Student Service-Learning Projects: Good Intentions, Questionable Impact

Saara Z. Nasruddin, PharmD, PhD Student¹; Meagen Rosenthal, PhD¹; Vibhuti Arya, PharmD, MPH, FAPhA² ¹University of Mississippi School of Pharmacy, Department of Pharmacy Administration ²St. John's University College of Pharmacy and Health Sciences, Department of Clinical Health Professions

Abstract

Student pharmacist-led service-learning projects aimed at community engagement generally provide health education while promoting the pharmacy profession. Many such projects often assume the needs and wants of community residents, and key community partners are often left off the decision-making table when it comes to planning. This paper will offer some reflection and guidance for student organizations to consider when planning projects, with a focus on local community partnerships to identify and address needs for more meaningful and sustainable impact.

Keywords: community engagement, health equity, community participation, public health, student pharmacist

Background

According to the American Association of Colleges of Pharmacy (AACP), there are 141 accredited colleges and schools of pharmacy in the US as of January 2022.¹ Each of these institutions has at least one student chapter of a professional pharmacy organization that participates in both community service projects and service-learning projects each year. Service-learning is defined by the National Service Learning Clearinghouse as "An approach to teaching and learning in which students use academic and civic knowledge and skills to address genuine community needs."^{2,3} Within pharmacy academia, service-learning is used as a form of experiential education for student pharmacists, and while it has been incorporated into the curriculum for many schools and colleges of pharmacy,² these projects are also led by student pharmacists within professional organizations.

Service-learning projects have the potential for major impact on advancing public health initiatives, particularly when the approach is aligned across didactic, experiential, co-curricular and extracurricular activities. For example, a point of care testing health screening event led by pharmacy students saw nearly 2,000 participants.⁴ Many of these student projects are aimed at providing health education on various topics to communities while also promoting the pharmacy profession. As was noted in a recent publication by Dicks and Mitchell, service learning projects ought to be mutually beneficial experiences for both the communities we serve and student learning.²

While the current literature includes commentary on didactic and experiential service-learning projects, it is primarily written from the faculty perspective² The process of community project planning by student pharmacists is not described in the literature. While the student planning process we describe was used at a single institution, to our understanding this approach is not uncommon at many institutions across the US.

Corresponding author: Saara Z. Nasruddin, PharmD, PhD Student University of Mississippi School of Pharmacy, Department of Pharmacy Administration; Email: snasrudd@go.olemiss.edu We offer further perspective on student-led, faculty-advised, projects that occur primarily via student organizations.

Design: Healthy Ramadan

Healthy Ramadan was a student pharmacist-led project inspired by the desire to integrate cultural sensitivity and service with the pharmacy profession. Before Ramadan, the holy month in which Muslims fast from sunrise to sunset, I (SN), as a student leader, worked with my colleagues in a student pharmacist professional organization chapter to hold an educational event at a local Masjid, an Islamic place of worship for Muslims. The goal of the event was to educate a local Muslim community in within the New York City area on the management of diabetes and cholesterol during Ramadan, as well as to encourage healthy eating habits for "suhoor/sehri", the meal eaten before the fast begins at dusk, and "iftar", the meal eaten to break the fast at sunset.⁵ The event itself took place at a masjid on the border of Queens, NYC and Nassau, Long Island, just outside of New York City, with a mix of attendees from both Queens and Long Island. We also hoped this student pharmacist project outreach would inspire others to offer healthcare services to minoritized houses of worship, from Gurdwaras to Synagogues, as a means to provide care to these communities, who often lack access to quality health services.6,7

Implementation

On the morning of this event, the student pharmacist team held a training session for our volunteers to educate them on Islam, Ramadan, and the social norms of a Masjid. We did this step to ensure that everyone adhered to the objective of delivering culturally sensitive education. Afterwards, we went to the Masjid, and received a tour from the Imam, the religious leader and point of contact for the event. Our outreach was part of a larger two-part event in collaboration with the Masjid. In the first part, the Imam provided a lecture to the attendees on how to spiritually prepare oneself for the month of Ramadan. Then we took a break for the afternoon Asr prayer. In efforts to improve attendance, after Asr prayer, the Imam made an announcement to everyone in the Masjid to join the second part, our event, where food was being provided by the students. After this announcement, the turn out for the event grew substantially. Before the second part of our event began, we distributed pre-surveys to those 18 years and older to assess their knowledge of healthy eating habits during Ramadan. Next, myself and my fellow student pharmacists delivered a presentation on the impact of fasting on diabetes and cardiovascular health followed by a question-and-answer session. We then distributed a post-survey to the same attendees to evaluate the impact of our presentation on participant knowledge of healthy eating habits during Ramadan.

Outcomes

A total of 24 adult participants, above the age of 18, completed both pre- and post- surveys. Less than half of those individuals had the chronic conditions our program was targeting; only 4 out of the 24 participants reported having Type 2 Diabetes (T2DM), 7 out of the 24 participants reported having hyperlipidemia, and only 2 participants reported having both Type 2 Diabetes and hyperlipidemia. Comparing the survey participation and attendance numbers with nationally representative estimates that show approximately 43% of Muslim Americans, around 1.5 million individuals attend Masjids for prayer on at least a weekly basis, the impact of our event looked dismal.⁸ However, the idea to reach out to this community was not only praised by our mentors, but also won us a national award.

Discussion

It was not until I (SN) had an experiential rotation with a preceptor focused on health equity, that I began to question the ways this event may have been a missed opportunity to meaningfully engage with the community rather than acting on assumptions made about them. As I reflected, I realized that while our intentions to serve this community were welcomed, the general assumptions we made about the worshippers were far from the truth.

Unchecked Assumptions

After exploring the results of our Healthy Ramadan pre- and post-surveys I (SN) came to the realization that our assumptions of this community, based on personal experiences, were 1) T2DM must be rampant within the community we were serving, and 2) community members needed to learn how to have a healthy diet during this time of tradition. While there is some evidence to suggest T2DM and cardiovascular disease is prevalent in Muslim American communities, most US epidemiological studies focus on these disease's prevalence through a racial or cultural lens.^{7,9,10} There are gaps in knowledge of how minoritized religious practices and religious discrimination overlap with social and structural factors of American nationality to impact ones' health. Exploring the multifaceted lens of identity on disease prevalence can further guide healthcare professionals and community organizations to adequately address health inequities.

These assumptions may not have resulted in direct harm and learning about T2DM could be useful for anyone. Nonetheless, had we taken some time to learn what was most important to the community, we may have had a greater impact. Additionally, assuming T2DM was prevalent in the community made our educational session more focused on treatment and management rather than a potentially more impactful session on prevention.

Value of Community Input & Involvement

I unintentionally got a glimpse of the real needs of this community and what meaningful engagement could have looked like after the formal presentation of the event itself. As we concluded our presentation a handful of women and men stayed back and asked us questions about what exactly it meant to eat healthy, what types of vegetables were "good" to consume, inquired about iron deficiency, and the appropriate vitamins to take. While not all these questions are directly related to pharmacy, they are related to the larger scope of health and wellbeing. Had we asked the community about their needs ahead of time we could have planned an event related to their health-related concerns. Furthermore, planning an event that addressed these topics would have also provided a space for interprofessional collaboration to comprehensively address community members' understanding of health.

Missed Opportunities for Meaningful Impact

It is not uncommon for groups to go into to a community with a charity-based approach. However, looking to the literature around global health and international aid it is an approach that has long been contested.¹¹ While one may have a charitable or altruistic mindset, an unselfish devotion to the welfare of others, relying solely on this approach misses opportunities for engagement and may result in minimizing the communities being helped.¹² Charity based approaches, like that described in humanitarian aid work, overlook structural injustices and reward the "givers" and "helpers" for their generosity without any meaningful reflection on the inequitable conditions that caused the need to begin with.¹¹ These approaches enable cycles of dependency and reinforce existing power dynamics where communities being served are not explicitly engaged in decision-making or shared leadership.¹³

When communities are not engaged in research/outreach projects they report feeling exploited and treated disrespectfully and misrepresented by professionals.¹³ Additionally, they report that researchers often retain all information and control and do not specify short and long term benefits to the community.¹³ By not convening with a community to understand their needs and develop a mutually beneficial project, members do not have an incentive to participate. Furthermore, the power dynamic of the researcher/professional claiming to know more than them about their own health is exacerbated.¹³

2

COMMUNITY ENGAGEMENT

Being in positions of privilege as pharmacists and student pharmacists, we need to work with those we aim to help through community engagement. Community engagement is defined by the CDC as:

"[The] process of working collaboratively with and through groups of people affiliated by geographic proximity, special interest, or similar situations to address issues affecting the wellbeing of those people. It is a powerful vehicle for bringing about environmental and behavioral changes that will improve the health of the community and its members. It often involves partnerships and coalitions that help mobilize resources and influence systems, change relationships among partners, and serve as catalysts for changing policies, programs, and practices."¹⁵

Within medical research, community engagement has been shown to build trust between university institutions and communities, encourage community participation, and promote use of findings from the research project.¹⁶ For example, when the Kahnawake community, a native Mohawk community in Montreal, saw an increase in childhood obesity, the Kahnawake elders approached academic researchers to develop a school-based healthy eating and diabetes prevention intervention.^{16,17} Because a relationship of active engagement and trust was established between the university and the Kahnawake community, the community members were confident their needs and concerns were valued and would be addressed and they approached the university themselves.^{16,17} As a result, the Kahnawake Schools Diabetes Prevention Project (KSDPP) was developed and included culturally appropriate education modules and nutrition policy reform to incentivize healthy eating at local schools.^{16,17} Additionally, KSDPP was able to fund itself for 10 years.^{16,17} Partnership and shared leadership with those who best understood community needs ultimately led to results that targeted both individualistic and structural components to improving patient health.

Through my health equity focused experiential rotation I (SN) came to see the *Healthy Ramadan* service-learning project not only as a missed opportunity, but one I could learn from as I continue my professional development. I learned that moving the needle on inequities is bigger than a single event and given that 25% of Muslim Americans report experiences of discrimination while receiving healthcare services, we have work to do.¹⁸ Health inequity is about the structural systems in place that prevent people from accessing healthcare and services that meet their particular needs. Addressing these issues in healthcare requires consistency and relationship building for a sustainable and shared vision. I was so focused on making this event a reality within the time constraints of a student leadership position that I failed to take steps toward achieving the purpose of the event, which was to provide an impactful and meaningful health promotion event to the Muslim community. Through my health equity focused experiential rotation, I came to learn that this process starts with quieting our own visions and providing platforms and spaces for the voices of those we want to serve.

Recommendations for Student Pharmacists Organizations and Schools and Colleges of Pharmacy:

Through this project and subsequent reflection, I have some recommendations that could help guide others in planning their institution's efforts around student-led service-learning projects:

Table 1. Recommendations for Student Organizations and Schools and Colleges of Pharmacy

1. Avoid generalizing community needs based on personal experiences and research literature.

Each community has needs that may greatly differ from what we presume. The health disparities and community articulated needs between neighboring counties in any given jurisdiction, like our example in New York, may vary greatly.

 Conduct a needs assessment: Identify faculty mentors, graduate students, and/or services within the affiliated institution that can help conduct a needs assessment with a community partner and ask what healthcare information and/or services the community may benefit from.

A discussion should be had with leaders and community members on the best ways to connect with their communities. An important piece of this conversation is acknowledging historical harm on marginalized communities perpetuated through structural oppression and inequities; acknowledging the history allows us to pave way for establishing more meaningful relationships and trust with communities. If these faculty mentors, graduate students and resources do not exist at the affiliated institution then consider outside institutions or centers, like UM CREW (<u>https://crew.olemiss.edu/</u>), whose mission is to work directly with communities to increase their capacity to engage with institutional partners effectively and equitably. Facilitate open dialogue to determine what those needs are by reaching out to the leaders or surveying people at widely attended community gatherings or social media and emails. For student pharmacists looking for a meaningful and impactful research project, needs assessments may serve that purpose and result in a mutually beneficial and impactful effort.

3. With the results of the needs assessment, identify key priority areas for the identified community.

4. Gather information about local health agencies and community groups that may be working on these priority areas and identify any gaps that student projects may be able to fill.

5. In the planning stages, think through evaluation needs to gather data on the impact of projects and identify ways in which the projects can continue to evolve and serve community needs longitudinally.

6. Recognize that a single event may not be enough to meaningfully engage a community; prepare for longitudinal partnerships.

Impacting a community requires consistency. We should not have intentions of doing one event and leaving. Because engagement requires consistency, student pharmacists should understand that the rewards of their efforts will not be reaped within their one-year leadership position. What they, and the schools and colleges of pharmacy, are tasked to do is create a system of sustainability. A system of sustainability is actionable tasks to execute projects that benefit and engage communities that are consistent and measurable.

7. Teach students and faculty about community engagement processes to foster meaningful partnerships and projects.

Schools and colleges of pharmacy should dedicate efforts and resources to understand the landscape of the community around the institution, including the demographics of the communities, the history, disease burden data, what socio-political factors impact access and quality of care in the community. Often, student pharmacists, faculty, and leadership, may not always represent the communities immediately neighboring the institution, particularly when it comes to race, ethnicity, and socioeconomic status. Schools and colleges of pharmacy can create a community engagement plan that includes community needs assessments, partnerships with local community leaders and organizations, and engaging in longitudinal conversations that *invite*, not merely inform, the partners and community leaders to create a shared agenda where service-learning projects can be impactful.

Resources for Incorporating Community Engagement within Service-Learning Projects

While it might seem daunting for an individual faculty member or student pharmacist to think about getting started with community engagement within their school or college, there are some excellent resources to assist in this task. Some of these resources are listed below in Table 2. The use of the ADAPT tool has been offered as a health promotion planning resource for pharmacists and student pharmacists.¹⁹ We invite teams to go further and proactively invite community partners in the planning stage to assess priority and areas that are helpful to the community beyond prioritizing student outcomes. Importantly, it starts with taking the first step to build community relationships and create research and scholarship opportunities for students and faculty alike.

Resource	Description
CDC Principles of Community Engagement Framework ²⁰	The CDC provides science-based and practical guidance for how to engage community members in projects that may affect them. This framework introduces principles of community engagement, organizational support, building social connections and program evaluation.
NYC Race to Justice Framework ²¹	This framework from the NYC Health Department supports a value-based approach that puts shared decision-making at the center of community engagement to build sustainable relationships with an emphasis on health equity and anti-racism. It offers communication tips, language use guide, FAQs, glossary of terms, and elements to consider for varying levels of community engagement.
The Patient-Centered Outcomes Research Institute (PCORI) ²²	PCORI provides science-based and practical guidance for how to engage community members in projects that may affect them. This framework introduces principles of community engagement, organizational support, building social connections and program evaluation. PCORI's Building Effective Multistakeholder Research Teams website has sections relevant to both academic institutions and individuals interested in learning to engage stakeholders, solve common community engagement problems, address institutional barriers and build effective teams. ²³

Table 2. Community Engagement Resources

Extension of Meaningful Community Engagement into Research **Sustained Advocacy** come wit

Pharmacists and student pharmacists build trust with community members by encouraging them to provide input within a research project or community program. They can begin to understand their patients' contexts and circumstances to advance their health.

If schools and colleges of pharmacy used existing connections within pharmacy organizations to meaningfully interact with their neighborhoods, community members could look to their local pharmacy schools as a source of science-proven guidance who provide context-driven advice. Student pharmacists who participate in these community engagement projects would grow into thoughtful leaders. They would understand the inequities that surround healthcare and recognize there are opportunities for pharmacists to address them. Regardless of what practice setting they end up in, student pharmacists would learn first-hand that the purpose of leadership is to serve others.

Engagement that allows for space and inclusion leads to mutual support of each other's initiatives. If we start with creating meaningful, continuous, lasting relationships with community members, they will be shown and have the experience proving that pharmacists genuinely care about them. Over time these student pharmacist-patient and eventually pharmacist-patient relationships would develop into communities' themselves requesting pharmacist-driven programs.

True community engagement requires both reflection and action throughout the process. In the *Pedagogy of the Oppressed*, educator and philosopher, Paulo Freire states that reflection and action on the world is needed to transform it.²⁴ Pharmacy is a field that is ever evolving to better serve its patients and communities. It is time for us to not just participate in "action for action's sake"²⁵ but rather to participate in engagement for our communities' sake.

Conclusion

While Healthy Ramadan was a well-intentioned servicelearning project that may have provided benefit to student pharmacists, it had questionable impact on the intended population and was a missed opportunity for meaningful community engagement. Only through active and sustained community engagement can service-learning projects grow into a mutually beneficial exchange between Schools and Colleges of Pharmacy, student organizations, and the communities themselves. Active and sustained community engagement requires listening to community needs and involving the community in planning, avoiding generalizations based on personal experiences, preparing for longitudinal partnerships, and educating students and faculty on community engagement practices. Resources to get started include the CDC Community Engagement Framework, the NYC Race to Justice Framework, the Patient-Centered Outcomes

Research Institute, and the ADAPT tool. Each of these tools come with their own set of advantages and disadvantages and should be used thoughtfully when engaging with communities for student-led service projects. While student organized service-learning projects are the focus of this paper, the recommendations and resources equally apply to servicelearning activities outside of student organizations, organized by faculty members and/or schools and colleges of pharmacy. Applying a community engagement approach to servicelearning projects and student-led initiatives can not only benefit Schools and Colleges of Pharmacy in developing wellrounded, culturally-aware and involved pharmacists, but also improve the health and wellbeing of their neighboring communities.

Acknowledgements: Thank you to Dr. Anne Cafer (PhD) and Dr. Kyle J. Wilby (PharmD, PhD) for their reviews of a draft of this manuscript.

Conflicts of Interest: We declare no conflicts of interest or financial interests that the authors or members of their immediate families have in any product or service discussed in the manuscript, including grants (pending or received), employment, gifts, stock holdings or options, honoraria, consultancies, expert testimony, patents and royalties.

References

- Academic Pharmacy's Vital Statistics | AACP. Accessed July 26, 2022. https://www.aacp.org/article/academic-pharmacysvital-statistics
- Dicks M, Mitchell T. Service or Disservice? Ensuring Pharmacy Students Provide Authentic Service-Learning. Am J Pharm Educ. 2019;83(7):7465. doi:10.5688/ajpe7465
- 3. NYLC. Accessed July 20, 2021. https://www.nylc.org/
- Palombi LC, Bastianelli K, Stratton T. Point-of-care screenings at the University of Minnesota: Mechanism for civic engagement. J Am Pharm Assoc. 2014;54(1):56-62. doi:10.1331/JAPhA.2014.13122
- Ramadan. Yaqeen Institute for Islamic Research. Accessed August 29, 2022. https://yaqeeninstitute.org/what-islam-saysabout/ramadan#how-long-do-you-fast-in-ramadan
- Siddaiah R, Roberts JE, Graham L, Little A, Feuerman M, Cataletto MB. Community health screenings can complement public health outreach to minority immigrant communities. *Prog Community Health Partnersh Res Educ Action*. 2014;8(4):433-439. doi:10.1353/cpr.2014.0070

- Laird LD, Amer MM, Barnett ED, Barnes LL. Muslim patients and health disparities in the UK and the US. *Arch Dis Child*. 2007;92(10):922-926. doi:10.1136/adc.2006.104364
- NW 1615 L. St, Suite 800Washington, Inquiries D 20036USA202 419 4300 | M 857 8562 | F 419 4372 | M. A new estimate of U.S. Muslim population. Pew Research Center. Accessed March 28, 2021. https://www.pewresearch.org/facttank/2018/01/03/new-estimates-show-u-s-muslimpopulation-continues-to-grow/
- Jaber LA, Brown MB, Hammad A, et al. Epidemiology of Diabetes Among Arab Americans. *Diabetes Care*. 2003;26(2):308-313. doi:10.2337/diacare.26.2.308
- Stroope S, Kent BV, Zhang Y, Kandula NR, Kanaya AM, Shields AE. Self-Rated Religiosity/Spirituality and Four Health Outcomes Among US South Asians: Findings From the Study on Stress, Spirituality, and Health. J Nerv Ment Dis. 2020;208(2):165-168. doi:10.1097/NMD.00000000001128
- Cooney-Petro E. Branding White Saviorism: The Ethics and Irony of Humanitarian Discourse on Instagram. *Theses - ALL*. Published online May 12, 2019. https://surface.syr.edu/thesis/316
- 12. Milton CL. Altruism. *Nurs Sci Q*. 2012;25(3):222-224. doi:10.1177/0894318412447553
- Baum F, MacDougall C, Smith D. Participatory action research. J Epidemiol Community Health. 2006;60(10):854-857. doi:10.1136/jech.2004.028662
- 14. Thiessen T. What Do We Really Mean by "White Savior?":33.
- Chapter 1: What Is Community Engagement? | Principles of Community Engagement | ATSDR. Published December 6, 2018. Accessed August 4, 2021.

https://www.atsdr.cdc.gov/communityengagement/ pce_what.html

 Holzer JK, Ellis L, Merritt MW. Why We Need Community Engagement in Medical Research. J Investig Med Off Publ Am Fed Clin Res. 2014;62(6):851-855. doi:10.1097/JIM.000000000000097

- Cargo M, Lévesque L, Macaulay AC, et al. Community governance of the Kahnawake Schools Diabetes Prevention Project, Kahnawake Territory, Mohawk Nation, Canada. *Health Promot Int*. 2003;18(3):177-187. doi:10.1093/heapro/dag013
- ISPU | American Muslim Poll 2020: Amid Pandemic and Protest. Accessed March 28, 2021. https://www.ispu.org/american-muslim-poll-2020amid-pandemic-and-protest/
- Truong HA, Taylor CR, DiPietro NA. The Assessment, Development, Assurance Pharmacist's Tool (ADAPT) for Ensuring Quality Implementation of Health Promotion Programs. *Am J Pharm Educ*. 2012;76(1):12. doi:10.5688/ajpe76112
- Home | Principles of Community Engagement | ATSDR. Published December 7, 2018. Accessed April 10, 2021. https://www.atsdr.cdc.gov/communityengagement/i ndex.html
- 21. Race to Justice NYC Health. Accessed April 10, 2021. https://www1.nyc.gov/site/doh/health/healthtopics/race-to-justice.page
- Research Fundamentals: Preparing You to Successfully Contribute to Research. Published July 8, 2020. Accessed June 24, 2021. https://www.pcori.org/engagement/researchfundamentals
- Home | Patient-Centered Outcomes Research Institute. Accessed June 24, 2021. https://researchteams.pcori.org/
- 24. Freire P. (1972). Pedagogy of the oppressed. *Harmondsworth: Penguin,* 28.
- 25. Freire P. (1972). Pedagogy of the oppressed. *Harmondsworth: Penguin,* 41.