NEW EDUCATIONAL METHOD

Is Community-engaged Learning Possible During a Pandemic: A Call for Culturally Competent Medical Education [version 1]

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Abstract
This article was migrated. The article was marked as recommended.

Previously, medical school curriculum focused on faculty or physician-led basic science and traditional clinical experiences, with medical students only gaining experience of the community in which they practice during residency. In an effort to enable students to understand US healthcare disparities, the introduction of public health topics regarding marginalized communities and underrepresented individuals have been included in the classroom. However, missing from this shift is the inclusion of authentic public health educational experiences for medical students. These learning experiences are vital to truly understanding the marginalized and discriminated patient populations physicians will encounter. The recent COVID-19 pandemic has brought forth challenges for medical educators in numerous ways including how to effectively prepare students in understanding cultural competency through community-engaged learning for a new set of patient population; the pandemic patient. Due to health disparities, each patient experienced this pandemic differently based on their individual, cultural and community setting; also highlighting the importance of community-engaged learning. Here, the authors posit the role and importance of community-engaged learning in medical education and its utilization during the changing medical landscape due to COVID-19.

Keywords
education, community, community-engaged learning, cultural competency, COVID-19
Introduction
Over the last few decades, medical school education has evolved to train students in cultural competency and to address the broader underlying health needs of a population (Meuer et al., 2011). By concentrating on underlying issues affecting patients, the prevalence of using community-engaged learning to shape culturally competent physicians is increasing in medicine. Cultural competence is a set of congruent behaviors, knowledge, attitudes, and policies that come together in a system, organization, or among professionals that enables effective work and clinical care in cross-cultural situations (Flores, 2000). Teaching cultural competence is a challenge because now medical educators must provide their students knowledge of the differences amongst patient populations (DasGupta et al., 2006).

A Didactic Lecture Limits the Expansion of Medical Training
Traditional didactic medical education does not capture the nuanced perspectives and authentic voices needed when teaching about social determinants of health (SDOH) topics such as violence, substance use disorder and racial disparities. This traditional approach cannot capture the true influence of lifestyle, socioeconomic factors, and environmental hazards on morbidity, mortality, and well-being (Betancourt et al., 2002). A single lecturer is limited in his/her cultural knowledge of a given different culture or community. Medicine is a social practice that greatly depends on how patients are categorized. However, these categorizations are often implicitly filled with bias and prejudice (Meuer et al., 2011). These stereotypes lead to false judgements and sometimes lead to adverse outcomes through oversimplification of physiology and pathology (Meuer et al., 2011). In the hospital setting, these prejudices translate to wide ethnic and social disparities in diagnosis and treatment (Nelson, 2002). Additionally, a lecture format does not sufficiently impact a medical student’s aim to have a deeper understanding of complex issues (DasGupta et al., 2006). A lecture may provide adequate and useful information for outlining social issues but it does not create a profound change of understanding for those listening, teaching methods beyond discussion are required (Kamaka, 2010). Teaching culturally competent care is complex and requires a multiple levels of learning to uncover prejudices and implicit biases (Kamaka, 2010). Recently, COVID-19 brought to the forefront health disparities. For example, Racial and ethnic minorities, immigrants, LGBTQ, women and individuals from other marginalized groups have routinely fared worse in health outcomes as compared to their White counterparts (Adams et al.; Cleveland Manchanda et al., 2020). COVID-19 death rates varied amongst diverse populations magnifying inequalities in health and the effects of SDOH on life span, access to care and culturally competent health care. A thorough and thought-provoking teaching method is necessary to cover these issues.

The Role of Community-Engaged Learning
In an effort to expand the educational and experiential opportunities for students and faculty alike, educators have begun implementing novel learning experiences. Community-engaged learning creates opportunities for first-hand and lived experiences with diverse populations and community partners who provide front-line care and program delivery. These approaches have seen success at the few medical schools beginning to implement these ideas into practice. Medical schools have reported these experiences as key to their students deeper understanding of the social intricacies in health disparities (Roughhead et al., 2017). Students are given a greater sensitivity to communities they engage with and learn about the specific circumstances making these populations so vulnerable (Ventres & Dharamsi, 2015; Ventres et al., 2018). Additionally, students are able to develop the ability to foster relationships with community leaders and individual community members. A systematic review analyzed 57 peer-reviewed articles regarding methods of community based learning which demonstrated that educators found it easier to teach these complex and sensitive topics through community engagement more than didactic lectures (Boroumand et al., 2020). Introducing students to the community earlier in a medical student’s education creates opportunities for them to see and practice interactions with marginalized communities. This practice can help to develop the humanistic skills necessary to effectively care for all populations sooner and can create personal practices integrating social determinants of health for the future clinical years.

Culturally competent community-engaged curriculum
Medical school curricula across the US may benefit on developing curriculum in health inequities and social determinants of health with a similar innovative community-based approach. SDOH topics such as LGBTQ health, stigmatized patients, refugee health, human trafficking, child sexual abuse and gun violence may benefit from a community-engaged learning approach. Community-engaged learning techniques such as community led panels, early preceptorship, standardized patient scenarios, and service-learning, to name a few, add veracity and credibility to medical education learning objectives that aim to address cultural competency and social determinants of health. A community-based medical school less than 10 years old with less than 100 students per class developed a culturally sensitive curriculum with hands-on training in how to be responsive to the communities students encounter. The following are examples of strategies used at a new, small medical school to implement the community-engaged curriculum.

Community led panels
The medical school educators reimagined the classroom barriers by inviting service and community partners in and bringing students out of their classrooms. Community partners who focus on social issues provide the best experiential
knowledge and teaching methods to give students an active role in learning. For example, teaching about sexual violence and human trafficking becomes authentic, timely and relevant when leaders from a local Human Trafficking Task Force, law enforcement and Victim Services produce and present lectures, panels and small group exercises for medical students. This creates an encompassing multi-faceted learning experience on the social issues physicians will potentially encounter in practice. Other panels include LGBT peer panels that provide students with socially relatable peers to better understand the LGBT community. Additionally, the medical students experienced true interprofessional education by interacting with students and educators from school of social work and school of nursing in patient scenarios. These processes allow effective integration of health advocacy and cultural competency into medical education (Seifer, 1998).

Early student preceptorship
Students can gain insight with exposure to patient scenarios by beginning preceptorship in their first year. Although some may argue this is too early in a student’s medical education, there is a vital component of learning about social determinants of health to be gained. Students are likely to have enough basic clinical training halfway through their first year to be adequately prepared for preceptorship, and through continuous actual patient interaction students will pick up the underlying social health issues patients face (Rooks et al., 2001; Henschen et al., 2020). Additionally, rotating first year students through non-for profit clinics once to twice a semester is an invaluable experience for learning socioeconomic, racial, and language barriers. These rich experiences support student growth in cultural competence and understanding in addressing the social determinants of health.

Authentic voice via standardized patients
Additional thoughtful learning experiences can be created through a curriculum designed with standardized patients that display social health issues such as substance use disorders in addition to the clinical lesson being taught (Rutledge et al., 2004). Creating authentic standardized patient experiences using individuals from the community and ensuring racial, gender, sexual orientation, disability are represented, also contribute to a community-engaged learning experience and development of cultural competence. A patient representing a marginalized group can help the student become more aware of implicit biases in practice. Participation in a post encounter breakout session discussing these issues creates reflective and critical dialogue amongst students and faculty.

Learning Opportunities in a COVID-19 World
COVID-19 has left physicians with many questions about the affected patient populations and what are physicians roles in addressing social inequity. We know that major Black communities had a triple infection rate and an astonishing six times mortality of major White communities (Kendi, 2020). At this point in time we do not fully understand why this population was impacted more. Perhaps the biggest issue amongst clinicians is can we change the outcomes in the event of another pandemic? Can these patient populations be better equipped to handle a similar outbreak? The COVID-19 crisis forced physicians to make difficult decisions that may have been better guided with more information and better understanding of their patients. Now more than ever, during the aftermath of COVID-19, medical students must engage with their communities to understand the social determinants of COVID-19 and to gain insight into how the pandemic affected the lives of their future patients. Likewise, an additional call for community-engaged learning post COVID-19 stems from an unprecedented rise in US unemployment that will inevitably translate to a rise in economically challenged populations (Blustein et al., 2020). Healthcare is often compromised in disadvantaged individuals because of the unavoidable time and monetary constraints (Woolhandler & Himmelstein, 2020). Students can receive great learning experiences during these changing times by interacting with this expanding socioeconomic group.

Call for community-engaged learning post COVID-19
Until COVID-19, all community-engaged learning was performed face-to-face. Now educators are faced with a question of what is the role of community-engaged learning in a world that may need to enforce social distancing and other protective precautions? Exposure to these communities is essential so medical students can uncover and learn what barriers individuals faced, and the type of care they received. Students will learn Black communities often have less ability to social distance because of crowded housing, have more exposure to pollution, and have different baseline levels of chronic diseases (Adams et al.; Cleveland Manchanda et al., 2020). These disadvantages put them at higher risk of contracting and dying from COVID-19 (Adams et al.; Cleveland Manchanda et al., 2020). Observing and interacting in some form with community engagement should not be compromised.

Interacting remotely with community led panel
Understandably, many institutions will limit student physical interactions but medical education faculty may need to provide alternative methods of community-engaged learning. One strategy to understand the issues that face minority patient populations is to include in the curriculum a learning session on COVID-19 that invites community partners to join a virtual dialogue about how to better respond to a pandemic. Engaging one and one remotely or with socially distanced
group site visits, students will find common shared experiences and note the differences between how individuals dealt with the pandemic. Similarly, panels with members of interprofessional education or combined panels to help better understand substance use disorder can transition to remote platforms. For example, the authors recently invited recovery and peer support specialists to co-facilitate a virtual session with internal medicine residents discussing implicit and explicit bias and how to engage with marginalized patients via an online virtual meeting. Cultural immersion is still feasible with remote platforms. Additionally, video conferencing will allow interprofessional and multi-institution involvement to occur with ease. It is vital to understand that even in remote learning formats, medical educators can use technology to maintain and deepen community-engaged learning. This can be achieved through remote learning platforms that invite community members to small group discussions to expose students to others’ challenges during COVID-19. Learning firsthand will give medical students an enormous advantage in understanding the intricacies of different populations and how they were affected through COVID-19.

**Telehealth and preceptorship**

During COVID-19, the landscape of medicine changed and it was accelerated by technology. Telemedicine showed significant positive aspects during COVID-19 and it can be expected that it will have an important role in the future and health education as well (Hollander & Carr 2020). Telehealth has unique features to offer to enhance medical education and help students. Telehealth training utilizing standardized patients that represent lower socioeconomic patients will also help students gain appreciation for a patient’s full story. Preceptors using telehealth and school affiliated hospitals should both begin to conceive methods of implementing telehealth into their medical education role. The use of telehealth is helpful in having immediate access to patients and for ease of follow-up care. These same reasons apply for medical students wishing to follow up with patients. Preceptors and hospitals can obtain a rigorous learning environment through installation of a webcam in a patient’s room that students can view and contribute by obtaining patient history of present illness and adding to the physician-patient interaction. The role of this technology in rotations and clerkships may have a basis depending on results of this utilization by first year medical students.

**Remote service project learning**

In a situation where social distancing must be implemented medical students can still lead service learning projects to help expose themselves to other communities. For example, students can join food pantries where social distancing is maintained and as an additional service they can educate those in line in standard hygiene precautions. Students can speak to those individuals to better understand the barriers to healthcare for the recently unemployed. In medical schools across the country students have begun to volunteer in call centers, helped create patient education material, and helped with grocery shopping among other activities (Rose, 2020). Even grocery shopping may enhance the student’s education through student guidance to clients with medically informed nutrition input and increase cultural competence.

Additionally, technology can aid students in performing service learning. Mentoring economically challenged high school and college students, meeting with elderly populations, and helping disabled children with their schoolwork can all be done virtually as well and will also provide a better idea of the community the medical student works with. These methods increase student engagement and understanding of underrepresented and marginalized people while providing humanistic and compassionate care.

**Discussion**

There are various approaches to enhance a curriculum that encompasses community-engaged learning. Doing so is vital in educating future physicians because these experiences bring forth the many aspects of patient issues that are difficult to teach strictly by didactic approaches. These experiences can be shared through community led panels, service learning projects and minority cases for standardized patients. Although there are some limitations to community engagement because of COVID-19 such as social distancing requirements, community-engaged learning must not be totally dismissed. Students and faculty may address these obstacles through the use of technology and socially distanced interactions. Community led panels, early preceptorship, novel service learning projects and minority cases for standardized patient methods can all be done virtually as well, further raising their importance as a mode of learning during a post COVID-19 world. With the current pandemic, future medical education research should focus on advancing methods for community-engaged learning. Medical schools must continue to be global leaders in education and community care during these new and changing times by augmenting their curriculum to satisfy this need.

**Take Home Messages**

- Community-engaged learning is a vital component of medical education
- Students can participate in community led panels, service learning projects and minority cases for standardized patients
• COVID-19 has brought forth the importance of community-engaged learning.
• Following COVID-19, educators should implement novel community-engaged learning methods

Notes On Contributors

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Declarations

The author has declared that there are no conflicts of interest.

Ethics Statement

This manuscript describes quality improvement to education without the use of human subjects or data.

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Migrated Content

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Subha Ramani
Harvard Medical School, Brigham and Women's Hospital

This review has been migrated. The reviewer awarded 4 stars out of 5

I enjoyed reading this paper on the importance of engaging medical students in cultural competency curricula through community engagement. I agree with the authors that authentic learning experiences are important early on in health professions training. Cultural competence is clearly defined, its importance well emphasized and overall the paper is well written. I agree with my fellow reviewer on the following points:- The abstract could be tighter and expand on the most important messages- This definitely reads like a perspective or reflective piece- nothing wrong with that, but it needs to be clear- If facts or numbers are quoted, readers need to know if they are based on studies or authors' opinions. Again, opinions are fine in a reflective or perspective paper- just need to clarify.- MEP caters to a worldwide audience, terms should not be country centric and facts and figures should be relevant to the rest of the world I would have liked to have seen a road map to where the authors are taking me at the end of the introduction section. This is an important topic, the pandemic indeed has uncovered disparities and I commend the authors for bringing attention to the topic. All health professions educators should find this piece interesting and it will provide food for reflection.

Competing Interests: No conflicts of interest were disclosed.

Reviewer Report 10 February 2021

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Ken Masters  
Sultan Qaboos University  

This review has been migrated. The reviewer awarded 3 stars out of 5

An interesting paper dealing with community-engaged learning during a pandemic. Community-engaged learning is crucial to medical professional training, and, as the authors note, the issues arising from the pandemic have exacerbated this need. The paper is a useful read, giving interesting aspects for medical educators to consider. It does, though, have some issues that should be addressed:

• The Abstract gives a good background to the paper, but the main ideas given in the paper are then squashed into a single sentence or two at the end of the Abstract. It might be better to shorten the first part of the Abstract and broaden the second part, so that the reader can get a better understanding of what is in the paper. (The Abstract should be a summary of the main points in the paper, rather than a background lead-in).

• Each section consists of a single paragraph, and the reader is met with a wall of text. It would be easier for the reader if these paragraphs were broken into smaller pieces for easier understanding.

• The authors need to write out the LGBTQ acronym, particularly because they sometimes use LGBTQ and sometimes LGBT. They may wish to explain the difference. As readers who would benefit most from the paper would be those unfamiliar with the terminology and issues, these need to be clear, otherwise, the authors’ efforts may be wasted.

• The information about “A community-based medical school less than 10 years” is too vague. If the authors are citing a study, then it needs to be formally cited and referenced. If the authors are giving their own original results of research, then they need to supply more information about the work. In either case, the institution needs to be identified.

• “The following are examples of strategies used at a new....” No further examples are given in this section. It would appear that the examples are given in the next section (but not the other sections that follow). The authors should clarify this, so that it is clear where the examples they cite from that study begin and end.

• It would be useful if the authors could give some details about the context in which they are working, and the background experience of their students; medical curricula are different around the world, and a sentence like “Students are likely to have enough basic clinical training halfway through their first year to be adequately prepared for preceptorship” would not make sense in many countries.

• The statement regarding the mortality rates citing Kendi may need reviewing, for two reasons:
  o The Kendi article is a magazine article written by a non-medical (albeit academically respected) person; it would be better to cite the original publications on which those figures are based.
  o From my rather quick reading of the mortality rates, the rates appear to 2 to 3 times the expected rates, based on population sizes. Still unexpectedly high, but not the 6 times given by the statement. If the authors have arrived at their figure by performing extra calculations and extrapolations, then it would be useful if they could lead the authors through that process (but again, if they draw their data directly from the primary sources, it would more strongly support their argument).

I'm not entirely sure that the heading “Discussion” is the appropriate heading for the final section of the paper. Perhaps “Reflection” or something similar might be better.

Similarly, I see that the authors have submitted their paper under a “New education method or tool”. This may leave readers a little disappointed, as many would have been waiting to find out about a new method or tool, but it does not materialise. I think the paper is a good reflective opinion piece, and should be listed as such. (While they do refer to some tools not widely used before, such as telemedicine or community involvement (even in
the early years of medical training), these are not new: the important aspect of the paper is the need to apply these during the pandemic. If the authors really wish to keep it as a "New education method or tool" then they would need to clearly highlight and identify the new aspects to what they are proposing, perhaps with practical examples. So, the paper is interesting, but does need a little more work. I look forward to Version 2 in which these issues are addressed.

**Competing Interests:** No conflicts of interest were disclosed.

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**Maria de los Angeles Fernandez-Altuna**
Universidad Nacional Autonoma de Mexico Facultad de Medicina

This review has been migrated. The reviewer awarded 2 stars out of 5

Thank you for writing this article from the point of view of cultural competence and educational practice during the COVID-19 pandemic. All medical educators have been faced to a real challenge for community learning and practice. During this pandemic I liked very much the broad approach taking into account not only community based practice, but this practice oriented to cultural competence. Now that the world is struggling with COVID-19, this culturally medical education approach seem plausible and very suitable. In order to improve the manuscript, I would respectfully advise to create a table to resume main features of each approach, advantages, etc. I would also advise to include a table with more practical examples which would guide other medical schools to implement your approach. And finally, to say more about how this approach could be effectively incorporated to the curriculum.

**Competing Interests:** No conflicts of interest were disclosed.