

**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

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2 **Personal, Professional, and Institutional Social Network accounts.**

3 **Facebook:**

- 4 1. BEM IKM FKUI  
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24 4. Shafira Aurelia: <https://www.linkedin.com/in/shafira-aurelia/>  
25 5. BEM IKM FKUI - <https://www.linkedin.com/company/badan-eksekutif-mahasiswa-ikatan-keluarga-mahasiswa-fakultas-kedokteran-universitas-indonesia/>  
26  
27

28 **Discussion Points:**

- 29 1. Is it possible for preclinical medical students to engage in community development despite the harsh  
30 online setting forced by COVID-19?  
31 2. Are healthcare workers the only instrumental stakeholders in combating the pandemic?  
32 3. Can we, as preclinical medical students, contribute to society although we are not yet established as  
33 health workers?  
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1 **ABSTRACT.**

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

18  
19 *Keywords: community participation, COVID-19, Indonesia, medical student*

20  
21 **Key Words:** Community Participation; COVID-19; Indonesia; Medical Student (Source: MeSH-NLM).

22

## 1 THE EXPERIENCE

2 The *Tri Dharma Perguruan Tinggi* or The Three Pillars of Higher Education is a common principle attached to  
3 university students in Indonesia. The three values which are “Education, Research, and Giving Back to The  
4 Community” act as a voice of reason for activities created and led by students.<sup>1</sup> The community efforts  
5 conducted by medical students have fundamentals that are aligned with the core values instilled in the  
6 Hippocratic Oath.<sup>2</sup> Medical students may wonder how community efforts should be conducted during times of  
7 isolation and social distancing.<sup>3</sup> With uncertainties and limitations on face-to-face activities, medical students  
8 had to ponder creatively on methods to give back to the community. In regard to that matter, as third year  
9 medical students from Indonesia, we would like to share our hardships and efforts in persistently engaging with  
10 the community despite the pandemic situation.

11

### 12 Student-led Community Engagement Before the Pandemic

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

27

### 28 Impact of The Pandemic on Student-led Community Engagement

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

39

### 40 Attempts to Continue Development in *Kampung Lio* Via Online

1 Different from engagement, development aims to change and monitor certain communities to improve them in  
2 a wider and more sustainable scale. <sup>4</sup> Continuing our 5-year community development program, three events  
3 were still hosted in *Kampung Lio* despite the online scenario. Firstly, community assessment in which descriptive  
4 data of residents were gathered semi-online with some of us (in small groups) visited *Kampung Lio* onsite. The  
5 second event was called *Tinggi Cerdas*, or literally translated as “Tall and Smart” (**Figure 1**). The program  
6 aimed to increase knowledge about maternal and reproductive health for mothers of children under 5 years -  
7 with heavy emphasis on the prevention of stunting. We recruited 26 volunteers from our faculty which did  
8 interventions once a month from September to December 2020 using E-Booklets via WhatsApp Call. Since it  
9 was our first online intervention, both the turn-up and engagement rate were low. Despite only a few joining, the  
10 mothers in *Kampung Lio* were all enthusiastic and interactive throughout the video call session. Some of the  
11 volunteers even bonded with the mothers, as they gave multiple interventions during the development program.  
12 Moreover, we also conducted training for community health workers via ZOOM meetings on the *PrimaKu*  
13 application - an app by the Indonesian Pediatric Society designed to monitor child growth and development.  
14

15 Our last event, *CHERISH*, was the peak of our annual community development program. Public health events  
16 such as cervical cancer screening, medical checkups, and sexual health education were conducted for free.  
17 However, according to our pre-event assessment in 2020, the COVID-19 pandemic did not only affect the health  
18 of the residents, but also the financial stability of them. To further help the residents of *Kampung Lio*, we altered  
19 our health programs and initiated a business education program to alleviate their knowledge on alternative ways  
20 of gaining income. The event emphasized on educating the residents of *Kampung Lio* about entrepreneurship  
21 and financial management. Moreover, we also helped in eliminating misconceptions about COVID-19 and the  
22 importance of getting vaccines during the pandemic (**Figure 2**). Efforts to better gain trust from the people were  
23 conducted through trivia games in the WhatsApp Group prior to the main event. Initially, expectations around  
24 enthusiasm were moderate as we knew that the novelty of the program may maybe perceived as alien by the  
25 people in *Kampung Lio*. However, the event received high caliber of enthusiasm with many interested in learning  
26 to better their financial status. This enthusiasm might be due to the prizes provided for winners of the business  
27 model competition as incentives for them to start their own businesses. With such funding, the participants felt  
28 encouraged to boost their business, in which some of the businesses are growing even further on the six months  
29 follow-up we conducted. During the COVID-19 education event for children, we conducted a virtual puppet  
30 show in which we created a video tale about three characters fighting an imaginary character, *Monster Cora*,  
31 an analogy for the SARS-CoV-2 virus. At the end of the video, we encouraged the children to make a video on  
32 how they would defeat *Monster Cora*. The children joyfully made videos about them practicing hand hygiene,  
33 wearing masks, and physical distancing. The health cadres of *Kampung Lio* also participated in the event, in  
34 which we organized a competition for them to conduct health education and promotion to their local  
35 communities. Trainings of the health cadres were facilitated by the local primary health care center, thus  
36 hopefully would also increase the public’s trust on local health care facilities and workers.  
37

### 38 **New Ways of Virtually Reach Out to the Community**

39 As previously mentioned, *FKUI Peduli* was a way to give back to the working staff members of FMUI (**Figure**  
40 **3**). However, due to social restrictions during the pandemic, we tried other means to reach out the staff  
41 members. Those efforts included conducting telemedicine, appreciation videos, and gathering donations. In

1 telemedicine, employees consulted doctors through video calls facilitated by students. Meanwhile, appreciation  
2 videos were made from thank you notes written by students to thank the employees for their tireless efforts in  
3 taking care our in-campus facilities. Lastly, donations consisting of food and masks, were distributed to the  
4 employees. Moreover, we also conducted a program named *RELIVE*, which aimed to help the elderly in a  
5 nursing home during the pandemic (**Figure 4**). The fundamental aim of the program was to help comfort the  
6 elderly through the facilitation of their feelings kept up during isolation. The program included sharing sessions  
7 in small groups through videocalls between the elderly and committee members. We also conducted a pottery  
8 painting class to engage them in hands-on activities at home. The potteries were auctioned online with all  
9 revenue received donated to the nursing home. The main challenge conquered was the inadequate number of  
10 smartphones available for the programs to be conducted virtually.

11  
12 After the community efforts were conducted, we also interviewed some medical students who volunteered in  
13 these online community efforts to receive feedbacks on how the programs can be further improved. The  
14 interviewees were very grateful for the medium provided to learn about empathy and care for others, even  
15 during uncertain times due to the pandemic. They also expressed their struggles in gaining the people's trust  
16 and enthusiasm -thus, when it was achieved, words could not express the amount of happiness it brought them.  
17 They also believed that it is our role as medical students to keep on persevering during the pandemic through  
18 hearty efforts for the overall health of the community. The experience was also beneficial in teaching them on  
19 how to implement World Health Organization's Five Stars Doctor in future practice, especially as a Community  
20 Leader.

### 21 22 **Recommendations For the Future**

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

### 33 34 **Conclusion**

35 In short, community engagement is still possible despite the harrowing pandemic situation we are currently in.  
36 Throughout the course of the pandemic, we managed to adapt the majority of our engagement programs in  
37 virtual settings. Despite certain limitations being present, the virtually boundless setting made it possible to us  
38 to invite speakers of high caliber with decreased funding and even collaborated with universities thousands-of-  
39 kilometers away from our faculty. Community engagement done online is still a possibility, although there should  
40 be an emphasis on the community's technical capability to engage with us via online mediums. Although one  
41 might argue about the impact these interventions actually make within the society. Hence in conducting activities

- 1 we should remind ourselves once more on the simplest definition of giving back to the community: *“To help and*
- 2 *share one’s time with others”*.
- 3

Accepted, in-press



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3 three pillars of higher education. Available from: [https://unpar.ac.id/public-teaching-the-realization-of-](https://unpar.ac.id/public-teaching-the-realization-of-tri-dharma-perguruan-tinggi-the-three-pillars-of-higher-education/?lang=en)  
4 [tri-dharma-perguruan-tinggi-the-three-pillars-of-higher-education/?lang=en](https://unpar.ac.id/public-teaching-the-realization-of-tri-dharma-perguruan-tinggi-the-three-pillars-of-higher-education/?lang=en). Cited Sep 2, 2021.
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- 13

Accepted, in-progress

## 1 **SUMMARY - ACCELERATING TRANSLATION**

2

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

6

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

9

### 10 **Sebuah Upaya untuk Melanjutkan Kegiatan Pemberdayaan Komunitas oleh Mahasiswa Kedokteran di** 11 **Tengah Pandemi COVID-19**

12

13 Tri Dharma Perguruan Tinggi merupakan prinsip yang dijunjung tinggi oleh mahasiswa di Indonesia. Diantara  
14 ketiga prinsip tersebut, pengabdian masyarakat sangat erat kaitannya dengan mahasiswa kedokteran. Namun,  
15 di tengah pandemi COVID-19, kegiatan pengabdian masyarakat menjadi lebih sulit dilakukan karena  
16 keterbatasan interaksi tatap muka. Dalam artikel ini, penulis akan menjelaskan mengenai upaya mahasiswa  
17 Fakultas Kedokteran Universitas Indonesia dalam melaksanakan dan mengadaptasikan kegiatan pengabdian  
18 masyarakat pada masa pandemi COVID-19 ini. Sebelum pandemi COVID-19, mahasiswa Fakultas Kedokteran  
19 Universitas Indonesia telah melakukan berbagai kegiatan pengabdian masyarakat, seperti cek kesehatan  
20 umum dan pengambilan data kesehatan di kampung binaan kami, yakni Kampung Lio. Saat pandemi COVID-  
21 19 terjadi, kegiatan pengabdian masyarakat diadaptasikan dalam bentuk daring. Salah satunya adalah  
22 pelaksanaan kegiatan penyuluhan kesehatan melalui buku digital yang dikirim melalui grup warga Kampung  
23 Lio pada aplikasi Whatsapp. Penulis juga melaksanakan kegiatan gabungan daring dan luring, yakni pelatihan  
24 melukis pot bagi para lansia di panti jompo. Sebelum acara pelatihan melukis, panitia mengadakan acara  
25 perkenalan dengan para lansia di panti jompo tersebut. Pada acara perkenalan, panitia mendengarkan cerita  
26 para lansia. Setelah melukis, pot lukisan lansia tersebut dijual pada acara penggalangan dana. Dana yang  
27 diperoleh dari acara tersebut didonasikan seluruhnya untuk keperluan panti jompo.

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

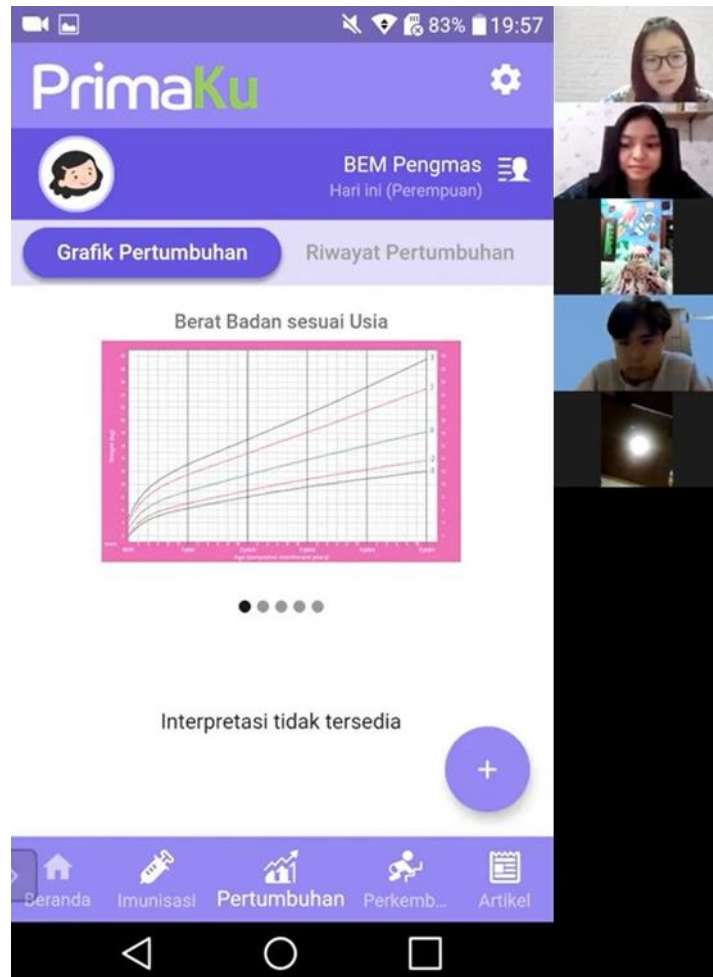
33

34

1 **FIGURES AND TABLES.**

2

3 **Figure 1.** Members of Our Team Conducting Tele-education about the 'Primaku' Application during the *Tinggi*  
4 *Cerdas* virtual event.  
5



6

- 1 **Figure 2.** Introductory Poster of Our Largest Annual Event, CHERISH. From Top left to bottom left, the words  
2 say in Bahasa Indonesia: Business event, COVID-19 event, and education event.



3

1 **Figure 3.** One of Our Members Meeting Non-Teaching Staffs and Janitors in the *FKUI Peduli* event.



2

Accepted,



1 **Figure 4.** Two of Our Members in a Videocall with Three Elderlies who Took Part in Our RELIVE Event.



2