

Interprofessional Geriatrics Education Program: Train the Trainer Pilot Model

Balogun SA^{1*}, Fletcher K² and Bradley EB³

¹Division of General Medicine, Geriatrics/Palliative Care, University of Virginia Health System, USA

²Director Geriatric Nurse Clinical Practice Program Riverside Health System, University of Virginia, USA

³University of Virginia School of Medicine, USA

*Corresponding author: Balogun SA, Department of Internal Medicine, Division of General Medicine, Geriatrics/Palliative Care, University of Virginia Health System P.O. Box 800901 Charlottesville, VA, USA, Tel: 434-2434849; Fax: 434-2439282; E-mail: sab2s@virginia.edu

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Abstract

Background: With the rapid aging of the U.S. population, the proportion of elderly adults far exceeds the capacity of geriatric trained health professionals for care. As a result of this critical shortage, health professionals without formal training in geriatrics, mostly provide care in the elderly. We developed and implemented an Interprofessional Geriatrics Education (IPGE) pilot program for non-geriatric trained clinical health professionals to foster enhanced knowledge and skills in geriatric care. In addition, we utilized a Train-The-Trainer (TTT) model in which participants will then disseminate these best practice principles to others.

Methods: As an initiative of the Virginia Geriatric Education Center, ten health professionals from four disciplines were enrolled in the 40-hour comprehensive, longitudinal educational program using both on line and in class format, with a focus on falls, geriatric syndromes, and transitions in geriatric care, pharmacotherapy and the development of a dissemination project. Participant feedback was through the online platform and exit interviews.

Results: One hundred percent of participants stated that the content met their educational needs, and 81% stated that they intend to make a practice change as a result of the program. On a 5-point Likert scale (poor=1, excellent=5), the participants rated the effectiveness of the teaching sessions (average: 4.6/5.0), the faculty (average: 4.7/5.0), the presentations (4.4/5.0), the syllabi (average: 4.4/5.0), and the use of audio-visuals (average: 4.3/5.0). Overall, participants enhanced their knowledge of clinical geriatric care. They also developed proposals of dissemination projects.

Conclusion: IPGE can be a useful tool in improving geriatric care and provides a meaningful way to train practitioners from multiple disciplines at the same time, who then train others, in an effort to address the shortage in geriatric care providers.

Keywords: Interprofessional education; Geriatric education; Geriatric care

Introduction

With the rapid aging of the United States (US) population, the proportion of elderly adults far exceeds the capacity of geriatric trained specialists. As of 2003, there were only about 5.5 geriatricians per 10,000 patients, 75 years and older [1]. The trend in the number of physicians certified in geriatric medicine in the last 10 years has been relatively stagnant, if not on a decline [2]. This figure is just as small in other health professions. According to the 2013 American Nurses Credentialing Center Survey, there were only a little over 7000 nurses certified in gerontology [3]. In 2011, US adults age 65 years and above made up almost 13% of the total population and were over 39 million in number. With life expectancy increasing, this number is projected to double by the year 2040, when all 'baby boomers' will be at least 65 years of age [4]. Within the same time frame, the number of geriatricians currently just over 7000, is not expected to increase significantly given the falling entry rates of new doctors into the geriatric field [2]. This situation makes the geriatric work force shortage critical and dire. As a result of this shortage, many health

professionals without formal training in geriatric care are currently providing care for the elderly. This creates suboptimal medical management of these patients as these health practitioners often times lack the appropriate knowledge of geriatric principles.

Inter-professional education, using expert faculty from various disciplines to teach health care professionals from these same disciplines, is one approach to maximize scarce expert resources. Having these health care professionals then disseminate this knowledge further magnifies this effect and can help to decrease the shortage of trained professionals. The Train-The-Trainer (TTT) model is a well-known educational tool and has been utilized in education programs for different medical disciplines including geriatrics; however none of these published programs have incorporated Interprofessional principles [5]. We developed and implemented an Interprofessional geriatrics education pilot program for non-geriatric trained health professionals involved in geriatric care in community clinical settings. The intent of the program is to foster enhanced knowledge and skills in geriatric care and have the participants disseminate geriatric best practice principles to others, using the TTT approach.

Methods

The Virginia Geriatric Education Center, a consortium of health-related departments in three universities (Virginia Commonwealth University, University of Virginia, Eastern Virginia Medical School), with funding from Health Resources Services Administration (HRSA) in 2010 has established geriatric education programs across Virginia. One of the many initiatives of the center includes an interdisciplinary TTT pilot program, a forty -hour comprehensive geriatrics education program. The first TTT program was implemented in Central Virginia over a three-month period of time, in the spring of 2012 and included ten health professionals from four disciplines (community physicians, nursing, physical therapy and occupational therapy).

Participants (N-10)	Number (%)
Profession	
Medicine	2(20%)
Nursing	4(40%)
Occupational therapy	2(20%)
Physical therapy	2(20%)
Clinical site	
Ambulatory/Home care	8 (80%)
Hospital	0
Long term care	2(20%)
Sex/Race	
Female/Caucasian	10 (100%)
Male	0

Table 1: Demography of participants

Participants were all volunteers and were not compensated for their time. Recruitment was done electronically through email and verbally through professional contacts of the faculty. Most of the participants (80%) practice in the ambulatory/home care setting and they were all female and Caucasian (Table 1).

The program used a hybrid approach to content delivery, utilizing both on-site and online components. The 18 -hour (45% of the total program time) on-site component of the program was delivered over 4 days during the 3-month period. This consisted of 14 interactive workshop presentations by interprofessional faculty which included a geriatrician, several geriatric nurse practitioners, a geriatric certified physical therapist, a social worker with geriatric expertise, two experts in adult learning, and a program evaluation specialist (including authors SB, KF, EB). The focus of the workshops was common geriatric syndromes using falls as an exemplar, transitions in geriatric care, geriatric pharmacotherapy as well as content on the principles of adult learning and teaching strategies. In addition, participants were also instructed on how to design and develop an educational dissemination project.

The online component formed about 35% of the total program time (14 hours). It involved an interactive online platform where peer

review articles related to the workshops were posted with a discussion forum [6-10], in which participants were expected to engage in dialogue by asking and responding to questions posed by faculty or other participants.

Participants spent 20% of the total program time (8 hours) in developing their dissemination project and at the end of the program; they presented the proposed project to their colleagues and the faculty. Participants evaluated the program online after each of the four full day sessions using a QuestionPro survey, which included questions about the overall effectiveness of the sessions and the speakers, the method of presentation, the opportunity to participate, the quality of the materials, the use of audiovisuals, session learning objectives (5-point Likert scale, poor=1, excellent=5). Additionally participants were asked (yes/no) whether the session met their educational needs, if the level of difficulty of the presentation was appropriate, and whether the sessions spurred them to consider making a practice change. All participants also took part in a one-hour exit interview process administered by the program evaluation specialist (EB). Comments were recorded by hand, and summary results were developed. The questions in the exit interview focused on the specific content that was most useful in participants' daily work, what changes participants plan to make in daily practice as a result of the program, specific benefits of the program, barriers that prevented participants from taking full advantage of the program (if any), the greatest strength of the program, and areas for improvement.

Results

According to the exit interview results, all of the participants evaluated the core content of the program (geriatric syndromes, geriatric pharmacotherapy, and falls assessment) as useful and relevant in their daily work. One hundred percent of participants across all four full day sessions stated that both the online and in-class content met their educational needs. Eight one percent of participants stated that they intend to make a practice change as a result of their interaction with either the online or in class content. Additionally, on a 5-point Likert scale (poor=1, excellent=5), the participants rated the effectiveness of the teaching sessions (average: 4.6/5.0), the faculty (average: 4.7/5.0), the presentations (average: 4.4/5.0), the syllabi (average: 4.4/5.0), and the use of audio-visuals (average: 4.3/5.0), with a range from 3.0-5.0. A summary of representative quotes from the exit interview are provided in Table 2.

The Interprofessional learning environment and interaction with professionals from multiple disciplines was favorably received. The participants also reported that the speakers, the variety of topics, and the interactive nature of the sessions were strengths of the program. They felt that the more interactive the program, the better, and that contingencies should be made when offering online course materials, as some rural areas may not have reliable internet access. All participants developed and presented a proposal of a dissemination project to educate other professionals in their respective fields. Dissemination projects include proposals on teaching home health therapists and aides the risks associated with transitions in geriatric care from the hospital to the home setting, teaching corporate leaders in long term care the role and function of the medical director, teaching nurses in the nursing home how to recognize, report and follow up on signs of sepsis, teaching home health aides proper skin care and teaching caregivers the risks/prevention of falls in the home.

What changes have you made in your daily practice as a result of this program?
'I think about how medications impact the whole picture with my patients, and I think about the Beers List.'
'I am doing more falls related assessment.'
'I think about geriatric syndromes with each patient.'
Please comment on specific benefits this program provided.
'Having multiple disciplines represented has been useful as we've been able to learn about many different care environments.'
'Typically I feel very isolated in my job, so it's been nice to be around others who are passionate about geriatric care.'
'Liked the green/environmental effort in the program.'
'It inspired me to want to teach more.'
'It gave me confidence in reconciling med lists.'
Please comment on the barriers that prevented you from taking full advantage of the program.
'Use of technology, being in rural areas can pose a challenge particularly with predictable internet access'
'Getting time away from work can be a challenge.'
What is the greatest strength of this program?
'The wonderful multidisciplinary resources, from a wide variety of care setting.'
'The speakers.'
'The variety of teaching and learning methodologies used.'
'The overall four month schedule was great because it provided an opportunity to learn some information, assimilate it and try it in practice, and come back and ask more about it.'
How can the program be improved?
'The more interactive, the better.'
'Have a review of Collab (online portal)'
'Set up a geriatric interest group for the participants on Collab (online portal).'

Table 2: Summary of representative quotes of participants on exit interview

Discussion

Interprofessional geriatric education (IPGE) can be a useful tool in improving geriatric care in the community. In our pilot, health professionals from four different disciplines, without formal geriatric training were able to enhance their knowledge of clinical geriatric care. In addition, these professionals would be able to implement changes in their clinical practice by teaching other practicing health care professionals in their respective communities to improve the quality of care delivered to older adults.

The limitations of this pilot program include the small number of participants, no randomization in recruitment and lack of racial diversity or diversity in clinical practice sites of participants. While these make it difficult to generalize these results, there have been other IPGE programs that have shown similar favorable results [11,12].

However unlike our pilot study, none of the programs incorporated both Interprofessional principles and the TTT model, which has the potential to facilitate greater dissemination of knowledge of geriatric

principles. To fully assess the impact of an IPGE program like ours, which utilizes the TTT model to improve the knowledge of health professionals and geriatric care, further investigation is warranted. This could focus on subsequent dissemination of the TTT content by the program participants in their workplace or practice settings.

Next steps

The Train the Trainer Program is being replicated in two other areas in Virginia using the hybrid approach of both on line and on site education. Recruitment of participants from diverse clinical sites of care (hospital, long term, ambulatory and home care) is a focus in order to provide a richer discussion about the challenges in care transitions across setting and encourage collaborative dissemination projects.

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