Title: Assess, Adapt, & Innovate: An Effort to Ensure Sustainability of Medical Student-led Community Engagement during the COVID-19 Situation in Indonesia

Article type: Experience

Author names:
1. Angelina Patricia Chandra
2. Stella Kristi Triastari
3. Shafira Aurelia
4. Muhammad Mikhail Athif Zhafir Asyura

Degrees and Affiliations:
1. Third-year Medical Student. Universitas Indonesia, Depok, Indonesia.
2. Third-year Medical Student. Universitas Indonesia, Depok, Indonesia.
3. Third-year Medical Student. Universitas Indonesia, Depok, Indonesia.
4. Third-year Medical Student. Universitas Indonesia, Depok, Indonesia.

ORCID (Open Researcher and Contributor Identifier):
1. Angelina Patricia: https://orcid.org/0000-0002-8406-5594
2. Stella Kristi Triastari https://orcid.org/0000-0002-2568-0570
3. Shafira Aurelia: https://orcid.org/0000-0001-5279-607X
4. Muhammad Mikhail Athif Zhafir Asyura: https://orcid.org/0000-0003-3018-2792

About the author: Angelina, Stella, Shafira, and Muhammad Mikhail are currently a third-year medical student of Universitas Indonesia of a 5.5 year program. They are also active in numerous student organizations and activities, including community development.

Corresponding author email: angelina.patricia@ui.ac.id

Acknowledgment: The authors would like to thank all of the participants of the programs. The authors would also like to thank and acknowledge dr. Dewi Friska, a lecturer of the Faculty of Medicine, Universitas Indonesia, for the suggestions and help in conducting the programs. The authors would also like to express gratitude to all of the committees of the event. Finally, the authors are also grateful for the support from the faculty.

Financing: The funding for programs included in this research comes from the Faculty of Medicine Universitas Indonesia and donations.

Conflict of interest statement by authors: No conflict of interest

Compliance with ethical standards: The author declares no conflict with ethical standards.


Manuscript word count: 1649
Abstract word count: 249
Number of Figures and Tables: 4
Personal, Professional, and Institutional Social Network accounts.

Facebook:
1. BEM IKM FKUI
2. Faculty of Medicine, University of Indonesia

Twitter:
1. BEM IKM FKUI - https://twitter.com/bemfkui
2. Faculty of Medicine, University of Indonesia - https://twitter.com/Medicine_UI

Instagram:
1. Angelina Patricia Chandra - https://www.instagram.com/angiebelieb/
4. Shafira Aurelia: https://www.instagram.com/shafr_/ 
5. Department of Community Outreach, BEM IKM FKUI - https://www.instagram.com/penghugsquad/
6. BEM IKM FKUI - https://www.instagram.com/bemfkui/
7. Faculty of Medicine, University of Indonesia - https://www.instagram.com/medicine_ui/

Linkedin:
1. Angelina Patricia Chandra - www.linkedin.com/in/angelina-patricia

Discussion Points:
1. Is it possible for preclinical medical students to engage in community development despite the harsh online setting forced by COVID-19?
2. Are healthcare workers the only instrumental stakeholders in combating the pandemic?
3. Can we, as preclinical medical students, contribute to society although we are not yet established as health workers?
Dates
Submission: 03/18/2022
Revisions: 05/02/2022
Responses: 05/09/2022
Acceptance: 07/13/2022
Publication: 07/14/2022

Editors
Associate Editor/Editor: Francisco J. Bonilla-Escobar
Student Editors: Sebastian Diebel, Ahmed Nahian
Copyeditor: Michael Tavolier
Proofreader:
Layout Editor:

Publisher's Disclosure: This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our readers and authors we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.
ABSTRACT.

The *Tri Dharma Perguruan Tinggi* or The Three Pillars of Higher Education is a common principle attached to university students in Indonesia. Out of the three, giving back to the community resonates greatly with medical students, especially when aligned with the Hippocratic Oath. Although, since the COVID-19 pandemic started, students pondered how such face-to-face limitations could be deterred to still give back to the society. This experience tells a brief recount of creative efforts made by students from the faculty of medicine, Universitas Indonesia (FMUI) in finding ways to empower the community in such drastic times. Kampung Lio is a village directly taken care of by the faculty. Before the pandemic, efforts made to develop the community include conducting free general checkups and health assessments which is later used as baseline data for our community development program. Efforts to continue development during COVID-19 utilized many different virtual mediums in conducting online-based events. Health promotion was conducted using e-booklets sent via WhatsApp groups filled by the villagers from Kampung Lio. Telehealth also played a huge role in our intervention, as we succeeded in conducting a hybrid intervention - combining remote painting classes while calling and providing an ear for them to listen. Despite intervention still being possible, a proper assessment of the community’s ability to utilize such online platforms is recommended before execution. Furthermore, to maximize engagement with the community, building a good rapport is necessary which could be achieved through small interactions prior to the intervention even through online means.

*Keywords: community participation, COVID-19, Indonesia, medical student*

*Key Words: Community Participation; COVID-19; Indonesia; Medical Student (Source: MeSH-NLM).*
THE EXPERIENCE

The Tri Dharma Perguruan Tinggi or The Three Pillars of Higher Education is a common principle attached to university students in Indonesia. The three values which are “Education, Research, and Giving Back to The Community” act as a voice of reason for activities created and led by students. The community efforts conducted by medical students have fundamentals that are aligned with the core values instilled in the Hippocratic Oath. Medical students may wonder how community efforts should be conducted during times of isolation and social distancing. With uncertainties and limitations on face-to-face activities, medical students had to ponder creatively on methods to give back to the community. In regard to that matter, as third year medical students from Indonesia, we would like to share our hardships and efforts in persistently engaging with the community despite the pandemic situation.

Student-led Community Engagement Before the Pandemic

As medical students, we resonate more with community engagement efforts that directly involve face-to-face interaction. Before COVID-19, medical students in the Faculty of Medicine, Universitas Indonesia (FMUI) were involved in various community efforts, with most of them situated in rural regions in proximity of the campus. The FMUI students conducted various community efforts, including free mass circumcision, general checkups, and health promotion events in Kampung Lio, our community development village. We believe that empathy and the willingness to help others need to be practiced since our first year in medical school. In accordance with that belief, first year medical students are given the opportunity to participate in the programs such as conducting annual assessment on metabolic diseases, maternal and reproductive health, personal hygiene, and eco-friendliness. These assessment indicators were gathered via personal interview of Kampung Lio’s residents and became the foundation of the community development program. Other than Kampung Lio, the students also conducted a community engagement program within the faculty, called FKUI Peduli (FMUI Care). The program included health consultation with doctors from various health specialties in FMUI’s affiliated hospital. Doctors would examine the patients, give health advices, and treatments to the employees working in FMUI including the janitors and security guards. Therefore, FKUI Peduli was a way to give back and appreciate their services.

Impact of The Pandemic on Student-led Community Engagement

However, familiarity of the norm shifted during the pandemic. Medical students were forced to creatively adapt and think ways of community outreach approaches in online scenarios. The massive difference lies in the inability to interact directly with people, challenging medical students to embrace values of community empowerment just by sitting in front of their desktop screens. Moreover, screen-to-screen interaction increases the difficulty of building rapport with the community, thus they may get disinterested and even doubt the student's intentions in the first place. Hence, due to the pandemic, we are forced to carry out the three pillars of higher education through conducting programs shifted for the pandemic situation. In addition, the pandemic also forced us to think outside the box, exploring other variables such as: (1) their financial difficulties which might interfere with their overall health, (2) the online-learning method which lowers children’s motivation in Kampung Lio to study, and (3) the lack of encouragement of Kampung Lio’s community health workers efforts on Kampung Lio.

Attempts to Continue Development in Kampung Lio Via Online
Different from engagement, development aims to change and monitor certain communities to improve them in a wider and more sustainable scale. 

Continuing our 5-year community development program, three events were still hosted in Kampung Lio despite the online scenario. Firstly, community assessment in which descriptive data of residents were gathered semi-online with some of us (in small groups) visited Kampung Lio onsite. The second event was called Tinggi Cerdas, or literally translated as “Tall and Smart” (Figure 1). The program aimed to increase knowledge about maternal and reproductive health for mothers of children under 5 years - with heavy emphasis on the prevention of stunting. We recruited 26 volunteers from our faculty which did interventions once a month from September to December 2020 using E-Booklets via WhatsApp Call. Since it was our first online intervention, both the turn-up and engagement rate were low. Despite only a few joining, the mothers in Kampung Lio were all enthusiastic and interactive throughout the video call session. Some of the volunteers even bonded with the mothers, as they gave multiple interventions during the development program. Moreover, we also conducted training for community health workers via ZOOM meetings on the PrimaKu application - an app by the Indonesian Pediatric Society designed to monitor child growth and development.

Our last event, CHERISH, was the peak of our annual community development program. Public health events such as cervical cancer screening, medical checkups, and sexual health education were conducted for free. However, according to our pre-event assessment in 2020, the COVID-19 pandemic did not only affect the health of the residents, but also the financial stability of them. To further help the residents of Kampung Lio, we altered our health programs and initiated a business education program to alleviate their knowledge on alternative ways of gaining income. The event emphasized on educating the residents of Kampung Lio about entrepreneurship and financial management. Moreover, we also helped in eliminating misconceptions about COVID-19 and the importance of getting vaccines during the pandemic (Figure 2). Efforts to better gain trust from the people were conducted through trivia games in the WhatsApp Group prior to the main event. Initially, expectations around enthusiasm were moderate as we knew that the novelty of the program may maybe perceived as alien by the people in Kampung Lio. However, the event received high caliber of enthusiasm with many interested in learning to better their financial status. This enthusiasm might be due to the prizes provided for winners of the business model competition as incentives for them to start their own businesses. With such funding, the participants felt encouraged to boost their business, in which some of the businesses are growing even further on the six months follow-up we conducted. During the COVID-19 education event for children, we conducted a virtual puppet show in which we created a video tale about three characters fighting an imaginary character, Monster Cora, an analogy for the SARS-CoV-2 virus. At the end of the video, we encouraged the children to make a video on how they would defeat Monster Cora. The children joyfully made videos about them practicing hand hygiene, wearing masks, and physical distancing. The health cadres of Kampung Lio also participated in the event, in which we organized a competition for them to conduct health education and promotion to their local communities. Trainings of the health cadres were facilitated by the local primary health care center, thus hopefully would also increase the public’s trust on local health care facilities and workers.

New Ways of Virtually Reach Out to the Community

As previously mentioned, FKUI Peduli was a way to give back to the working staff members of FMUI (Figure 3). However, due to social restrictions during the pandemic, we tried other means to reach out the staff members. Those efforts included conducting telemedicine, appreciation videos, and gathering donations. In
telemedicine, employees consulted doctors through video calls facilitated by students. Meanwhile, appreciation videos were made from thank you notes written by students to thank the employees for their tireless efforts in taking care our in-campus facilities. Lastly, donations consisting of food and masks, were distributed to the employees. Moreover, we also conducted a program named RELIVE, which aimed to help the elderly in a nursing home during the pandemic (Figure 4). The fundamental aim of the program was to help comfort the elderly through the facilitation of their feelings kept up during isolation. The program included sharing sessions in small groups through videocalls between the elderly and committee members. We also conducted a pottery painting class to engage them in hands-on activities at home. The potteries were auctioned online with all revenue received donated to the nursing home. The main challenge conquered was the inadequate number of smartphones available for the programs to be conducted virtually.

After the community efforts were conducted, we also interviewed some medical students who volunteered in these online community efforts to receive feedbacks on how the programs can be further improved. The interviewees were very grateful for the medium provided to learn about empathy and care for others, even during uncertain times due to the pandemic. They also expressed their struggles in gaining the people’s trust and enthusiasm -thus, when it was achieved, words could not express the amount of happiness it brought them. They also believed that it is our role as medical students to keep on persevering during the pandemic through hearty efforts for the overall health of the community. The experience was also beneficial in teaching them on how to implement World Health Organization’s Five Stars Doctor in future practice, especially as a Community Leader.

Recommendations For the Future

The pandemic pushes medical students to think holistically and adapt programs with current needs of the people. Some recommendations to be noted before conducting virtual programs include proper assessment on the people’s ability to utilize online platforms and assessment on what help they need during the pandemic. The interventions conducted would also have to consider the duration of screen-time (a maximum of 3-4 hours), as the people might have difficulties in affording highly compatible gadgets alongside stable internet connections. During that short time frame, the committee needs to maximize interactive discussions and prioritize the essential educational purpose of the program. Moreover, building rapport with the people is recommended to be conducted prior to the virtual intervention through various means, including conducting games and increasing interaction through texts and calls. In addition, a follow up session is necessary to ensure the sustainability of the intervention.

Conclusion

In short, community engagement is still possible despite the harrowing pandemic situation we are currently in. Throughout the course of the pandemic, we managed to adapt the majority of our engagement programs in virtual settings. Despite certain limitations being present, the virtually boundless setting made it possible to us to invite speakers of high caliber with decreased funding and even collaborated with universities thousands-of-kilometers away from our faculty. Community engagement done online is still a possibility, although there should be an emphasis on the community’s technical capability to engage with us via online mediums. Although one might argue about the impact these interventions actually make within the society. Hence in conducting activities
we should remind ourselves once more on the simplest definition of giving back to the community: “To help and share one’s time with others”.
REFERENCES.


SUMMARY - ACCELERATING TRANSLATION

Write a summary of your research in the language where the study was conducted and written for a non-scientific audience. In this way, participants, researchers, practitioners, and decision-makers can have easier access to your research/results and use them where they see adequate.

It must include, title, main problem to solve, aim of study, methodology, results, and conclusion (no references are required). The summary should have a maximum of 1000 words.

Sebuah Upaya untuk Melanjutkan Kegiatan Pemberdayaan Komunitas oleh Mahasiswa Kedokteran di Tengah Pandemi COVID-19


Berdasarkan pengalaman kami, kami merefleksikan bahwa sebelum melakukan kegiatan pengabdian masyarakat secara daring, perlu dipastikan bahwa komunitas masyarakat tujuan memiliki akses internet dan mampu menggunakan aplikasi tertentu (misalnya Zoom meeting). Selain itu, memiliki hubungan baik dengan komunitas masyarakat tujuan menjadi hal yang penting. Hal tersebut dapat dilakukan dengan melakukan interaksi atau membuat acara perkenalan sebelum intervensi dilakukan.
FIGURES AND TABLES.

Figure 1. Members of Our Team Conducting Tele-education about the ‘Primaku’ Application during the Tinggi Cerdas virtual event.
Figure 2. Introductory Poster of Our Largest Annual Event, CHERISH. From Top left to bottom left, the words say in Bahasa Indonesia: Business event, COVID-19 event, and education event.
Figure 3. One of Our Members Meeting Non-Teaching Staffs and Janitors in the FKUI Peduli event.
Figure 4. Two of Our Members in a Videocall with Three Elderlies who Took Part in Our RELIVE Event.