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RESEARCH ARTICLE

Medical students' perspectives on the program outcome drivers of community immersion: A realist-informed study

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ABSTRACT

Background: The effects of community immersion programs and other forms of community-based medical education on students have been highlighted in the literature. However, the driving factors that generate these outcomes are not emphasized by many authors.

Objective: This study aimed to identify and explain the important contextual factors and mechanisms considered as driving factors of the outcomes of community immersion programs.

Methodology: An exploratory qualitative inquiry that employed focus group discussions, in-depth interviews, and reflection papers was utilized. The realist approach provided the structure in eliciting and analyzing medical students' perspectives on the driving factors of the program outcomes of community immersion. Data were analyzed through thematic analysis.

Results: The outcomes generated by the community immersion program are consistent with the literature as well as relevant to the course and social outcomes as identified by De La Salle Medical and Health Sciences Institute. Uncovered major driving factors for these program outcomes include: "perceiving things from a different perspective", and "positive attitude towards community health". Various contextual factors that trigger these driving factors were further unpacked that provide a backdrop to the community immersion program.

Conclusion: Factors that bring about the program outcomes of community immersion are evident in the experiences of medical students. Focusing on these factors may allow community preceptors and administrators to have clearer perspectives on the factors to focus on in teaching community medicine through community immersion. It is recommended that preceptors and administrators consider and nurture these factors during community immersion to be effective in teaching medical students in the community setting and in the provision of primary health services to communities.

Keywords: *context–mechanism–outcome configurations, complex intervention, community-based medical education, community preceptors*

Introduction

Community immersion programs (CIPs) and other forms of community-based medical education undoubtedly serve as important avenues in the achievement of various educational outcomes. For instance, an increased interest in, and intention to support community health practice, were observed [1,2]. Such program outcomes may help address the shortage of medical workforce in many communities. Furthermore, Meurer *et al.* [3] explained that medical students tend to develop a sense of responsibility to address inequity in marginalized populations by understanding community health needs. Various authors have presented many other related outcomes of community-based medical education programs as synthesized literature [4,5].

The De La Salle Medical and Health Sciences Institute has been training fourth year medical students through four to six weeks of immersion in rural communities as part of their clinical clerkship. This program provides opportunities for students to render health services, particularly promotive and preventive health care, to those most in need— the poor sectors of the villages (*barangay*) in the context of community health development [6]. In particular, the CIP aims to help medical students internalize the roles of community physicians. These roles are termed as *course outcomes*: provider of comprehensive health care, administrator of a community health program, health educator, health researcher, health information manager, health economist, and health policy maker [6]. These course outcomes are based on the program outcomes of the Commission on Higher Education (CHED) for the Doctor of Medicine program [7]. Students are also expected to demonstrate *social outcomes* expressed as Expected Lasallian Graduate Attributes (ELGAs) [6]. ELGAs include compassionate and safe physicians, innovative and efficient managers, effective communicators, ethically and socially responsive, and reflective life-long learners.

However, the factors that drive such program outcomes are not highlighted in the literature. Focusing on the driving factors may provide pieces of evidence that would inform community organizers, preceptors, and administrators in the design of effective community immersion programs. Furthermore, Wong *et al.* [8] emphasized that medical education, such as the CIP, should be viewed as a complex intervention because the outcomes of medical education are highly context-dependent and human agency-driven.

To explain complex interventions, such as the CIP, the context and other factors that contribute to its outcomes should be taken into consideration, as Ansay *et al.* [9] argued against looking at programs as static and isolated from its social milieu. It requires the identification and explanation of the factors that drive these educational outcomes.

To understand how these outcomes came about, their connection to the driving factors should be established. To do this, the realist approach was used, which is based on the realist philosophy of science that seeks to explain a certain complex phenomenon by uncovering the mechanism or underlying reason that generates an outcome [8,10]. Understanding the mechanism of a particular outcome — in this case, the course and social outcomes of CIP, requires the need to look beyond the observable and delve into the mechanisms [10]. Through the realist approach, it becomes clear that the mechanism that leads to the outcome is only turned on when the context is appropriate to the CIP. The context is described as the environment or circumstances in which the community immersion programs are implemented. If contexts are appropriate and conducive for the CIP implementation, it can contribute to generate the desired program outcomes.

This study aimed to identify and explain the important contextual factors and mechanisms considered as driving factors of the course and social outcomes.

Methodology

Study Design

This exploratory qualitative inquiry used focus groups (FGs), reflection papers, and in-depth interviews to elicit medical students' perspectives on the drivers of the course and social outcomes.

The realist approach was used in the data collection and analysis. Although this approach was not fully applied in this study, its main structure was utilized — the interaction of the *context, mechanism*, and *outcome* (CMO). The outline of this structure is presented in Figure 1.

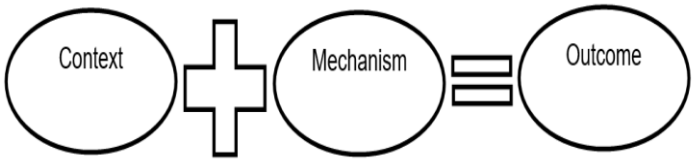

Figure 1. *Context-mechanism-outcome configuration of the realist approach*

Data Collection

Focus groups served as the primary data collection method. This method was used to elicit a range of perceived effects of and the factors affecting community immersion. Each FG was moderated by either one of the authors who is knowledgeable in community health and who had training and experience in facilitating FGs. In moderating each FG, participants' interaction was ensured by providing opportunity for the participants to reflect and better understand the topic at hand to allow them to elaborate further their perspectives and experiences [11]. Further, Krueger and Casey's [12] suggestion to address the potential power play between the

participants was considered by balancing the contributions of dominant and less dominant participants.

To triangulate information gathered from the FGs, in-depth interviews and reviews of the students' reflection papers were added. These helped in the comprehensive understanding of the data and determined discrepancies in the data generated from one data collection method [13].

The data collection tool was developed in accordance with the research question and objectives. Questions were classified as (a) context-related, which refers to the features of the community immersion stakeholders (students, program, and community processes); (b) mechanism-related, pertaining to the underlying reasons that directly contribute to the achievement of the program outcomes; and (c) outcome-related, that touched on the effects of the CIP. To enhance the validity of the tool, pre-testing was conducted in two FGs participated by selected medical graduates. Pre-testing results were properly considered in the revision of the tool. This tool was used for both the focus groups and in-depth interviews.

Sampling and Data Sources

Purposive sampling was utilized in the identification of medical students who experienced community immersion during their clinical clerkship. Study participants were chosen from the three sites of community immersion to include diverse community experiences. The principle of data saturation guided the identification of the sample size. Five FGs were conducted comprising 5-6 participants per FG totaling to 26. In addition, 8 in-depth interviews were conducted and 30 reflection papers were reviewed.

Data Analysis

Thematic analysis by Braun and Clarke [14] guided the data analysis. All data from the three data collection methods were inputted to the NVivo 12 software for data management and eventually facilitated data coding and thematic development. More than 200 codes for each of the context, mechanism, and outcomes were generated. Such codes were identified as the present salient features of the data extracts that were relevant to the study objectives. These codes were identified initially by one of the authors and validated by the other three authors. Similar codes were clustered to develop themes. These themes were aligned with the realist conceptions of the context, mechanism, and outcome as applied in community immersion. To form the logical connections of these three components and create the CMO configurations (CMOCs), the CMOCs were generated in a backward manner: themes that are CIP outcomes were first determined, followed by uncovering the mechanisms of these outcomes, and later identified the contextual factors. To elicit the outcomes, the team focused on the question, “What are the effects of the CIP?”. The mechanisms and contextual factors were uncovered by asking the question, "What factors contributed to the attainment of these effects?”.

Ethical Clearance

The research protocol of this study was approved by the De La Salle Medical and Health Sciences Institute - Independent Ethics Committee.

Results

The main study findings, presented as themes, were organized in accordance with the CMOC structure. It focused on the 2 CMOCs that show the drivers of, and the CIP outcomes. Each of the themes was provided with a summary of all included data extracts and presented with sample prominent data extracts from the data sources.

Outcomes (CMOC 1)

Enhanced capacity to adapt: The students' exposure to a new environment necessitated them to deal with varied situations and learn to interact effectively with various types of people. Students also learned to utilize available community resources and find alternatives in providing basic health services. As explained by two participants:

> *The community immersion taught me how to be flexible in different situations. It taught me how to adjust to my environment. It exercised my interpersonal skills...and reminded me to live a simple life.*

> *I learned how to approach them [children], how to befriend them; so, they will not be scared of doctors; especially that I've seen in the community that parents always say to misbehaving children, “don't be rude, the doctor is there!”*

Appreciation of community health concepts: Several students expressed an increased recognition of the value of various concepts relevant to health education, primary health care, community development, and other related concepts. It involves the application of the biopsychosocial

approach and application of lessons learned such as traditional medicine and working with teams:

Community immersion taught me that doing health education does not automatically mean that they [community members] will get the message right away… it is not enough to implement one health education project, it needs follow through.

This immersion made me realize that there is more to life than being just a clinician. I can be a researcher, educator, manager, and social mobilizer.

Demonstrated competence: For several students, it is imperative to be knowledgeable and skillful in the community setting, as such, they were able to deliver satisfactory health services. This was derived from the responses of several study participants such as the following data extracts:

We have to make sure that they [people] really understand what we teach.

I had engaged the mother in the biopsychosocial approach… and said that she now finally understands her son's condition.

Mechanism (CMOC 1)

Perceiving things from a different perspective: The outcomes described in CMOC 1 were brought about by how the students viewed the situation in a more critical way. This mechanism relates to the change in perspective that emphasizes relationships and the ability to look beyond what is evident. It also involved the desire to develop and improve skills. Some respondents presented:

The immersion is an opportunity to reflect so that I can see things from another perspective, it is all about how to put things into perspective… I saw the symbiosis in action. It is about the relationship with other people.

[Community immersion] helped me reassess myself on the things I should know and master in my medical education to serve patients better…

[In the community] I try not to be afraid of my failures during my first attempts. I must make sure that after my repeated mistakes, I will learn something to correct them...be proactive in my approach in life - to always work and deal with weaknesses…

Contexts (CMOC 1)

Experiencing concrete healthcare system problems: Living in a community distant from the rural health centers, hospitals, and pharmacies is an opportunity for the students to understand the real community health problems such as less healthcare access. As expressed by two of the participants:

With the exposure in the community as a medical student, I have witnessed the lack of accessibility to healthcare… I saw the demand [for healthcare] - doctors, facilities, and supplies are lacking…. there are stories in the community wherein some residents who died were not attended by a doctor."

One early morning, a baby boy seemed to have measles and needed to be brought to the hospital, but they do not have any means of transportation and money to go to the hospital. We feel sad, we know what the patient needs but we cannot give the needed assistance.

Prior community immersion-related exposures: Previous experiences of students, especially during their undergraduate education, provided them with the ability to keep up with the demands of community immersion. They find activities more bearable and present lesser difficulties. Respondents narrated that these had prepared them to face what are expected of them:

The previous school where I studied had outreach activities in home for the aged and orphans wherein there were health education programs. This somehow helped me connect my previous experiences [to this community immersion].

I am more open to communicate with others because of my previous immersion experience. I feel better prepared to undergo immersion because I have an idea of what to do, how to interact with others, and how to implement objectives.

Effective guidance and support: Students value the support provided by the preceptors and community organizers as well as the weekly preceptorial, hands-on approach of the community organizers, and the purposeful activities that aim to contribute to the overall development of the community.

Whenever we encounter problems in the community such as water or power interruption, we do not easily get worried since our faculty preceptor and community

organizer are very approachable, which is a big factor for us in this community immersion.

Every time we have project implementation, our preceptors and community organizers always come to the community to support us. The conduct of a dry run before the project implementation also helped a lot.

Our preceptorial every Monday was very helpful because it gave us direction - if we were sent in the community without it, we would be at loss [on what to do].

The CMOC 1 is represented in Figure 2.

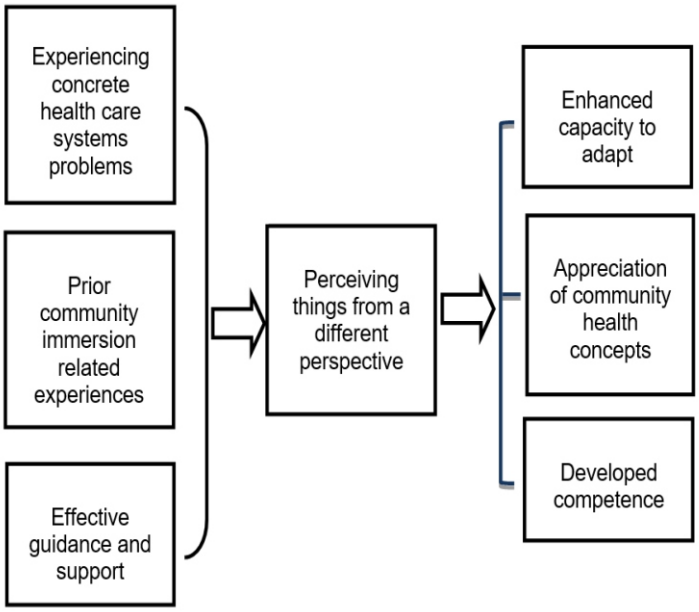

Figure 2. *Context-mechanism-outcomes configuration 1 of community immersion*

Outcomes (CMOC 2)

Increased desire to practice/support community health: It includes increased motivation to pursue a family and community medicine specialization, the desire to be a "Doctor to the Barrios" (village doctor) in the future, or consider reaching out to people who are most in need. The following quotes substantiate this theme:

In this immersion, I saw the extreme lack of support from the government, especially in the rural areas… that is why I am inspired to join the Doctor to the Barrios (village doctor)… I will try to reach places that are in need, not focusing only where there are more [resources], to be of help in the future.

When we visited a patient in their house, I saw that he is struggling so much with his illness; this made me realize further the need for more doctors in the community; such experience made me consider working in rural communities.

Valuing working relationships: Students realized the importance of building rapport with colleagues, foster parents, and patients. As medical students are immersed as a group, they realized the value of appreciating the contributions of each team member as well as the importance of establishing open communication. These contributed to the students' satisfaction in their community immersion experience, as well as the quality of care and services they provide to the community members. Two of the participants narrated:

I established a good working relationship with my patient in the community; it helped a lot…. they easily relay information about their health condition… As a future doctor, good working relationship is also important in the health facility setting; it will allow patients to return for follow-up and help track their progression.

I enjoyed the immersion in the community; it further enhanced my skills in rapport building…This made me gain trust in people both inside and outside of the medical profession. I also got to form a bond with my groupmates whom I will cherish for the rest of my life.

Reinforced empathy: Students realized the importance of sharing the feelings of others and understanding the circumstances of patients in the community. One of the participants described this outcome by highlighting the importance of immersing within the patients' setting:

I learned the need to be empathic. In certain situations, during my patient interaction and living with a foster family and accommodating their requests such as blood pressure taking, [I was able to exercise] patience and understanding. I realized the difference between patient consultation in the hospital and actually living within the patients' environment.

We went to the patient's house by walking; we were able to see their set-up in their household and their family. I understood why sometimes they do not come back for follow-up consultations [in the health facility] because they live that far, or they simply do not have the means to do so.

Awareness of community conditions: Students learned about community practices such as traditional and alternative medicine, became aware of the level of health knowledge of community members, and appreciated simple living in the community.

Not everyone in the lower class shows lack of thought… they just need to be given proper avenues for education, communication, and resources.

There are many lessons in the community, especially that we live with the community people… [we got to learn] their practices, how they live from day to day.

Mechanism (CMOC 2)

Positive attitude towards community health: This mechanism includes the desire to find better ways of doing something, liking the things done in the community, and maximizing time in the community to learn and to serve. Further, the students' sense of responsibility is activated as they are put in a situation where they need to assess and manage sick patients within their level of competence. Two study participants mentioned:

At first, we were not able to address the questions of the patient's mother, but we tried to find better ways to educate them; in doing so, we were able to help her learn and understand better the patient's condition.

I have to appreciate what I am doing so I can do well what must be done. And I can learn more, and I apply what I have learned in the previous years.

Contexts (CMOC 2)

Dynamic interaction with community members: This factor refers to the direct interaction of students with the community members on matters relevant to community assessment, service delivery, partnership, and others. Many of the students' experiences relate to patient visits, as stated:

One of the highlights of my community immersion was the patient visit. I was the clinical clerk in charge of a cerebral palsy patient. I was able to engage with the patient and his caregiver about patient care.

I was impressed by the way things were handled in the community because even though it was a bit informal, it was more comfortable for the patients to express what they were feeling and what they want.

Community appreciation/support: Positive reactions to and appreciation of the students' initiatives and accomplishments in the community helped them to be more motivated in community work. Active village health workers and supportive foster parents, as well as community members who were willing to learn, also served as encouragement to students. This is exemplified in the following narrations:

Every time our foster parents learn about a community health project we are initiating, they really make efforts to be there during the project implementation…. other community members gave us token after taking their blood pressure.

We were asked by the [local] school to discuss menstrual cycle. That was memorable… they [community] were grateful to us and listened intently during the lecture.

Patients expressed appreciation to us visiting them in their homes, asking them their condition, medication status… those are important to them.

Inclination to serve: This includes the willingness to reach out to communities with inadequate health services, interest in population health, and seeing community immersion not only as an academic requirement but as a means of genuinely helping others:

For me, it is more important to help if it is needed by the community.

It is my interest to cater to a lot of people. I realized that it was God's plan to bring me into this field.

Effective guidance and support: (Similar to CMOC1)

The CMOC 2 is represented in Figure 3.

Several other potential driving factors were uncovered in this study that may contribute to explain why CIP works and in what circumstances. However, these factors do not logically show connections to the other factors to form CMOCs.

Discussion

The CIP as a form of community-based medical education contributes to meet various educational outcomes. There were

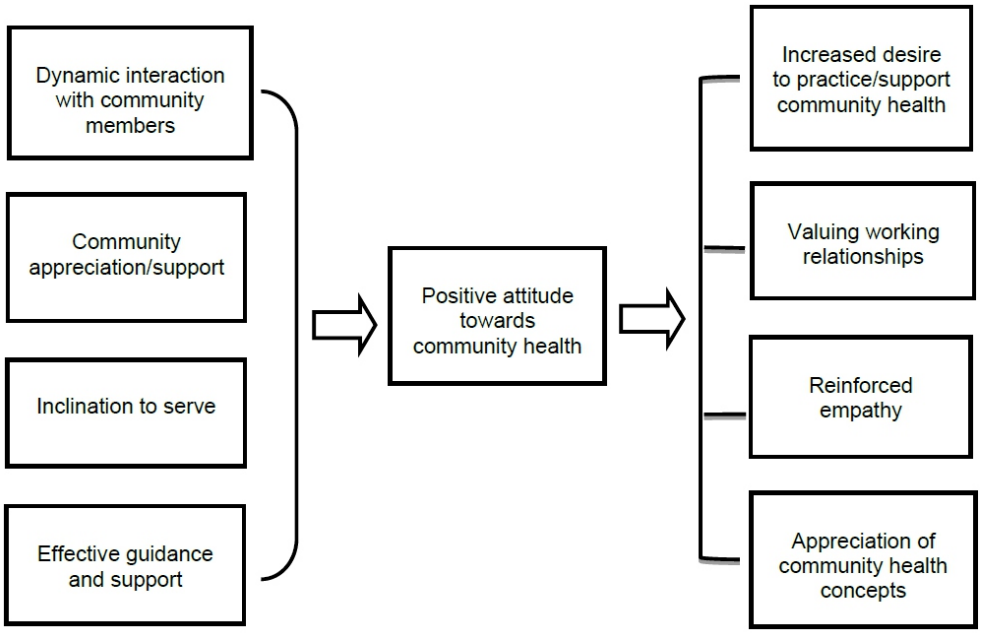

Figure 3. *Context-mechanism-outcomes configuration 2 of community immersion*

at least seven outcomes identified by the study participants: a) enhanced capacity to adapt, b) valuing working relationships, c) reinforced empathy, d) increased desire to practice/support community health, e) demonstrated competence, f) appreciation of community health concepts, and g) awareness of community condition. Most of these outcomes are relevant to the identified De La Salle Medical and Health Sciences Institute course and social outcomes [6], and corroborate other studies [1,3,5], as well as the CHED policy [7].

This study aimed to unpack the driving factors and present valuable evidence on the factors that are essential to consider in the design of an effective CIP to achieve various program outcomes.

The Driving Factors: Mechanisms and Contextual Factors

Mechanisms

There are two mechanisms identified in this study: *perceiving things from a different perspective*, and *positive attitude towards community health.*

Perceiving things from a different perspective: This mechanism calls for a discernment of community exposures not only in its face value but primarily looking at the experiences more critically. It emphasizes the need to elicit lessons from experiences towards personal and professional improvement. This mechanism implies that a reflection process is essential in community immersion and other community-based medical education initiatives. Pagatpatan *et al.* [5] highlighted the importance of reflection to deliberately draw learning insights from the experiences. Similarly, Kolb [15] suggested transforming experiences into more meaningful concepts.

Positive attitude towards community health: This mechanism drives students to succeed and encourages them to continue working in the community. In many community immersion initiatives, students are exposed to unsatisfactory environments such as lack of health services and uncooperative community people. Positivity allows students to transform negative experiences by focusing on the root causes of problems and finding or understanding solutions. Although it is difficult to remain positive and perform effective communication in an overwhelming and stressful learning situation, developing awareness through reflection and seeking advice may help minimize frustration in experiences [16].

Contextual Factors

One contextual factor in this study is *experiencing health care system problems* which is linked to reinforced empathy. Students who experience the actual health care system as felt by the community members may increase their ability to share and understand community feelings and situations. This factor also allows students to observe community processes and practices, leading to an increased awareness

of the community. Learning has been noted from observation and participation in community activities, and stories shared by families on issues that affect their health [17]. This contextual factor implies that students must be guided to realize that these experiences do in fact provide them with a better outlook on patient-doctor relationships. Students must be encouraged to be inquisitive about the situations they experience with the community members.

The students' *prior community immersion-related experiences* is another important driver of the CIP outcomes. Community immersion, especially in rural communities, entails a significant adjustment for many students. However, students with previous related experiences may feel a certain level of preparedness, as Correia and Bleicher [18] inferred that when prior knowledge is activated, students' capacities and experiences to create new knowledge are enhanced. This factor suggests the need to capitalize on students with prior community immersion-related experiences such as letting them lead group activities. Further, preceptors need to connect previous students' experiences to their current experiences to facilitate the implementation of student activities.

The context, *dynamic interaction with community people* is an essential factor towards students' awareness of community conditions. Following this line of thought, Mthembu and Mtshali [19] reported that the interaction of students with the community allowed them to construct knowledge in the area of community-based learning. In practice, it implies the need to identify avenues and encourage students to actively interact with community members within their socio-economic environment.

Another contextual factor is *community support/ appreciation*. Community residents and family members tend to appreciate medical students' community initiatives when they realize that these efforts are significant to the community members and their families. This can be manifested through direct expression of appreciation and community participation in various activities initiated by the students. This supports the idea that student's learning objectives must be congruent to the community needs, aside from ensuring proper timing in the implementation of community activities and ensuring consistency of these activities to community practices. Likewise, community leaders should be well informed about the program and must be updated on its development to facilitate community support.

The context *inclination to serve* drives students to provide service to individuals and families. This is an essential attribute for future medical practitioners as Larkin and Hamilton [16] explained that demonstrating positive regard for others is among the most critical behaviors for health professionals. This driving force relates to Stukas *et al.* [20] clarification that intrinsic motivation is important to sustain commitment to serve others.

Study participants implied that *effective guidance and support* are indispensable and require preceptors to perform various roles. Egan and Testa [21] identified three principal functions of fieldwork supervision, namely, educative, supportive, and administrative. In this study, the supportive function was highlighted wherein students put significant value on the presence of preceptors and community organizers in the implementation of the initiated community projects. The educative function was also evident as students appreciated the inputs and discussions during the preceptorial and dry-run activities. However, assisting the students to link practical experiences to theory and facilitate the student's familiarity with the administrative procedures in the community are not well-emphasized by the students. This should include regular feedback that helps students clarify and identify their roles in the local healthcare system.

These driving factors and program outcomes can be summarized as represented in Figure 4. The contextual factors are classified as c*ommunity process features, student features,* and *program features*. This summary should be interpreted as: the presence of these contextual factors are potential triggers for the two mechanisms that may bring about the specified program outcomes. Presenting them in a combined form is a recognition that in actual community immersion practice, implementers may not necessarily act on each contextual factor exclusively as presented in every CMOC but usually act upon or implement simultaneously and may overlap with other contextual factors.

Furthermore, it is not assumed that the driving factors uncovered in this study are exhaustive and enduring. Contexts are dynamic and always changing, and outcomes may vary. The key in understanding community immersion, as a form of medical education program, is to acknowledge it as a complex intervention. To evaluate CIP comprehensively, preceptors and administrators may utilize the realist structure of context-mechanism-outcome configuration. Rather than just asking, “what works?”, it would be more helpful to ask, “what works, for whom, in what circumstances, and why”? in the implementation of community immersion programs.

Lastly, these findings are limited to the perspectives of medical students who underwent community immersion.

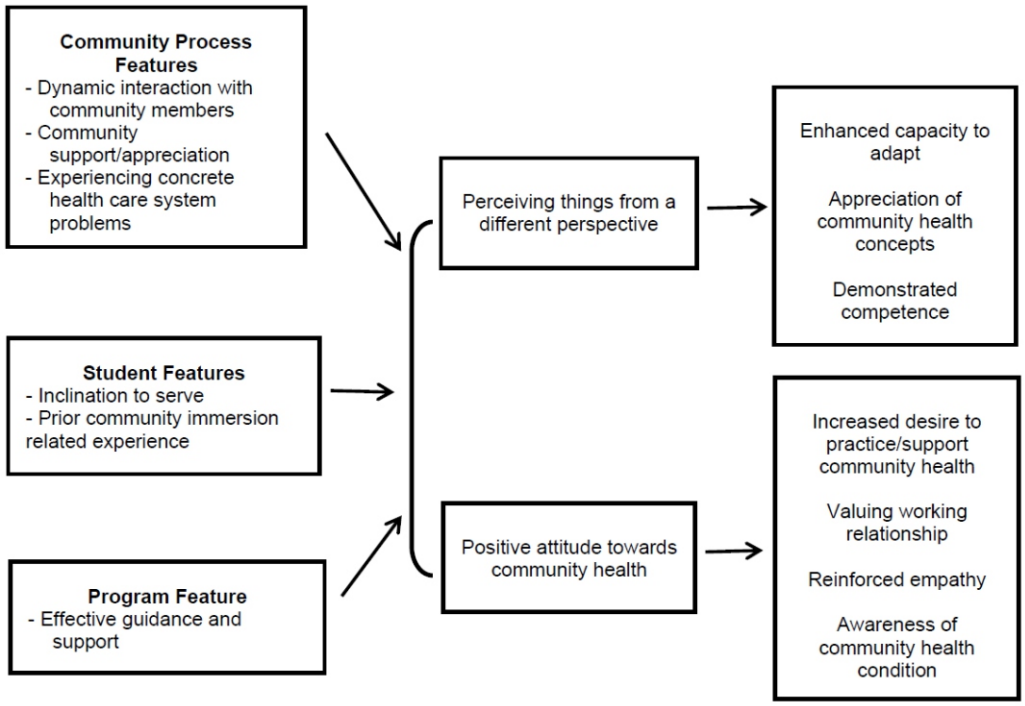

Figure 4. *Summary of the contexts-mechanisms-outcomes configurations of community immersion*

The exploration of the uncovered driving factors and outcomes of this program did not consider the perspectives of other stakeholders.

Conclusion

The uncovered educational outcomes of the community immersion program among the study participants are relevant to the social and course outcomes of De La Salle Medical and Health Sciences Institute and are consistent with the literature. Based on the significant findings of this study, the need to nurture two factors that drive community immersion to achieve essential educational outcomes are highlighted: *perceiving things from a different perspective*, and *positive attitude towards community health*. To be effective, community preceptors and administrators should focus on the processes that trigger these two factors. The conditions that are conducive for the immersion program to operate must be emphasized. These include maximization and/or cultivation of various contextual factors: *experiencing healthcare system problems, prior community immersion-related experiences, dynamic interaction with community people, community support/appreciation, inclination to serve,* and *effective guidance and support*. Further, in the learning process, study findings imply that reflection process should be an integral activity in every community immersion program.

To generate optimum educational outcomes through community immersion, community preceptors and administrators must focus on the driving factors. The success of an immersion initiative may depend greatly on how educational resources are invested to nurture these factors for educational gains.

The current findings may serve as an example and a catalyst in evaluating CIPs as complex programs as well as bases for the improvement of the CIP at De La Salle Medical and Health Sciences Institute and other similar programs elsewhere. To further uncover other potential driving factors, it is recommended that a follow-up study that includes the perspectives of community members, preceptors, and administrators would be essential.

References

1. Amalba A, Abantanga FA, Scherpbier AJJA, van Mook WNKA. (2017) Community-based education: The influence of role modeling on career choice and practice location. Medical Teacher 39(2):174-180.
2. Meili R, Fuller D, Lydiate J. (2011) Teaching social accountability by making the links: Qualitative evaluation of student experiences in a service-learning project. Medical Teacher 33(8):659-666.

3. Meurer LN, Young SA, Meurer JR, *et al.* (2011) The urban and community health pathway: Preparing socially responsive physicians through community-engaged learning. American Journal of Preventive Medicine 41(4 Suppl 3):S228-236.
4. Song Y, Lee M, Lim A, Ko G. (2018) Integrative review of studies of service-learning in health-related disciplines. Indian Journal of Public Health Research and Development 9(11):1022-1025.
5. Pagatpatan CP, Valdezco JAT, Lauron JDC. (2020) Teaching the affective domain in community-based medical education: A scoping review. Medical Teacher 42(5):507-514.
6. Department of Family and Community Medicine. (2016) Student immersion program guidelines. 2016: Dasmarinas, Cavite p.1-31.
7. Commission on Higher Education. (2016) Policies, standards and guidelines for the Doctor of Medicine program. Commission on Higher Education: Quezon City, Philippines.
8. Wong G, Greenhalgh T, Westhorp G, Pawson R. (2012) Realist methods in medical education research: What are they and what can they contribute? Medical Education 46(1):89-96.
9. Ansay SJ, Perkins DF, Nelson CJ. (2004) Interpreting outcomes: Using focus groups in evaluation research. Family Relations 53(3):310-316.
10. Pawson R. (2006) Evidence-based policy: A realist perspective. London: SAGE Publications.
11. Pagatpatan C, Ramirez CM, Perez A. (2015) An experience of focus groups fieldwork among novice nurses in the Eastern Visayas Region, Philippines. Philippine Journal of Nursing 85(1):28-36.
12. Krueger R, Casey M. (2015) Focus groups: A practical guide for applied research, 5th Ed. CA: SAGE Publications.
13. Patton MQ. (1999) Enhancing the quality and credibility of qualitative analysis. Health Services Research 34(5 II):1189-1208.
14. Braun V, Clarke V. (2006) Using thematic analysis in psychology. Qualitative Research in Psychology 3(2):77-101.
15. Kolb D. (2015) Experiential learning: Experiences as the source of learning and development. New Jersey: Pearson Education.
16. Larkin H, Hamilton A. (eds.) (2010) Clinical and fieldwork placement in the health professions. Mebourne, Australia: Oxford University Press.
17. Sopoaga F, Zaharic T, Kokaua J, Covello S. (2017) Training a medical workforce to meet the needs of diverse minority communities. BMC Medical Education 17(19).
18. Correia M, Bleicher R. (2008) Making connections to teach reflection. Michigan Journal of Community Service Learning 14(2):41-49.
19. Mthembu SZ, Mtshali FG. (2013) Conceptualisation of knowledge construction in community service-learning programmes in nursing education. Curationis 36(1):E1-E10.
20. Stukas AA, Snyder M, Clary EG. (2016) Understanding and encouraging volunteerism and community involvement. The Journal of Social Psychology 156(3):243-255.
21. Egan R, Testa D. (2010) Models of supervision. In: Stagniti K, Schoo A, and Welch D (eds.). Clinical and fieldwork placement in the health professions, Melbourne, Australia: Oxford University Press.