Introduction of Simulation-Based Learning Strategy to Bridge the Theory-Practice Gap in Advanced Concepts in Community Health Nursing Course: Lens from Students' Perspective

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ABSTRACT

Simulation has proven to be one of the most powerful forms of enactive experience in medical sciences, which enhances the efficacy of both direct and vicarious learning. At the undergraduate level, community health nurses are expected to be inclusively knowledgeable about population-based nursing practices with diverse communities; so, they prepare well to establish partnership skills with stakeholders and make collaborative decisions that promote awareness and understanding of the community's health needs. Problem prioritisation is an essential step of the planning cycle. It is one of the advanced concepts in community health nursing which needs in-depth knowledge and contemplation about the dynamics of the community. This paper highlights the students' perspectives regarding the impeccable effects of simulation pedagogy on students' learning in terms of improving their communication skills and alleviating the fear of dealing with community stakeholders before the actual problem-priority setting exercise for the clinical community project.

Key Words: *Community health nursing, Simulation-based learning, Problem prioritisation, Stakeholders.*

Community health nursing is a discipline in which professional nurses are educated in the process of population-based nursing and consider the whole community as an individual client.[1] According to the Pakistan Nursing Council (2019), Advanced Concepts in Community Health Nursing is one of the clinically based courses of the undergraduate programme curriculum, which provides opportunities for students to acquire in-depth knowledge of advanced concepts of the community as a partner and implement the planning cycle in the community setting.[2] Community health nurses must possess in-depth knowledge of population-based nursing practices in diverse communities. It enables them to collaborate effectively with stakeholders and make informed decisions to promote awareness and understanding of the community's health needs.[3]

Nursing institutions faced high overheads to ensure providing positive clinical experiences in a community setting; however, exposure to the community is confined to students with a length of the semester and required clinical hours during the undergraduate nursing programme.

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Priority setting exercise is a step of community assessment and intervention. An incredible community simulation setup was designed to reveal a real village experience and to help students learn about the significance and process of priority setting. Students had to prioritise at least eight community-identified health problems given in the scenario from the highest to the lowest level of ranking with the collaboration of simulated stakeholders and residents of the community, which subsequently would be considered a community field project to meet the objectives for the clinical course. The simulated activity was video recorded, and consent was obtained before the course.

Problem prioritisation is an integral part of the planning cycle in which identified problems are ranked from highest to lowest in terms of their magnitude, severity, and feasibility of effectively utilising appropriate resources within the community.[4] Table I indicates the responses of the simulated community performers while integrating the concepts of community priority setting to complete the problem prioritisation exercise. A scale ranging from 25 to 100% was used to elicit responses from community stakeholders. These responses were categorised as 0-25% represents [+], 26-50% [++], 56-75% [+++], and 76-100% [++++]. The categorisation interprets the provided percentages as indicative of the burden level on the community and its magnitude. The lower percentage (25%) represented issues that were less important, whereas 100% indicated the most critical issue that needed to be addressed. Therefore, hypertension was identified as a major concern in this simulated-community prioritisation activity.

Table I: Simulated priority setting exercise.

Problem list	Magnitude / Prevalence		Seriousness	Feasibility	Community concern	Overall score
Substance abuse	42%	++	+++	++	+++	14
Malnutrition	53%	+++	++	+	++	9
Hypertension	78%	++++	+++	++	++++	18
Anaemia in pregnancy	24%	+	++	+++	++	11
Illiteracy among adults	68%	+++	++	+	++	9
Dengue	21%	+	+	+++	++	9
Diabetes	38%	++	+++	++	++++	16
Environmental hygiene	32%	++	++	++	++++	14

Hence, this paper highlights the impeccable effects of simulation on undergraduate students' learning in the Advanced Concepts in Community Health Nursing (ACCHN) course.

Simulated-based activity in community health settings requires an immersive technical and innovative approach to create a conducive rural environment for learners before their actual exposure in the community setup.[5] It provided an opportunity for students to perform the role of community health nurses and alleviate apprehensions in a risk-free learning environment. In contrast, few students felt shy due to continuous monitoring from the camera, which increased their anxiety to being vocalised on microphones in a large audience. Interestingly, ungraded criteria enhanced productivity and receptiveness to feedback; however, few students with non-serious attitudes may have underachieved. Ungraded simulation-based activity in medical courses decreases students' stress levels and promotes the retention of learning that is significant for their professional careers.[6] The adequate training of standardised patients (SPs) as local community stakeholders such as lady health visitors, religious leaders *(Molvi)*, community institutional leaders *(Wadera)*, healthcare representatives *(Nazim)*, and people from the rural community with appropriate local attire added realism. It enhanced learners' insight, modified their behaviours, and improved clinical performance in a safe environment.

Moreover, students were exposed to creative challenges that tested their critical thinking, group dynamics, and cultural sensitivity. For instance, the challenges included students negotiating with stakeholders, language barriers for the clarification of ideas, dealing with the rebellious behaviours of residents, objections from a religious leader, and community health issues. On the other hand, this simulated activity exposed students' strengths and shortcomings in front of a large audience, which has both positive and negative impacts on an individual's learning. Consequently, some students experienced enough confidence to overcome barriers with strategies that came up instinctively, which overpowered a few students who felt pessimistic with a barrage of challenges while performing the task. Unexpected challenges during simulation are difficult to manage but they prepare students to comprehensively identify and take a proactive decision in real circumstances.[7] Nonetheless, it is well-justified that the outcome of challenges impinging on students is not always a negative impact; often, it is positive and develops professional competencies in learners to deal with the crisis in the future as well.

Furthermore, a conducive environment for debriefing allowed each student to share experiences without hesitation and clarified unclear advanced concepts while reviewing a video recording of the simulated activity. The positive attributes of the facilitators are one of the salient features of this simulation, which allowed learners sufficient time to reflect upon their actions retrospectively and directed the discussion on group learning instead of alienating anyone. Several debriefing techniques such as open-ended questions to inquire about what went wrong or right, clues for unacceptable behaviours, prompting questions for inappropriate language, and silence to assimilate information and analysation were beneficial for higher-order thinking and stren-gthened their theoretical concepts. The debriefing exercise influenced students to improve their professional behaviours by critiquing their spontaneous actions so they could fill the learning gaps in implementing future community projects. This strategy is adopted into the undergraduate community health curriculum so that diverse range of community scenarios can be incorporated into community clinics, and students gain practical insight into dealing with challenging situations in a safe environment. These hands-on experiences facilitate students becoming immersed in the role of a community health nurse. In addition, researchers can explore the impact of simulated pedagogy on alleviating learners' anxiety levels and developing competencies in their diagnostic and data collection skills during their first visit to the primary healthcare centres. The advancement in simulation-based education in community courses of undergraduate programmes may contribute to the skills of nurses to evaluate families, communities, healthcare services, and the health education system in a deeper and more comprehensive manner.

In a nutshell, simulation-based learning is an effective design tool for the improvement of theoretical knowledge in clinical practices. Conscientious efforts are needed in designing a nursing curriculum to integrate standardised clinical simulation in community health nursing courses for undergraduates to go far beyond traditional community practices; thus, students will be well equipped to attain the challenges of a new paradigm shift in community health nursing.

COMPETING INTEREST:
The authors declared no conflict of interest.

AUTHORS' CONTRIBUTION:
SH: Conception of manuscript, acquisition, analysis, or interpretation of data, drafting, and revising it critically for important intellectual content.

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REFERENCES

1. Anderson ET, McFarlane JM. Community as partner: Theory and practice in nursing. United States: Lippincott Williams & Wilkins; 2010.

2. Council PN. Post RN BScN Curriculum. 2019. Available from: http://pnmc.gov.pk/wp-content/uploads/2023/03/Post-RN-BSN-29.10.2019.pdf.

3. World Health Organization. A framework for community health nursing education. WHO Regional Office for South-East Asia 2012. Available from: http://iris.who.int/handle/10665/204726.

4. Chatora R, Tumusiime P. District health management team training modules: Health sector reform and district health systems: Module 1. World Health Organisation. Regional Office for Africa 2004.

5. Akber BA, Rajani MI, Khalid F, Docherty C. Simulated learning in rural community environment: Pushing the boundary. *Adv Simul* 2021; **6(1)**:5. doi: 10.1186/s41077-021-00155-3.

6. Ferrin N, Zarbock T, Tieman M. Effect of grading and class rank on performance in a surgical simulation course. *J Surg Edu* 2020; **77(1)**:166-77. doi: 10.1016/j.jsurg.2019.07.001.

7. Hustad J, Johannesen B, Fossum M, Hovland OJ. Nursing students' transfer of learning outcomes from simulation-based training to clinical practice: A focus-group study. *BMC Nursing* 2019; **18(1)**:53. doi: 10.1186/s12912-019-0376-5.

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