

Unveiling Undergraduate Students' Perceptions and Experiences in Hasanuddin University's Community-Based Medical Education Program

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QUESTIONNAIRE

Study I.D.:

DEMOGRAPHIC

Age:

Table S1: Students' perceptions from the open-ended questionnaire.

Some excerpts from participants' responses	Sub-themes	Themes	Category	
"Building social connections with paramedics/healthcare professionals at the Community Health Center (Puskesmas) and sharing knowledge with each other." (P2)	Student–health worker	Opportunity for interactions	Positive perceptions	
"What I like is that I can interact with the community, speaking and sharing what we know with the people is something enjoyable." (P36)	Student – community			
"This program provides us, as medical students, with the experience to learn how to communicate effectively and appropriately." (P20)	Communication	Acquire of skills		
"The most important thing I remember learning during community-based activities is empathy and sympathy when dealing with patients and their families." (P11)	Empathy			
"I learned about new knowledge that I socialize with the community, as well as improving my soft skills in public speaking." (P1)	Public speaking			
"During this activity, I also learned about teamwork and collaboration." (P28)	Teamwork			
"I have become more confident in interacting with the community." (P16)	Self-confident			
"We learn how to apply good ethics and attitudes in society. And in my opinion, that experience is truly valuable in preparing myself for the future before entering the clinical clerkship." (P4)	Ethics and professionalism			
"We learned how to conduct a thorough, accurate, and comprehensive medical history taking. Then, we were given the opportunity to independently perform medical history taking on patients, enabling us to understand the patient's medical journey from the beginning until the present." (P35)	Interview/history taking			
"One of the things I learned is how to effectively explain or educate the community about diseases (health promotion)." (P4)	How to perform health promotion			
"Throughout my participation in the community-based program, I had the opportunity to directly and systematically identify health issues in an organized manner (based on the urgency of the problems)." (P19)	Identifications of health issues			Learning Opportunities
"I learned to develop a mindset, innovation, and creativity in solving health problems in the community." (P40)	Health problem-solving priorities			
"In addition to knowing the health conditions of the community, healthcare workers should also understand the environmental and social conditions of the community." (P13)	Social determinant of health			
"How to approach family medicine towards patients." (P5)	Family medicine			
"I learned about community medicine firsthand, studying patients holistically, observing real-life conditions, and comparing them to what we have learned in the classroom." (P36)	Community medicine			
"The benefits experienced include directly witnessing the workings of the Community Health Center. Prior to this, I had never been exposed to such healthcare facilities. Through this experience, I had the opportunity to explore various locations, such as the registration counter and examination rooms. Additionally, I had direct interactions with patients, nurses, and doctors, and indirectly observed and shadowed their work processes." (P7)	Community Health Center service system			
"After participating in community-based activities, I realized the stark difference between receiving theoretical lectures and going directly into the field and meeting patients. This program teaches us how to apply the theories we have learned in a real-life setting." (P32)	Translating Theory to Practice			

Some excerpts from participants' responses	Sub-themes	Themes	Category
"The facilitator in my group was very dedicated in imparting knowledge, sharing experiences from community health centers, and providing us with tips and tricks on how to be a doctor working in a health center or rural area in the future." (P45)	Sharing knowledge and experiences	Effective facilitators	Negative perceptions
"The facilitator was very helpful in guiding us during our discussions on health issues by explaining theories and analytical approaches. They also directed us in problem-solving steps and helped us in developing a health program material. Additionally, they provided us with valuable advice and inputs throughout our discussions." (P40)	Engages in discussions		
"The facilitator is very helpful and provides good guidance. They give directions on what should and should not be done during direct visits to the community." (P24)	Provides guidance		
"The facilitators provided excellent support and even accompanied us during the community education activities." (P3)	Accompanies / supports		
"They also provided real-life examples of how we should behave and communicate with patients." (P32)	Role model		
"The facilitator provided us with positive solutions, suggestions, and feedback for our team." (P6)	Provides feedback		
"Often, students become confused because the activities do not align with the predetermined schedule (there are many changes)." (P8)	Schedule	System issues	
"The large number of students in one group during the activity makes it less effective." (P13)	Number of students		
"The educational materials provided were not specific and too broad." (P18)	Health education materials		
"The venue for the activities does not match the number of participants, resulting in a formalistic execution." (P10)	Formality	Inadequate facilitator roles	
"The facilitator has their own busy schedule and tasks, resulting in less than optimal guidance and support provided." (P9)	Busy or passive		
"The facilitators were still insufficient (in terms of their numbers), so there were some groups that had discussions without being accompanied by facilitators." (P2)	Number of facilitators		

P: Participants

Table S2: Students' experiences from the open-ended questionnaire.

Some excerpts from participants' responses	Themes	Category
"This program is very unique as we have never experienced it before. Directly engaging with the community is one important aspect that, in my opinion, was not deeply explored during the preclinical phase. Therefore, this program has become a good breakthrough." (P3)	New/first experience	Positive experiences
"I'm glad to be able to interact with new people. Here, I learned how to build communication with strangers." (P21)	Meeting new people	
"I find the learning experience in the health center very interesting. We were able to go out into the field and visit people's homes, observe their living environments, and learn about the etiology or causes of patients' illnesses." (P25)	Learning methods and Settings	
"The benefits obtained include having the opportunity for outings with friends." (P7)	Opportunity for outings	
"As an important foundation to be used upon completion of preclinical studies." (P26)	Preparation as a future doctor	
"What I like is when the community warmly welcomes our arrival, allowing them to be more open in sharing about their personal and family health issues." (P38)	Positive response from the community	
"Friendly and understanding head of the community health center, as well as the staff who were willing to accompany us even though we had to walk a bit far." (P35)	Positive response from health worker	Negative experiences
"Difficulty accessing the health center due to its considerable distance from the faculty area." (P6)	Distance and access to the community	
"We face difficulties in capturing the attention and focus of the community because they are also waiting for their health check-ups, which makes the environment less conducive." (P23)	Unconducive / too crowded	
"The creation of educational media takes a long time, which can disrupt regular learning activities." (P6)	Preparing educational media	
"The incomplete data from the puskesmas resulted in some limitations during the assessment." (P29)	Puskesmas limitations	
"Communicating with the patient is quite difficult because they cannot speak Indonesian." (P8)	Language barrier	
"When the education provided to the community is not accepted and doubted because we are seen as students who have limited experience." (P20)	Poor response from the community	

P: Participants

Table S3: Students' perceptions from the focus group discussion.

Some excerpts from participants' responses	Sub-themes	Themes	Category
"My experience was that we received a lot of assistance and guidance from the nurses during our discussions. The nurses helped us when we asked questions to the patient's family." (I9)	Student – health worker	Opportunity for interactions	Positive perceptions
"Well, from there, if it's from our perspective, the real benefit lies in how we can directly interact with patients because during our undergraduate studies, it was more focused on theory, getting to know various diseases, understanding their diagnosis and treatment. However, we have never had the opportunity to directly engage and interact with patients. Through this program, activities at the community health center can be one of the means for us to learn direct interaction, especially since now in our profession, the skill to communicate directly with patients is highly essential." (I1)	Student - community	Acquire of skills	
"In addition, another benefit that we might obtain is learning about conflict management and time management, because yesterday we were only given a time range from 7 AM to 12 PM. After 12 PM, we had to be back on campus. So, we had to manage our time effectively to complete the socialization, fill out all the forms, and take a photo with the head of the community health center within that timeframe." (I8)	Time management		
"From my perspective, I can add that the first benefit is developing soft skills, including learning how to communicate with diverse individuals in the community health center environment, ranging from those in higher socioeconomic backgrounds to those in lower socioeconomic backgrounds." (I5)	Communication		
"Because this benefit is strongly felt, the improvement is eventually experienced during the clinical phase. For example, when we haven't learned a specific topic yet, suddenly when we arrive in the community, people ask us questions. So, how do we manage to provide concise answers to the community in unexpected situations, while still being able to articulate ourselves and appear professional to show that we know what we're talking about? It turns out that we experience this a lot during the clinical phase, such as when we check a patient's vital signs in the morning and they suddenly ask about their illness. We have to respond professionally." (I8)	Ethics and professionalism		
"From my experience, for the community program, there was a specific course called Community Medicine in the curriculum. Towards the end of that course, there was an agenda to visit a community health center. In the health center, each group was assigned a patient whom we would interview or approach to delve deeper into their illness and understand the environmental aspects related to their condition." (I1)	Interview / history taking		
"We were taught to explain a disease using simple and easily understandable words rather than complex terminology. The emphasis was on using language that could be well understood by the community. We were taught how to establish good interpersonal and intrapersonal communication with the community, ensuring that the educational information we intended to convey would be effectively delivered." (I4)	How to perform health promotion		
"The diverse residents in the community health center environment and how can we assess their needs and health issues." (I5)	Identifications of health issues		
"In my opinion, there is a lot to be learned, such as how to identify and select prevalent health issues in the community, enabling us to formulate which problems should be addressed first by establishing priority issues." (I2)	Health problem-solving priorities		
"We are assigned one patient whom we will interview or approach to delve deeper into their illness and understand the environmental aspects related to their condition." (I1)	Social determinant of health		
"Then we get to know how the community health center system works, which might be our future workplace as general practitioners. We also get to familiarize ourselves with the national health insurance system (BPJS), which is crucial in the healthcare field. Additionally, we are taught about the basics of health center management, which is also important for our future endeavors." (I5)	Community Health Center service system		
"The suggestion is to focus more on mentorship and combining theory with practical experience, which is more important." (I5)	Translating theory to practice		
"It's fortunate that my facilitator is excellent in teaching. They frequently come to guide us, which is quite different from other classmates. They teach us everything from theories to how to communicate during community socialization." (I4)	Sharing knowledge and experiences	Good facilitators	
"I did experience guidance during class, such as understanding the flow of discussions and knowing what needs to be done." (I2)	Engages in discussions		

Some excerpts from participants' responses	Sub-themes	Themes	Category
"Furthermore, I agree with what was mentioned earlier about the conditions in each community health center. In my case, I was fortunate to have a cooperative head of the health center. We were guided and mentored effectively, which may have been different from the experiences of my peers. However, I believe it depends on the culture of each health center." (I7)	Provides guidance		
"So we have Problem-Based Learning (PBL) and Clinical Skill Lab (CSL) in our curriculum. The course coordinator provided guidance where PBL and CSL were combined. In this approach, we discuss the case in small groups during PBL sessions, and then we directly apply what we learned in CSL. That's the basic concept. However, we faced some challenges, the first being scheduling. Students were confused about whether to prioritize CSL or PBL, and there was some confusion and mixing up of schedules." (I2)	Schedule		
"In addition, I would like to mention that during our time at the community health center, we were divided into three groups. Each group consisted of 10 people, and we all arrived together on the same day, totaling around 30 people. It gave the impression that we were all clustered together. (I10)	Number of students		
"In the community health center, each group discussed different topics. For example, there was a separate topic for family visits, and another topic for community socialization. There were materials prepared to be presented in the GOR (sports hall) and at the health center. Additionally, within the health center, each group was assigned different patient cases to visit. My group was assigned to focus on Coronary Artery Disease (CAD) as the most prevalent disease at the health center, but we presented information on Bell's Palsy as part of the socialization material." (I4)	Health education materials	System	Negative perceptions
"And in my opinion, the goal of community medicine is to provide something valuable to the community. However, due to the lack of preparation, we were unable to make any significant impact on the community. We only visited the health center once, provided education, and then it was done. So, personally, I agree with others that it felt more like a formality to complete this task." (I6)	Formality		
"In our group, the facilitator only entered the room once, and that was just to provide task assignments before leaving again. As a result, we had to work based on our own knowledge and ask other groups for help. It felt like a formality to complete the task, and if possible, we would simply copy the answers from other groups." (I12)	Busy or passive		
"From my perspective, one of the significant factors that contributed to the suboptimal implementation is the large imbalance between the number of supervisors and students. For example, in one health center, there could be up to 30 students but only one or two supervisors. We understand that one supervisor cannot effectively guide 30 students at once. However, due to this limitation and lack of preparedness, perhaps only around 10 out of the 30 students truly grasped the essence of this course." (I6)	Number of facilitators	Inadequate facilitator role	

I: Informant

Table S4: Students' experiences from the focus group discussion.

Some excerpts from participants' responses	Themes	Category
"For me, there are many unexpected things that we learned, and one of them is the realization that community classes vary from one another. This is something we had never encountered in previous classes." (I2)	New / first experience	
"Another example from my personal experience is when I entered the clinical phase, the atmosphere was truly different from the campus or academic setting. In the hospital, we hear patients' complaints and understand their feelings. Therefore, I believe that community-based activities during our studies are crucial in preparing us for the real atmosphere in the community." (I6)	Learning methods and Settings	Positive experiences
"The patients we visited were cooperative in answering the interview questions." (I8)	Positive response from the community	
"Luckily, I was assigned to Cendrawasih Health Center, and they were quite cooperative in accepting us as students." (I8)	Positive response from health worker	
"During our visit, we didn't know the location of the health center, so we ended up spending a lot of time searching for it and finding parking, as the area was narrow." (I8)	Distance and access to the community	
"During our third visit, we were assigned to conduct community education in the form of a video or banner. Our group received the task of creating a video. However, due to the high number of people in the health center, including patients waiting in line, it seemed like no one paid attention to our educational efforts. It felt like our message was being ignored. Many people were passing by in the health center, and it seemed like we were hindering the flow of patients entering the clinic." (I10)	Unconducive / too crowded	Negative experiences
"Facing people with different languages where they cannot speak Indonesian poses a challenge. From that experience, we learned that there are many ways we can educate the community." (I2)	Language barrier	

<p>"In my group, we were assigned a patient with diabetes mellitus (DM). We were instructed to visit the patient's home. However, when we arrived, the patient was willing to cooperate, but the patient's family refused to be interviewed or questioned further. Perhaps they were taken aback because we arrived in a group of about ten people without prior notification." (11)</p>	<p>Poor response from the community</p>	
<p>"For example, we were not guided or involved in discussions on how we should approach the community, or the strategies that the health center uses to engage with the community. We never had the opportunity to interact with the health center staff, so we were left to figure things out on our own. As a result, we remained silent and unsure of how to proceed." (15)</p>	<p>Poor response from the healthcare</p>	

I: Informant