RESEARCH ARTICLE
The perceived benefit of a short-term service trip of students and participants while working in an HIV community center in Puerto Rico [version 1; peer review: awaiting peer review]

Martin G. Rosario, Samantha Ewing, Kaitlyn Foster
School of Physical Therapy, Texas Woman's University, Dallas, Texas, 75235, USA

Abstract
Introduction: Puerto Rico is among the top five territories in the USA to be affected by human immunodeficiency virus (HIV), which is why our goal is to help the island with service trips. Studies have reported the professional and personal benefits students can gain by participating in service activities. However, the benefits obtained by the Hispanic-Latino participants living with HIV in Puerto Rico, have not been outlined. The purpose of this study was to discuss the perceived benefits of a short-term week-long service trip for the students, participants, and personnel.

Methods: A total of 11 physical therapy students and one professor travelled to Puerto Rico for a one-week service trip. The group partnered with an established organization named 'La Perla de Gran Precio,' which works with low-income Hispanic-Latino USA citizens participants that have been diagnosed with HIV. Students were involved in both academic and cultural components by providing physical therapy services to the participants. At the end of the week, surveys were given to all parties involved.

Results: Students, personnel and participants reported the service trip as extremely positive. Students suggested that its integration should be considered in any physical therapy curriculum to improve the future of this profession further. Participants reported learning from this experience and have been able to implement the methods into their routine.

Conclusions: The Puerto Rico service trip enhanced the education of physical therapy students and their ability to increase cultural awareness, boost communication skills, provide opportunities to overcome challenges, and foster a sense of purpose. Also, the Puerto Rico service trip was a beneficial and positive experience for all people involved. Consideration should be made to incorporate this initiative a much larger scale in a population that is vastly underserved.

Keywords
Service trip, Puerto Rico, HIV, educational service trips
Corresponding author: Martin G. Rosario (mrosario1@twu.edu)

Author roles: Rosario MG: Conceptualization, Project Administration, Writing – Original Draft Preparation, Writing – Review & Editing; Ewing S: Writing – Original Draft Preparation; Foster K: Writing – Original Draft Preparation

Competing interests: No competing interests were disclosed.

Grant information: The author(s) declared that no grants were involved in supporting this work.

Copyright: © 2019 Rosario MG et al. This is an open access article distributed under the terms of the Creative Commons Attribution Licence, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

How to cite this article: Rosario MG, Ewing S and Foster K. The perceived benefit of a short-term service trip of students and participants while working in an HIV community center in Puerto Rico [version 1; peer review: awaiting peer review] F1000Research 2019, 8:647 (https://doi.org/10.12688/f1000research.18944.1)

First published: 10 May 2019, 8:647 (https://doi.org/10.12688/f1000research.18944.1)
Introduction
The human immunodeficiency virus (HIV) is a worldwide pandemic affecting the lives of over 36.9 million individuals (see data from UNAIDS). According to the Center for Disease Control (CDC), there are more than 1.1 million people with HIV of ages of 13 years and older in the United States alone. In the United States, Texas and Puerto Rico are among the five locations with the highest rate of HIV diagnoses, with 15.4 and 13.3 per 100,000 people, respectively. According to the CDC, the number of HIV infections is four times higher in Hispanic/Latino males than in white males within these groups (USA territory). In their latest surveillance report (in 2015, revised in November 2018), the CDC stated that the number of HIV infections has increased among individuals between 25–34 years old, with the rates of infection in males being 4.8 times more than in females. The prevalence and incidence rates of HIV in Puerto Rico are deemed prominent and call for the necessity of multimodal and multifocal assistants, intervention, integration of innovative research and service projects.

Service projects are a component of many educational programs and have been shown to be beneficial at a personal and professional level for everyone involved (Withers et al., 2013). Service trips are also intended to aid in different health care needs in low-income regions (Sykes, 2014). Prior research demonstrated that for medical students and residents, service excursions have been favorable in creating insight into valuable experiences for personal development and diplomatic connections (Chiu et al., 2012). Additionally, service trips had been found to improve clinical skills and training competency (Campbell et al., 2011), enhance cultural awareness (Brown et al., 2012) and provide a meaningful connection with others in diverse cultural contexts (Chiu et al., 2012).

Much attention has been drawn by multiple organizations to helping in larger regions through service trips, such as Africa and Asia, where the number of people infected with HIV is higher in comparison to the Latin/Hispanic population within the US territory (see data from Go Overseas). However, prior studies have failed to discuss the advantages of these trips in an HIV low-income community center (located in Puerto Rico) which mainly treats Latino/Hispanic people. Additionally, the value or perception of the students and personnel have not been reported.

Therefore, the purpose of this article is to explore and report whether short-term service trips can be beneficial in a professional and personal level to those providing the services, as well as to those being served in a Latino-Hispanic, low-income, HIV community setting.

Methods
Participants
A total of 40 people were involved in the Puerto Rico Service Trip. There were 11 physical therapy students (9 females and 2 males ranging from 23 to 26 years of age), and a Professor from Texas Woman’s University (Dallas Campus). The group partnered with an established organization in Puerto Rico, La Perla de Gran Precio (LPGP), which mainly works with low income, HIV diagnosed participants. There was a total of 19 patients (age average 59.2±1.7 years) and 9 employees who participated in the service activities. All students, employees and participants were included in this study.

Hispanic-Latino HIV Community Center
The group visited an established organization in Puerto Rico, LPGP, which works mainly with participants who are low income and have been diagnosed with HIV. LPGP is a community center comprised of an inpatient facility to assist women who are unsafe to live on their own, are undergoing drug rehabilitation, a shelter for children who have parents receiving treatment from the institution, a transitional home (from supervised living to independent), independent living (own/rented apartment), and an outpatient facility. LPGP also participates in regular homeless outreach events throughout the city.

Activity overview
The group of physical therapy students and their professor traveled to San Juan, Puerto Rico from May 13th to May 20th, 2018. The service trip had academic and cultural elements, which are depicted in the itinerary (see Extended data, Appendix 1 (Rosario, 2019b)).

The academic components were related to the physical therapy skills students acquired during their first two years of the physical therapy program. These skills were mainly physical therapy evaluation and intervention under the supervision of the professor, a licensed physical therapist. The students provided physical therapy services to the participants in both the outpatient and inpatient facilities, updated exercise plans, and performed exercise testing within a variety of diagnoses.

The cultural component was related to group discussions on the cultural differences (Hispanic-Latino population in Texas versus Puerto Rico), the impact of HIV in Puerto Rican Hispanic-Latino people, and the participation in a daily reflection (see Extended data, Appendix 2 (Rosario, 2019b)) to evaluate the events of the day and troubleshoot potential barriers. Additionally, the group engaged in homeless outreach events; these outreach events included providing clean attire, showers, haircuts, HIV testing, and educational information to the people around the San Juan Area who were without a permanent residence. Finally, on the last day, the students developed a social lunch activity where they aided the community center’s chef in preparing and serving food for the activity. This venture provided an opportunity for the students, personnel, and participants to share a meal and life experiences.

Survey
Three separate surveys were designed for the students, employees, and participants of LPGP. The student survey (see Extended data, Appendix 3 (Rosario, 2019b)) was 30 questions, 23 Likert scale style and 7 free response, intended to gauge the perceived benefits of participating in the service trip, and the employee survey was composed of 12 questions, 8 Likert scale style, and 4 free response. Both the employee (see Extended data, Appendix 4 (Rosario, 2019b)) and participant surveys (see Extended data, Appendix 5 (Rosario, 2019b)) were translated.
from English to Spanish by a student volunteer, and were checked for accuracy by the Spanish-fluent professor who had previously resided in Puerto Rico. The Community Center’s participants surveys included 8 questions, 5 Likert scale style and 3 free response. All Likert scale questions ranged from strongly disagree (1) to strongly agree (5). Surveys were voluntarily completed on the last day by employees and members, whereas student surveys were conducted during the students’ trip back and were completed prior to returning home the next day. All surveys were completed anonymously, allowing one to report their true perception without concern of repercussion.

Ethics and consent
The authors used the ARECCI tool to determine and justify that the service trip is classified under Program Quality Improvement, for which the ARECCI tool is recommended instead of Institutional Review Board approval. Participants provided LDGP Center written informed consent and verbally agreed to be part of the activities of the service trip and the initiative. To protect all parties involved, no photos or identifiers were collected from any participant in this project.

Statistical analysis
Data were gathered in a spreadsheet and Likert scale for averages and the standard deviation was analyzed by Statistical Package for Social Sciences (SPSS) version 24. Overall free response themes were analyzed.

Results
Students
On a Likert scale ranging from strongly disagree (1 points) to strongly agree (5 points), students responded with strong agreement that their participation in the service activity made them more aware of their impact on others, encouraged them to overcome challenges, assisted in becoming aware of one’s own biases and prejudices, as well as foster a belief that because of this trip, they will be a better new-grad hire. Additionally, students stated that this mission trip availed them on a personal and professional level, and felt as though they made an impact on the community they worked with. Students agreed and gave the lowest score to the pre-trip reflections helped prepare them for the trip question (Likert scale 3.78±0.67). However, results showed that the overall service trip activity was a success, according to the Likert scale data, 4.71± 0.4. Raw responses are available Underlying data (Rosario, 2019a).

Employees
All of the employees strongly agreed to the questions “our group coming to serve your organization was beneficial” and “our group provided appropriate interventions and services for your organization.”

Participants
Every member strongly agreed to the questions “do you feel like you will be able to implement what you learned into your routine?” and “would you like to have a group come back again?”.

The experience had a positive effect, as demonstrated by the above results, as every person involved found value from participating in this service activity, whether it be as a volunteer or member of the organization. All students rated strongly agree on “made me more aware of my possible impact on others,” “service trips like this one can provide real aid for people in the community,” “service trips like this one can benefit other students,” and, “I felt like I had an impact with the community I worked with on this service trip.” All employees strongly agreed with all statements indicating that they felt the services provided were of great value to their organization. Similar to the employees, the members strongly agreed to nearly every question, with only one participant reporting a 4 out of 5 regarding communication between students and members. Otherwise, the members strongly agreed with all statements indicating significance from interacting with students during their service trip to Puerto Rico.

Discussion
Prior research reported the personal and academic benefits (Fisher et al., 2017) of short-term service assignment in students within different professions. For instance, in medical students and residents, service trips have been shown to be constructive in creating insight into ethical and societal issues regarding global health (Abedini et al., 2012) while creating valuable experiences for professional development (Chetta et al., 2018). Reduction of healthcare worker burnout (Campbell et al., 2009), as well as improvement in clinical skills and enhance cultural awareness in medical and pharmacy students (Chuang et al., 2015) were also found. Additionally, trips such as these have proven to be meaningful to occupational therapy students by allowing connections to be made with others in diverse cultural contexts (Humbert et al., 2012). This service trip served as motivation to aid and provide service to a Latino-Hispanic, low-income community center that specializes in helping people...
living with HIV in Puerto Rico. Since it is often unclear whether the community partners served during these trips experience the same sort of gain, the purpose of this article is to delineate the benefits of this short-term mission trip to Puerto Rico for both those providing the services, as well as those being served.

During the planning stages of this service-learning experience, many negative opinions about potential harm short-term service trips can cause were discovered within our group. Concerns included western savior complex, creating a cycle of dependence, and the trip being more focused on the benefits for volunteers as opposed to the people they are serving. Moreover, concerns about language and culture barriers affecting the success of the services provided and the ability to make meaningful connections with those being served were brought up. In doing a literature review, little to no evidence was found to neither support nor negate these claims.

Deliberations commenced to create an abroad mission trip course were the destination could vary depending on the areas requiring assistance. Future clinical skills will be assessed to identify quantifiable methods of measuring professional improvements and learning. Further, this service trip was composed of only physical therapy students and faculty, considerations will be made for interdisciplinary collaborations focusing on the necessity of the participants needs.

Conclusion
Since a small student sample expressed interests in this initiative and were able to fund their travel to Puerto Rico, our findings and data cannot be generalized. However, as per the results of this study, along with the reports from the participants, employees, and participants, it can be supported that short-term service learning experiences should be included in graduate academic programs in order to produce well rounded, culturally aware students. As indicated above, every person involved in this event found great value in at least one aspect, indicating that similar events can be used to foster growth in students and advance global health initiatives. Further research should be conducted to assess the value of similar trips in different regions to explore the benefits of short-term physical therapy services provided to different populations.

Data availability
Underlying data

This file contains the answers from each respondent, in addition to pooled responses. Please note that some of the free response answers from the participants and employees are in Spanish.

Underlying data are available under the terms of the Creative Commons Zero “No rights reserved” data waiver (CC0 1.0 Public domain dedication).

Extended data

This file contains the following extended data:

- Appendix I: Itinerary of cultural and academic activities per day.
- Appendix II: Daily Reflection Example, day 1 and 2.
- Appendix III: Student Survey and Student Survey Results.
- Appendix IV: Employee Survey and Employee Survey Results.
- Appendix V: Participant Survey and participant Survey results.

Extended data are available under the terms of the Creative Commons Attribution 4.0 International license (CC-BY 4.0).

Grant information
The author(s) declared that no grants were involved in supporting this work.

Acknowledgements
Thank you to La Perla de Gran Precio, San Juan Puerto Rico for providing access to the facilities.

References


Chuang C, Khatri SH, Gill MS, et al.: Medical and pharmacy student concerns...


The benefits of publishing with F1000Research:

- Your article is published within days, with no editorial bias
- You can publish traditional articles, null/negative results, case reports, data notes and more
- The peer review process is transparent and collaborative
- Your article is indexed in PubMed after passing peer review
- Dedicated customer support at every stage

For pre-submission enquiries, contact research@f1000.com