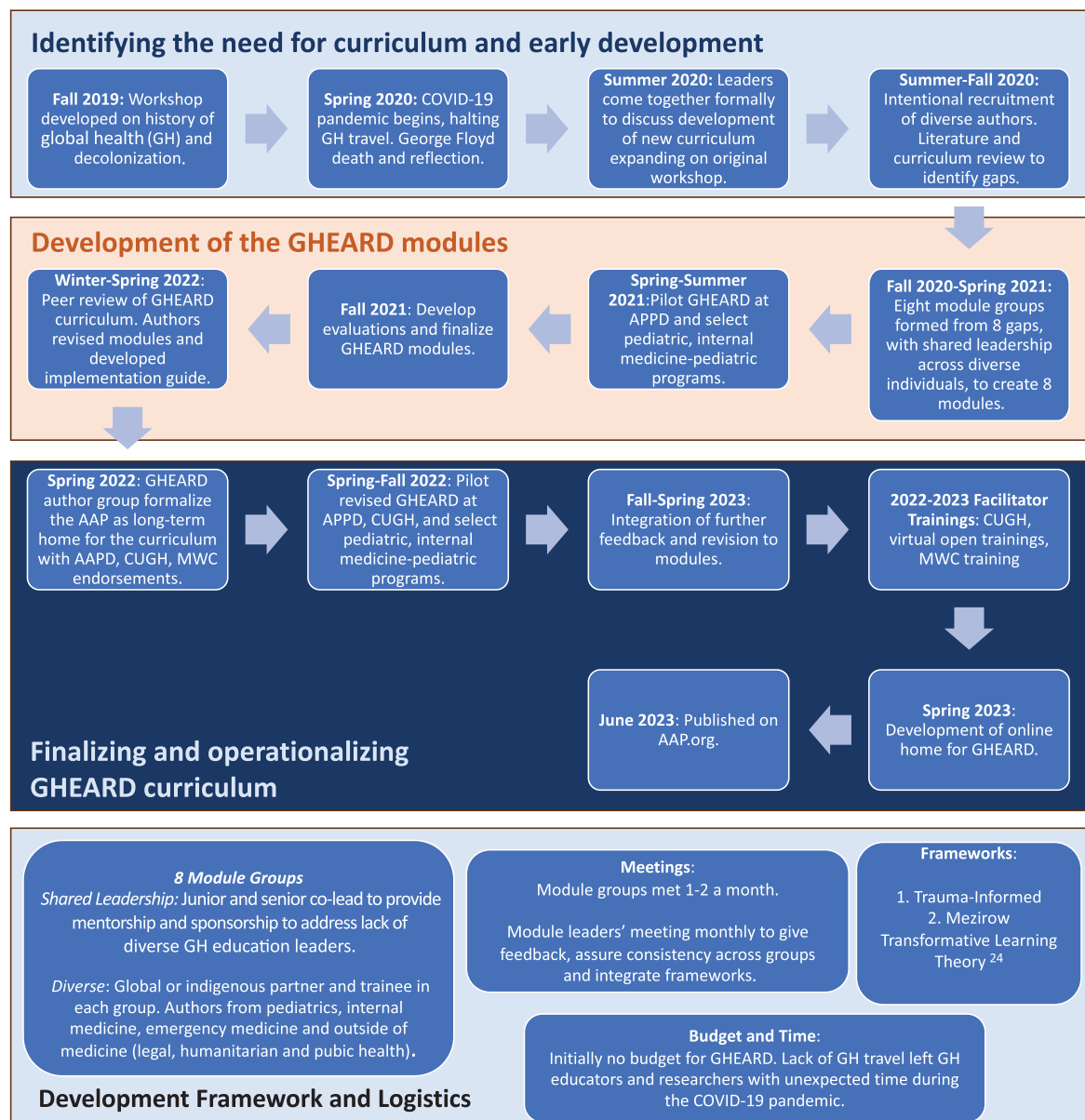
**FIGURE 1****GHEARD 8 Modules and Sample Activities, Drawn From Identified Curricular Gaps**

Abbreviations: GHEARD, Global Health Equity, Anti-Racism, and Decolonization; SUGAR, Simulation Use for Global Away Rotations; GH, global health; DEI, diversity, equity, and inclusion.

Note: Key gaps identified by the early GHEARD authorship group in their review of the literature and formal needs assessment that were the basis for the 8 GHEARD modules. These gaps are described in detail in Fanny et al.¹⁶

privilege, power, and positionality within GH; (3) introduces decolonizing and anti-racist best practices in pre-, during, and post-engagement; and ultimately (4) encourages participants to commit to GHEARD principles throughout their careers. The needs assessment demonstrated that many GH educators have limited experience in leading conversations about bias,

systemic injustice, and anti-racism.¹⁵ Thus, we included a training module. Learning objectives were created by module workgroups and reviewed by the larger curriculum workgroup (FIGURE 3). Module workgroups developed curricular activities for each learning objective, which were reviewed monthly for iterative interdisciplinary feedback (FIGURE 2).²¹

**FIGURE 2****Timeline of Development of GHEARD and Development Framework**

Abbreviations: GHEARD, Global Health Equity, Anti-Racism, and Decolonization; APPD, Association of Pediatric Program Directors; AAP, American Academy of Pediatrics; CUGH, Consortium of Universities for Global Health; MWC, Midwest Consortium of Global Child Health Educators.

Step 4: Educational Strategies

We grounded the curriculum in Mezirow's transformative learning theory to promote critical self-examination, acceptance of discomfort to challenge assumptions, engagement in new paradigms, and learner interaction.²⁴ We also drew upon trauma-informed educational approaches to promote learner psychological safety.²⁵

Recognizing that learners would approach GHEARD from a variety of backgrounds and that programs may provide different GH experiences, we made the curriculum customizable. This allows educators to tailor

activities based on learner needs and institutional context. We also developed an implementation guide to assist educators in selecting activities based on needs and time available.²¹

Seven learner module workgroups included GHEARD 101, History of Global Health, Taking GHEARD to the Field, GHEARD in Partnership, Taking GHEARD Home, GHEARD and Climate Change, and Reimagining Global Health, in addition to the facilitator training module workgroup. Workgroups developed activities using additional pedagogical strategies and frameworks, adapting existing resources when possible.

FIGURE 3
GHEARD Modules Learning Objectives

GHEARD 101
• Recognize an individual's identities, role, power, and privilege within the home and work community • Develop a language framework of basic decolonization, anti-racism, and equity concepts
History of Global Health
• Understand in brief the history of global health with attention to influences of colonialism, religion, capitalism, and war through didactic lectures, small group discussions, recorded expert interviews, and short readings • Recognize how history can directly impact clinical care, research, and health outcomes through a case simulation and discussion of malaria prevention
Taking GHEARD to the Field
• Acknowledge implicit bias and its implications in global health experiences • Examine and adjust motivations and intentions when engaging in global health experiences • Cultivate and apply GHEARD principles before, during, and after global health experiences • Identify ways to navigate and mitigate challenging situations related to global health experiences • Recognize the scope of one's impact when engaging in global health experiences • Describe ethical and sustainable approaches to establishing a career in global health through interviewing experts
GHEARD in Partnerships
• List key quality domains for global health partnerships • Differentiate partnership qualities that promote equity and anti-racism versus those that reinforce colonialist views of global health • Analyze the benefits and costs to different stakeholders impacted by a partnership • Recognize the power dynamics reflected in terms currently and historically used to describe relationships within global health
Taking GHEARD Home: History of US Region
• Examine some aspects of structurally derived social determinants of health in historically marginalized groups within the United States • Practice elements of critical consciousness by listening to the experiences and perspectives of others and while personally reflecting on one's own past and present experiences through small group discussion • Inventory examples of social inequality manifested in communities and learn to examine the physical, historical, and social barriers and/or advantages to health outcomes at work in specific communities • Highlight some of the unique federal policies and historical failures that affect the health and wealth outcomes of American Indians and Alaskan Natives in the United States
Reimagining Global Health
• Describe how the COVID-19 pandemic, global conflicts, etc serve as an opportunity to evaluate the equity ambitions of global health vis-à-vis health care realities around the globe • Explore how the current structure of academic scholarship in global health perpetuates power imbalances between "producers of knowledge" and marginalized producers/recipients of knowledge • Discuss how coloniality is manifesting in the decolonization efforts, and how to reframe the movement so that the voices of the formerly and currently colonized are centered • Reflect upon individual positionality within the global health and contemplate one's personal role in applying the principles of equity, anti-racism, and decolonization moving forward
GHEARD and Climate Change
• Identify those areas of the world disproportionately affected by the effects of climate change • Understand that the areas disproportionately affected by climate change are the least responsible for global carbon emissions • Reflect that the areas most affected by climate change are where most of the world's children live and on the broader social and intergenerational injustice implications of climate change • Identify the causes of global child mortality that are affected by climate change • Understand the synergies between global child health work and efforts to combat climate change • Identify opportunities to reduce the carbon footprint of global health
GHEARD Facilitator Training Module
• Reflect on personal and professional privilege and power in global health practice and the critical consciousness required to facilitate discussions on anti-racism and decolonization • Review the role and function of a GHEARD facilitator as a group leader promoting transformative learning for a diverse group of learners • Self-reflect on teaching styles in relation to Janet Billson's 13 principles for effective teaching and learning • Identify components of trauma-informed facilitation, psychological safety, and skills to create safe learning environments • Reflect on and practice self-regulation of emotional reactions while applying trauma-informed teaching skills and fostering psychological safety • Identify types of derailment of group conversations on racism and decolonization and methods to mitigate or refocus group conversation • Identify action steps to incorporate GHEARD principles and curriculum into your global health education and/or research program

Abbreviation: GHEARD, Global Health Equity, Anti-Racism, and Decolonization.

The Taking GHEARD to the Field and Taking GHEARD Home workgroups created case discussions based on existing peer-reviewed case reports utilizing problem-based learning and a flipped classroom framework.^{3,8,9,24-29} The History of Global Health workgroup used existing online decolonizing GH webinars and created prompts for self-directed reflection and utilized the Simulation Use for Global Away Rotations (SUGAR) model to develop simulated cases.^{9,26,27} Other groups innovated entirely new activities based on existing conceptual frameworks.^{24,25,28-31} Leveraging the SUGAR model, we designed facilitator guides for each activity to aid educators in implementing the curriculum.^{3,8,9}

We recognized that facilitators require specific skills to foster critical conversations around these topics, and that even well-intentioned educators risk causing harm if unprepared to confront their own biases and to manage threats to psychological safety and conversation derailments.^{8,9,23,29} Using trauma-informed educational approaches and consulting with an expert in diversity, equity, and inclusion training, we designed a facilitator module to prepare educators for challenging conversations around power, privilege, race, and systemic injustice.^{23,29} It includes activities to help facilitators understand principles of managing group dynamics in intense conversations, foster psychological safety with enhanced consideration of marginalized group members, understand learner experiences, and improve racial literacy and consciousness.^{23-25,29}

Step 5: Implementation

GHEARD authors piloted curricular activities in varied GH training programs at Cincinnati Children's (n=6), Emory Pediatrics (n=9), Minnesota Pediatrics (n=47), Louisville Pediatrics (n=10), Utah Pediatrics (n=24), and Baylor College of Medicine (BCM; n=21) during 2021 and 2022 for a total of 117 residents. The curriculum was piloted at national conferences including APPD 2021 (n=44), 2022 (n=17), and CUGH 2022 (n=45) through GHEARD facilitator training workshops. Educator and trainee surveys were developed by the GHEARD group (see online supplementary data). Surveys were accessed by trainees and conference participants via a QR code after the sessions. Trainee surveys focused on motivation and critical reflection while educator surveys asked about implementation and facilitation readiness. Results were analyzed using descriptive statistics; free response feedback was used to guide revision of modules. Additionally, the curriculum was peer-reviewed by 16 individuals and groups with subject matter expertise, and modules were revised based on feedback. We

obtained approvals from the AAP, APPD, and CUGH, and launched GHEARD on an open-access online platform.²¹

The BCM Institutional Review Board (IRB) granted ethical approval for the needs assessment survey. The collating of anonymous conference and trainee evaluations were for the purpose of programmatic evaluation and classified as educational quality improvement by Emory University IRB.

Results

Step 6: Evaluation and Feedback

Preliminary pilot evaluations focused on (1) the impact of GHEARD on individual participants, (2) implementation, and (3) facilitator readiness, for the purpose of improving the final curriculum. Ninety-seven percent (59 of 61) of trainees felt GHEARD was effective or very effective in encouraging reflection on decolonization, and 73% (32 of 44) felt GHEARD encouraged reflection on motivations for engaging in GH. Responses from open-ended evaluation questions highlighted the intensity of discussing decolonization in the current divided sociopolitical context and thus the need for facilitator training and support. Ninety-five percent of participants (38 of 40) across conferences stated they were likely to implement all or some of GHEARD. Common implementation barriers were educator time constraints and sensitivity of topic. The majority of participants were at least somewhat comfortable to facilitate GHEARD but stated the need for more practical implementation advice (agendas, post-course evaluations, etc), extending time for facilitator training and support after training to improve comfort levels (online supplementary data TABLE 2).

Apart from a few clinical cases, all of our reviewers found that the curriculum is broadly applicable to GME settings beyond pediatrics. Cumulative feedback was incorporated into the final modules. The evaluation toolkit was expanded to better describe learners' knowledge, attitude, and behavior changes and allude to systemic change (FIGURE 4).

GHEARD was published as an online resource in June 2023.²¹ Since then, more than 400 subscribers signed up to be part of the GHEARD facilitator list-serv. Initial web analytics show a total of 3192 views from 1783 individual users as of December 2024.

Discussion

GHEARD is a peer-reviewed, open-access, modular, customizable curriculum grounded in transformative learning theory and trauma-informed educational approaches to encourage critical reflection and action

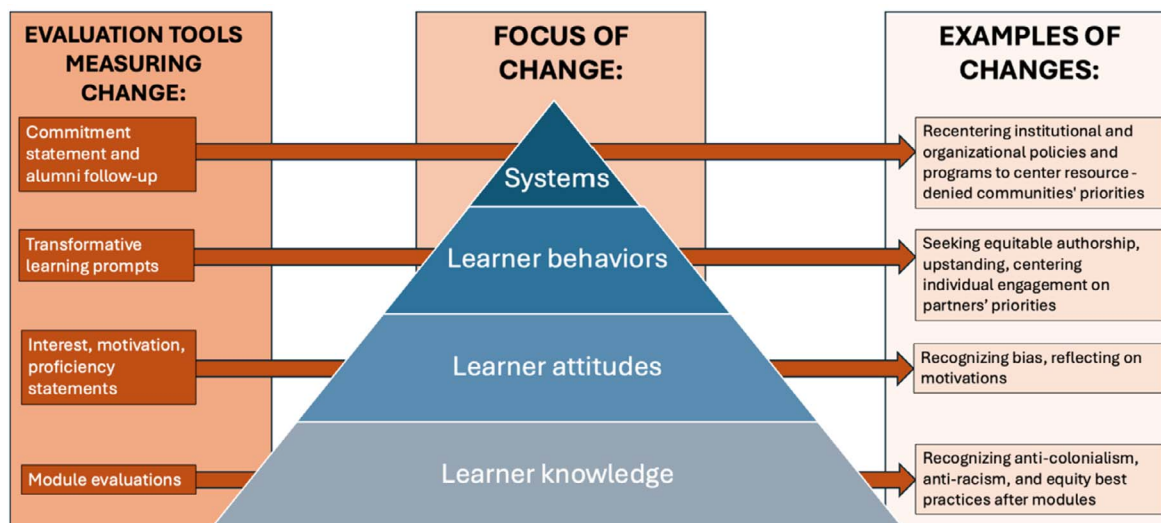


FIGURE 4

Summary of the Global Health Equity, Anti-Racism, and Decolonization (GHEARD) Evaluation Toolkit and Post-Course Strategy for Fostering Individual and Collective Change

Note: Decolonization, anti-racism, and equity are challenging areas for educators to develop effective evaluation tools as many changes take a lifetime to fully process. The toolkit was designed with this challenge in mind. The toolkit includes tools to evaluate the curriculum's effectiveness in cultivating changes in knowledge, attitude, behavior, and ultimately systems.

toward decolonizing GH as a field and as individuals.^{11,21,23} Over the past 2 decades, numerous GH education resources have been developed, including ethics-focused curricula,^{9,10} but they fail to address systemic bias in GH engagement.^{6,8-11,15} Several articles describe decolonization theory, the need for curricula on this topic, or learner decolonization milestones.^{11-20,32} However, there is a paucity of studies discussing the development and implementation of decolonization curricula in GME GH training programs.^{3,15,32} Several institutions have developed decolonizing GH research toolkits or checklists but these are not designed for GME or nonresearch GH engagement.^{33,34} Numerous institutions in academic GH have published statements, institutional decolonization plans, or resource guides, but have not proposed practical curricula.^{30,33-36} In response to these gaps, we developed a customizable modular curriculum for GH educators: GHEARD.²¹

GHEARD is designed to be customizable to each GME program's needs with a library of activities addressing multiple forms of GH engagement.²¹ GHEARD fosters critical reflection on colonial legacies in global contexts while guiding learners to draw parallels with historical and present-day racism in the United States.²¹ While true decolonization of the field of GH is beyond the reach of a single curriculum, GHEARD content is designed to facilitate reflection on decolonial concepts, to move learners toward active practice of decoloniality (ie, centering priorities of partners from RDCs), and to promote transformative action

such as facilitating structural change in the field in line with previously described milestones.^{20,32} Program evaluation from learners shows GHEARD can facilitate critical reflection around decolonization and increase motivation for GH engagement. A longer-term GME implementation study is underway to evaluate the learner's journey from reflection to action.

Educators state that GHEARD is feasible to implement and that with support they are ready to facilitate the training at their institutions. While most educators in pilot sessions were at least somewhat comfortable leading GHEARD curricular materials, more work is being done to evaluate facilitator readiness to improve facilitator comfort. Previous studies describe the challenges of training educators to have difficult critical conversations around anti-racism and equity and underscore importance of ongoing training and accountability for educators.^{11-13,19,25,28} Further expansion of facilitator training, sharing of best practices for facilitating GHEARD, and building a facilitator community are needed. Additional next steps include adaptation of clinical case activities for broader fields including public health and humanitarian settings and periodic curricular updates as learner and educator feedback is processed.

Limitations

The GHEARD curriculum includes 24 hours of content, exclusive of facilitator prep time; this may be daunting for educators and learners alike. GHEARD

requires a commitment to intense conversations beyond the session. Although we aim to create psychologically safe spaces for critical reflection, we lack data on the long-term effects or potential for unintentional harm from participating. Future studies are warranted to more formally assess the impact of participation on learners and facilitators. The GHEARD author group lacked representation of certain identities (eg, Hispanic/Latino authors). Furthermore, GHEARD utilizes learning theories developed by a White male American sociologist within the US context (Mezirow²⁴) and does not center global or indigenous epistemologies and methodologies.¹¹⁻¹⁴ While the pilot data were invaluable in shaping curriculum evolution, the study is not generalizable, and further studies are warranted to evaluate the impact of the curriculum including facilitator readiness.

Conclusions

GHEARD is an open-access, customizable resource that helps educators integrate decolonization, history, anti-racism, and equity into GME GH training.¹⁹ Program evaluations demonstrate GHEARD is feasible to implement in GME settings and encourages trainees to critically reflect on decolonization and motivations for GH engagement.

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