

The Impact of a Faculty Development Program in Health Literacy and Ethnogeriatrics

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Abstract

Problem

A faculty development curriculum aimed at increasing health literacy and awareness of patient care issues in ethnogeriatrics is essential to address serious deficiencies in faculty and health professionals' training and to prepare future health care professionals to care for older adults.

Approach

Authors from the Stanford Geriatric Education Center developed and implemented a faculty development program in Health Literacy and Ethnogeriatrics (HLE). The goal was to enhance faculty and health professionals' knowledge, skills, and attitudes in HLE-

related areas (e.g., health disparities, low health literacy, quality of care for ethnically diverse elders, patient/provider communication). The curriculum was implemented during an intensive weeklong program over a three-year period (2008–2010). The eight-module core curriculum was presented in a train-the-trainer format, supplemented by daily resource sessions.

Outcomes

Thirty-four faculty participants from 11 disciplines, including medicine, came from 19 institutions in 12 states. The curriculum positively affected participants' knowledge, skills, and attitudes related to topics in HLE. Participants rated the curriculum's

usefulness highly, and they reported that over 57% of the content was new. The HLE curriculum provided a mechanism to increase the self-assessed knowledge, skills, and attitudes of participants. It also fostered local curricular change: Over 91% of the participants have either disseminated the HLE curriculum through seminars conducted at their home sites or implemented HLE-related projects in their local communities, reaching diverse patient populations.

Next Steps

Next steps include measuring the impact on the participants' teaching skills and at their home sites through their trainees and patients.

Problem

Ethnogeriatric training is imperative for health care providers, yet the newness of this concept in the literature creates a need for evidence-based approaches. The proportion of older adults in the U.S. population is projected to rise to 20% by 2030; likewise, the ethnic and racial diversity of this population is also expected to increase.¹ Whereas elders in general have been shown to have lower levels of literacy, those from immigrant and minority populations are especially at risk, not only for limited English proficiency (LEP) but also for low health literacy. Both LEP and low health literacy create additional challenges in effective health care provider/patient communication.²

Cross-cultural health care has been taught in health professions training programs since the 1970s, yet little training was

incorporated specifically into geriatric health care education until much later (in the 1990s) when geriatric health professions faculty created resources for health educators. The Stanford Geriatric Education Center (SGEC) has since coined the term "ethnogeriatrics," defined as culturally competent health care for older adults. Subsequently, in 2007, the SGEC developed the "Faculty Development Program in Health Literacy and Ethnogeriatrics (HLE)," the topic of this innovation report, to address deficiencies in health care professional education, especially for those working with older adults from diverse populations.³

Health literacy research is a more recent discipline and includes understanding that medical errors, deferred health care, and higher mortality are related to a person's ability to appropriately use health care information.⁴ Older adults with diverse backgrounds are especially at risk for suffering the consequences of poor health literacy, and health care professionals, especially those who care for older populations, need training to appropriately care for and interact with these patients. Our program is the first attempt to train faculty in health professions programs to

teach ethnogeriatrics and health literacy to meet these identified needs.

Following expert recommendations to combine health disparities/cultural competence and health literacy training,⁵ the SGEC developed a program to train faculty to teach patients, students, and other faculty in health professions programs in the topics of ethnogeriatrics and health literacy.

Approach

Core curriculum

Both the content and methodology of the HLE curriculum are evidence based. The curriculum, developed through the consensus of an expert panel, is grounded in the recommended eight core domains.⁵ The 12-hour, eight-module core curriculum covers key concepts in HLE that are considered critical to all health care professionals (Table 1). The overall goal of the curriculum is improving health care professionals' competence in the practice and teaching of HLE. The program encourages participants to acquire expertise in content areas (e.g., health literacy, patient-centered care, and health disparities in aging populations), gain

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Table 1

Overview of Core Curriculum of the Stanford Geriatric Education Center Health Literacy and Ethnogeriatrics Program by Objectives (2008–2010)

Module	Knowledge, skills, and attitudes objectives
Exploring Health Literacy, Ethnogeriatrics, and Health Disparities	<ul style="list-style-type: none"> • Knowledge of terms related to ethnogeriatrics, health literacy, and cultural competence • Knowledge of how communication is related to health disparities • Knowledge of the acculturation continuum and its role in health care • Knowledge of the “ethnogeriatric imperative” • Skill in assessing personal cultural attitudes • Skill in applying reflective practice
Aging and Culture	<ul style="list-style-type: none"> • Knowledge of cohort analysis • Knowledge of the impact and implications of culture in geriatric care • Knowledge of the demographic characteristics of older Americans in the largest ethno-racial populations
Health Literacy in Patient-Centered Health Care	<ul style="list-style-type: none"> • Knowledge of how trust and respect impact the patient–provider communication and relationship • Ability to define patient- and relationship-centered care • Skill in identifying challenges in promoting health literacy • Appreciation of the importance of health literacy
Creating Health Messages for Low Literacy Elders	<ul style="list-style-type: none"> • Knowledge of approaches to assessing health literacy • Knowledge of health literacy policies • Knowledge of the three factors that influence older adult learning (i.e., format, emotional impact, interaction) • Skill in identifying ways to communicate health information to low-literacy elders
Patient- and Relationship-Centered Communication Strategies	<ul style="list-style-type: none"> • Knowledge of the impact of health literacy on health care and the patient-centered model • Skill in demonstrating a tool for assessing written health information • Skill in eliciting explanatory models of illness among older adults
Working With Interpreters and Translators	<ul style="list-style-type: none"> • Knowledge of the impact of limited English proficiency on health care • Knowledge of the dis/advantages of working with different types of interpreters • Knowledge of major ethnic and racial disparities in geriatric care
Improving Ethnogeriatric Health Care	<ul style="list-style-type: none"> • Knowledge of the roles and characteristics of effective team members • Knowledge of areas in which health care organizations can reduce barriers to effective ethnogeriatric care
Teaching Strategy Toolbox	<ul style="list-style-type: none"> • Knowledge of the Skeff/Stratos seven-category framework of teaching⁴ • Skill in applying best practices for each Skeff/Stratos category⁴ • Confidence in teaching skills

leadership and teaching skills, and learn from collegial exchange. The curriculum, delivered through 90-minute modules, applies principles of adult learning. The sessions are highly interactive, and small groups include no more than 14 participants. We chose instructional methods (e.g., train-the-trainer) based on the successful faculty dissemination model developed by the Stanford Faculty Development Center (SFDC) in teaching clinical medical faculty.⁶ This design includes engaging participants in an active learning process and maximizing their application of newly acquired content through the following methods: didactic presentations, case discussions,

brainstorming exercises, role-play exercises, and goal setting in their clinical practice, teaching, and institution.

Supplementary curriculum

In addition to their involvement in the core curriculum, participants may take advantage of optional resource sessions led by topic experts that provide additional in-depth content related to the HLE curriculum, such as family care giving in diverse populations. Other optional sessions focus on teaching techniques, implementation strategies, and resources. Examples of teaching techniques include the following: (1) improving teaching skills using both an

educational framework for analyzing performance as well as opportunities to practice specific behaviors; (2) participating as learners in HLE seminars to increase content knowledge and confidence in delivering HLE curriculum to patients, health care professions students, and faculty at home sites; and (3) discussing effective teaching styles and curricular content following each seminar.

Preparing to apply learning at home site

Mentored “project implementation” sessions with SGEC staff help prepare participants for home site project implementation and/or preparation for the role of faculty developer. For each module, participants receive instructional materials including presenter’s notes, handouts, PowerPoint slides with references, reading lists, and optional background readings to enhance understanding. In addition to integrating the traditional HLE module series at their home institutions, the participants are encouraged to teach modified and/or condensed versions of the core HLE curricula to health care professionals and students as appropriate for their home institutions. As part of their training, participants gain greater understanding of the topic content by acting as facilitators at their home sites, which has been previously shown to enhance content mastery.⁶

Participant recruitment and funding

A diverse group of 8 to 14 health care professions educators attend annually. SGEC recruits these professionals through the national Geriatric Education Centers (GEC) network, conferences, and listservs. HLE curriculum faculty formally review applications.

SGEC received Health Resources and Services Administration (HRSA) funding as part of their GEC grant. In 2008, 2009, and 2010, HRSA covered the cost for participants. However, the program has since expanded (to 160 contact hours), and we are now charging trainees \$800 per person; most participants receive some grant monies from their institutions.

Program evaluation

We assess the impact of the HLE training in the following four areas: change in participants’ self-reported knowledge, skills, and attitudes; participants’ satisfaction with the program; participants’

scores on the Health Beliefs and Attitudes Survey (HBAS)⁷; and further dissemination of HLE training or topics by graduates at their home institutions.

We assessed the effect of the curriculum on participants' self-reported knowledge, skills, and attitudes related to HLE through pre- and postsurveys. We used retrospective pre/post self-assessments because research shows that they provide more sensitive and valid measures of the attitudinal effects of faculty development training than traditional preintervention self-assessments.⁸ The 29-item evaluation survey mapped onto the eight module objectives, and each item was scored on a scale of 1 (low) to 5 (high). In addition, perceived relevance and usefulness of the content and participant satisfaction were evaluated through an 11-item survey; this second survey was also mapped onto the eight modules, and each item was again scored on a scale of 1 (low) to 5 (high).

We evaluated the curricular effectiveness in enhancing participants' views of patients' perspectives through the validated HBAS.⁷ The 15-item survey is scored on a six-point Likert scale (1 = "strongly disagree"; 6 = "strongly agree") and distributed over four domains—Belief, Context, Opinion, and Quality—which together assess the learner's perspectives about the patient's opinions and beliefs during history taking and treatment; the psychological and cultural context of the patient's illness; and the importance of knowing the patient's perspective in order to provide quality health care.

As a long-term impact measure, we conducted follow-up structured phone interviews with participants six months after they completed the weeklong training. During the phone interviews, participants discussed implementation action plans, and we assessed their success in incorporating the content and skills in their teaching responsibilities and/or in developing and implementing a project for low-literacy elders in their local environment.

We performed statistical analyses using Stata version 10.1 (StataCorp, College Station, Texas). Our evaluation has been determined exempt from human participants research by the Stanford School of Medicine institutional

review board because it is considered evaluation of the SGEC.

Outcomes

Of the thirty-four participants, 31 (91%) were female and 32 (94%) were from public institutions. On average, each taught 3 courses and 82 students per year, and each had 13 years of teaching experience (range 0–39 years). The 34 participants represented 11 disciplines (including medicine, nursing, social work, and pharmacy), 19 institutions, and 12 U.S. states.

The training had positive results in the four areas we assessed: (1) participants' knowledge, skills, and attitudes related to HLE topics; (2) participants' satisfaction; (3) participants' scores on the HBAS; and (4) dissemination of HLE knowledge by participants at their home institutions.

Impact on participant knowledge, skills, and attitudes related to HLE topics

Program evaluation results provide strong and statistically significant evidence of

the positive impact that both the core HLE curriculum and the supplemental curricular activities have on participants. Program evaluation data suggest improvements in participants' self-reported knowledge, skills, and attitudes related to HLE; scores ranged from 2.2 to 3.9 prior to starting the program and improved to a range of 4.1 to 4.9 after completing the HLE program (see Table 2).

Impact on participant satisfaction

Participants rated the usefulness and amount of new material in the eight HLE modules. Participants rated the modules as useful (range: 4.27–4.76 on a 5-point scale), and they indicated that 57% of the material was new (range: 49.4%–68.3% new). Trainees gave extremely high ratings to HLE facilitators for their seminar teaching performance. The overall mean ratings (M) showed that teaching faculty explained concepts clearly (M = 4.59), demonstrated enthusiasm for HLE (M = 4.80), demonstrated knowledge and competence in teaching HLE (M = 4.70),

Table 2
Participants' Self-Reported Impact of the Stanford Geriatric Education Center Health Literacy and Ethnogeriatrics Program on Their Knowledge (K), Skills (S), and Attitudes (A) by Module (2008–2010)

Module	Objective category (K, S, or A)	Mean pretest rating (SD)	Mean retrospective pretest rating (SD)	Mean posttest rating (SD)
Exploring Health Literacy, Ethnogeriatrics, and Health Disparities	K	3.2 (0.8)	3.1 (0.8)	4.5 (0.6)
	S	2.9 (1.0)	3.1 (1.0)	4.2 (0.6)
Aging and Culture	K	2.8 (1.0)	3.1 (1.0)	4.5 (0.7)
	S	2.6 (1.0)	2.5 (1.0)	4.2 (0.7)
Health Literacy in Patient-Centered Health Care	S	2.4 (0.7)	2.6 (0.9)	4.2 (0.6)
	A	3.9 (1.0)	3.6 (0.9)	4.9 (0.3)
	K	2.5 (1.0)	3.1 (1.0)	4.3 (0.7)
Creating Health Messages for Low Literacy Elders	S	2.2 (0.9)	2.4 (0.9)	4.2 (0.6)
	K	2.6 (0.9)	3.9 (0.8)	4.8 (0.4)
Patient- and Relationship-Centered Communication Strategies	S	2.6 (1.1)	2.7 (1.3)	4.4 (0.7)
	K	3.1 (1.1)	3.2 (1.2)	4.7 (0.6)
Working With Interpreters and Translators	K	3.0 (0.8)	3.3 (0.9)	4.4 (0.6)
Improving Ethnogeriatric Health Care Teaching Strategy Toolbox	K	2.3 (0.6)	2.0 (1.1)	4.2 (0.7)
	S	2.6 (1.0)	2.9 (1.2)	4.3 (0.6)
	A	3.4 (0.9)	3.5 (0.9)	4.1 (0.7)
All modules (combined)	K	2.8 (1.1)	3.0 (1.1)	4.4 (0.7)
	S	2.5 (1.0)	2.7 (1.1)	4.2 (0.6)
	A	3.6 (1.0)	3.6 (0.9)	4.5 (0.7)

Abbreviation: SD indicates standard deviation.

List 1

Selected Self-Reported Dissemination Projects of Participants in the Stanford Geriatric Education Center Health Literacy and Ethnogeriatrics (HLE) Program (2008–2010)**Community Projects**

2008

- Evaluation/participatory research and needs assessment of health literacy needs of Alzheimer's disease caregivers, cultural competency needs of service professionals, or health literacy needs for Chinese American elders in Portland, Oregon
- Proposal to NIH (R-21): Developmental research grant for an intervention for a target population facing health disparities
- Development of a cohort analysis on coastal Maine Islanders
- Development of linguistically and culturally appropriate complementary and alternative medicine training in oral health
- Survey of Chinese population to encourage increased acceptance of health program design

2010

- Education of the Roseland community senior population on common diseases, prevention of frequently encountered medication-related problems, and available resources to improve health outcomes

Curricular Projects

2008

- Development of a 24-hour accredited HLE curriculum in Montana
- Integration of the following topics (with pre- and postcourse assessments for each) into the medical school curriculum: working effectively with interpreters, health literacy, ethnogeriatrics, patient-centered care, research opportunities in the field
- Mentoring of faculty to incorporate content into social work and rural health courses

2009

- Development of a curriculum (lecture series) for geriatric fellowship trainees
- Development of a module called "Health Literacy and Older Adults" with an advisory board to create an evaluation for the module and possible submodules, such as "working with interpreters"
- Incorporation of materials from HLE modules into the "Cultural Diversity in Occupational Therapy" class
- Creation of a 1.5-hour lecture on health literacy issues with diverse populations for nursing students
- Development of an HLE certificate program called "Attending Through Cultural Attunement," which is offered as a university course in human services, intended for students as well as practitioners in the field
- Integration of HLE materials into gerontological nursing course
- Creation of an interdisciplinary course for medical students so that they will apply their understanding of HLE issues in their practices (each student will do a project on a health literacy topic—for example, on changing font size of health educational materials)
- Development of a two-hour workshop for residents, teaching them the teach-back method, and providing information on health literacy and health care disparities, using materials from the HLE program (as well as from an online module from the University of Arizona Culture and Health Literacy Project)

2010

- Discussion at faculty development and noon conferences: The Ethnogeriatric Imperative (on health literacy and patient safety, and cohort data)
- Creation of Cultural Competency/Humility Infusion Module that emphasizes care of the rural, older Latino patient for use with nursing students, other health science students, and providers in Wyoming; dissemination (and evaluation) of educational materials to undergraduate and graduate students and to educators and health care providers at University of Wyoming in Health Sciences
- Teaching of the HLE modules to multidisciplinary teams that care for elderly populations at San Francisco General Hospital: acute care for elders and medicine teaching service

and responded to participants' questions and concerns ($M = 4.77$).

Impact on health beliefs attitudes

Participants also self-reported improvements in their belief and

attitudes through the HBAS; mean domain scores on individual items (e.g., "a physician should learn about their patients' cultural perspective") ranged from 4.4 to 5.8 on a 6-point Likert scale (data not shown). These results, along

with the standard HLE evaluations, suggest an opportunity to impact health beliefs and attitudes in an HLE faculty development program.

Seminars conducted by participants at home institutions

The faculty dissemination model was successful in leading participants to teach the content and/or implement community projects at their home institutions. Of the 34 participants, 31 (91%) have either disseminated the HLE curriculum through seminars conducted at their home sites or implemented projects related to HLE in their local communities, reaching a variety of patient populations. We evaluated the responses to the follow-up interviews and found a range of projects that mapped well onto the themes of the program. The 31 participants completed a total of 42 projects: 7 community projects and 35 curricular projects. Several of the participants incorporated the material on-site and/or online for a variety of health professions including those in medicine (students, residents, and faculty), nursing, and occupational therapy. See List 1 for a sampling of projects.

Next Steps

Results show that this is a promising model of training health care professionals in HLE; it represents one step toward addressing the needs of a diverse aging population. Although our findings show that the program improves participants' self-reported knowledge, skills, and attitudes in HLE, we have continually refined the curriculum on the basis of feedback from participants, consultation with content experts, and ongoing review of the literature. For example, because one intensive week may not be sufficient time to deliver the extensive curricular content and to allow participants to demonstrate and/or practice newly acquired teaching strategies, SGEC staff have made themselves available beyond the training for support. Additionally, future iterations of the program will extend contact time from 120 to 160 hours and incorporate webinars to increase sustainability and dissemination. We are also exploring how we will objectively measure changes in participants' teaching, clinical practice, and institutions. For example, we may develop tools to have home site learners (trainees or patients) evaluate the HLE

faculty as done in the SFDC model,⁶ or we may have these learners self-assess the changes in their own knowledge, skills, and attitudes.

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Previous presentations: Preliminary data from this study were presented at the Society for Applied Anthropology conference in Santa Fe, New Mexico, in 2009.

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