



International Journal of Nursing and Health Care Science

Review Article

Konieczny L, et al. J Int J Nurs & Health Car Scie 03: 2023-229

Poverty Simulation Produces Rich Experience in Interprofessional Education

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Submission Date: 20 March, 2023

Accepted Date: 30 March, 2023

Published Online: 05 April, 2023

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How to cite this article: Konieczny L, et al. (2023) Poverty Simulation Produces Rich Experience in Interprofessional Education. Int J Nurs & Health Car Scie 03(06): 2023-229.

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Abstract

Poverty, with the accompanying chronic stress, is a primary social determinant of health. The Community Action Poverty Simulation (CAPS) is an immersive learning activity to provide awareness of the multiple factors and implications for persons living in poverty. During the simulation, the students in nursing, healthcare, and education experience challenges such as food and residential insecurity, poor compliance with healthcare plan, and educational needs. The simulation demonstrates how poverty may affect each person and affect nursing and other professions in providing care. The Interprofessional Education (IPE) provides experiential learning for students to collaborate to achieve better outcomes for persons living in poverty. The insights, communicated in the debriefing after the simulation, are profound.

Keywords: Interprofessional education; Nursing; Poverty; Simulation; Students

Introduction

Finding and infusing meaningful Interprofessional Education (IPE) experiences throughout the curriculum poses a challenge for many healthcare disciplines. The poverty remains a significant issue in the United States of America with rates for 2021 at 12.8 % or approximately 38 million people [1]. It is imperative that students from a variety of disciplines understand the effect that poverty has on health and thus quality of life. Using the Community Action Poverty Simulation (CAPS) as an IPE simulation, 90 students are given a valuable education experience at any level within their respective education program [2].

Literature Review

Poverty is recognized as the Social Determinant of Health (SDOH) that has the greatest influence on a person's health status when compared to all other SDOH [3]. The lack of financial resources has numerous impacts ranging from healthy nutrition and preventative health measures to access to medications and healthcare providers. Poverty contributes to health inequality and adversely impacts social justice. Although the national poverty rate is 12.8% of the population, some states exceed 22% living in poverty [1]. Due to the vast effect of poverty on health, one profession alone is insufficient to solve the problem. However, nursing is uniquely positioned to be part of the solution due to the numbers of nurses and the many healthcare environments in which they are employed. A qualitative study found nursing education is lacking in the curricula and experience in teaching social justice as a core value in nursing [4]. The study found the curricula and faculty focused on clinical care with insufficient educational approaches and effective learning related to social justice [4]. While community or public health nursing courses have historically addressed poverty affecting health, it falls short in integrating social justice throughout the educational program. An example against containing social inequity in community health nursing courses alone, poverty, affecting more than 12 million children in the United State of America, has negative physical and mental health consequences. Nurses can coordinate care and support families to reduce the physical, socio-emotional, and cognitive effects of the "toxic stress" of poverty [5]. Toxic stress changes the architecture in the child's developing brain in the prefrontal cortex, which involves executive function, and the hippocampus, which involves learning and memory.

This is important for students learning about care of children. The effects of poverty extend to care of adults as the literature speaks to the link between adverse childhood experiences with poor health in adulthood [6] Living in persistent poverty leads to chronic illnesses such as heart disease, substance abuse, and depression in adults [5]. The extensive range of health outcomes of social determinants of health may be taught in the classroom, simulation experience, clinical experience, and service learning. Thornton & Persaud call for transformative action for nursing education to address health inequity [7] Interprofessional Education (IPE) provides an opportunity to integrate curricula related to social determinants of health. IPE experiences even among professional practices that do not usually collaborate can be beneficial [7].

Interprofessional Education (IPE) challenges such as scheduling conflicts are outweighed by the benefits. Educational leaders support IPE related to improved safety, problem solving across disciplines, decreased errors, and insights into other professionals' competencies [8]. A study involving focus groups from five disciplines (nursing, radiography, physical therapy, social work, and podiatry) in IPE reported positive outcomes related to the affective domain of learning and self-reports of application of IPE to practice [9]. Another study among nursing, physician assistant, pharmacy, and physical therapy students reinforced the theme of communication among team members to achieve safe high-quality health care [10]. A review of published articles found introducing IPE earlier in the program of study can be effective in cultivating a collaborative approach to the work of healthcare [11]. Two IPE experiences, with nursing and pharmacy students, reinforced the importance of reflection at the end of the IPE experience and reinforcement of the content during the clinical experience [12]. In concluding the literature on IPE, educators and students will benefit from validated instruments which measure student assessment among professions participating in IPE experiences [13].

Simulation has been used effectively to teach clinical skills and collaborating as a team. A study reported caring behaviors such as being empathetic, listening, and treating the patient as an individual can be improved using simulation [14]. A focus group study documents nursing students can transfer learning outcomes from simulation to clinical practice [15]. The use of poverty simulation has shown participants were less judgmental and more understanding and empathetic to a patient from a low-income family after the simulation [16]. An interactive poverty simulation related to nursing students' perceptions indicated improvement in 11 out of 21 items using the Attitude Toward Poverty Scale-Short Form [17]. Interprofessional education using simulation promotes safety and communication among practitioners [18,19]. A poverty simulation study with nursing and social work students, reports the important findings by participants which "increased their ability to understand poverty with empathy" and learned to work in teams [20].

Description of Poverty Simulation

This specific CAPS experience is conducted at a private university in a suburban city located in the Northeast section of the United States. CAPS bridges the gap from misconception to understanding and sensitizes participants to the realities of poverty [2]. Nursing, respiratory therapy, and education undergraduate students collaboratively worked with graduate orthotics and prosthetic and nursing students in one college at the university. The simulation is the experience of the life of persons living at or below the poverty level. The poverty level of the city which neighbors the university is 28% [21].

Prior to the start of the IPE CAPS, the facilitators arranged the simulated "community" which includes a neighborhood of homes represented by specifically arranged chairs, surrounded by community facilities such as social services, place of employment, grocery store, bank/check cashing, utility company, pawn shop, pastoral services, homeless shelter and even correctional facility. The community stations are operated by 20 volunteer faculty and staff from the departments of nursing, education, campus security, and administrative members from the Dean's office. The 90 student participants are randomly assigned to "family units" which vary in demographics just as in the real world. Family unit constructs include single or two parent families of infants, pre-school and/or school aged children, families in which a grandparent resides with the family unit, and even single-family units where the individual resides independently. Regardless of the family composition all of the families are living at or below the poverty level. In addition, to these family constructs, a handful of students are assigned to portray the role of someone living in homelessness.

All participants receive a pre-briefing at the start of the IPE simulation informing them the simulation is designed for them to experience one month of living life as a low-income family. Each simulated week is 15 minutes in length with a brief break between weeks representing the weekends. During the 15-minute weeks, students are challenged to make decisions those who live in poverty a forced to make on a daily basis. Families are forced to decide between providing food or purchasing medications for family members with chronic illness. Participants experience waiting for social services or contact with the case manager which can be difficult to access. Some participants jump out of their chairs to be first to access services when a new simulated "week" begins. Children miss school due to the family's inability to afford transportation for both the parent who needs transportation for work and the child who needs transportation to school. Those arriving to places of employment late find diminished wages or termination further compounding the already stressful scenario. Single parents are forced to either bring their dependents with them to interviews and place of employment or leave their infants or pre-school aged children home with other underaged children because they were unable to afford childcare.

Debrief and Analysis of the Interprofessional Experience

The students are debriefed using the PEARLS Healthcare Debriefing Tool [22]. The debriefing of the simulation explores the students' feelings about the experience. On the surface, many of the students' statements during the debriefing seem very similar. However, when prompted to dig into implications for practice in their future professions, that is where the interprofessional nature of the group shone through. Nursing and other health science students focused on things they would need to be aware of in terms of patients having access to medications, treatments, and even the transportation to follow through on planned care. Education students spoke more of the need to remind oneself that the student who falls asleep in class or has difficulty concentrating may have additional family responsibilities and stressors related to poverty. The debriefing facilitator reinforces the key learning points and summarizes the participants' discussion.

It is also interesting to observe the range of responses, both during the simulation and during the debriefing. It is very clear some students had interacted with exactly the types of systems and barriers which are built into the simulation while others are incredulous this simulation experience is designed to be so challenging. As the conversations unfold during debriefing, it is possible to glimpse moments of insight from the latter group of students as they listen to peers across the range of professions speak to the realism of the experience.

The limitations of running the large-scale simulation include time scheduling due to the students' clinical rotations and education classes, volunteer participation, and physical space. One strength of the simulation is the awareness of the stressors involved in living at or below poverty level. Another strength is students learning to work with colleagues to achieve better outcomes for persons living in poverty. Educators in nursing and the other disciplines reinforce the connection between the simulation and the curriculum and the benefit of working in multidisciplinary teams.

Conclusion

The value of the Community Action Poverty Simulation as an experiential and interprofessional learning experience is profound. Most participants report they found the experience valuable and pertinent to their expected role. The verbalizations in the debriefing indicate more empathy to people living in poverty and more empathy for the struggle in gaining access to services. The nursing, healthcare, and education students' simulation experience delivers insight for persons living with the chronic stress of poverty. Interprofessional collaboration, learned as students, has the potential to enhance the care for persons living in poverty.

Author Note

There are no competing financial or non-financial interests.

References

1. U.S. (2020) poverty rate is 12.8% but varies significantly by age groups. United States Census Bureau.
2. Community Action Poverty Simulation (2022) Missouri Community Action Network.
3. Jarvis C, Eckhardt A. Physical examination & health assessment, 8th edition. St. Louis [MI].
4. Habibzadeh H, Jasemi M, Hosseinzadegan F (2021) Social justice in health system; a neglected component of academic nursing education: a qualitative study. *BMC Nursing* 20: 1-9.
5. Francis L, DePriest K, Wilson M, et al. (2018) Child poverty, toxic stress, and social determinants of health: screening and care coordination. *The Online Journal of Issues in Nursing* 23: 2.
6. Braveman P, Heck K, Egerter S, et al. (2018) Economic hardship in children: a neglected issue in ACE studies. *Maternal Child Health Journal* 22: 308-3017.
7. Thornton M, Persaud S (2018) Preparing today's nurses: social determinants of health and nursing education. *The Online Journal of Issues in Nursing* 20.
8. Sundberg K, Reeves S, Josephson A, et al. (2019) Framing IPE: exploring meanings of interprofessional education within an academic health professions institution. *Journal of Interprofessional Care* 33: 628-635.
9. Stephens M, Ormandy P (2018) Extending conceptual understanding: how interprofessional education influences affective domain development. *Journal of Interprofessional Care* 32: 348-357.
10. Furr S, Lane SH, Martin D, et al. (2020) Understanding roles in health care through interprofessional education experiences. *British Journal of Nursing* 29: 364-372.
11. Murdoch NL, Epp S, Vinek J (2017) Teaching and learning activities to educate nursing students for Interprofessional collaboration: a scoping review. *Journal of Interprofessional Care* 31: 744-753.
12. Shida J, Otsuka M (2022) Nursing students' experiences in consecutive clinical interprofessional education in Japan: application of the IPE in nursing colleges. *Nursing Reports* 12: 324-338.
13. Skinner K, Robson K, Vien K (2021) Interprofessional education: a unique approach to addressing the challenges of student assessment. *Journal of Interprofessional Care* 35: 564-573.
14. Leach R, Vardaman SA, Leigh KH (2021) Influence of simulation education activities on nursing students' caring behaviors. *International Journal for Human Caring* 25: 277-282.

15. Hustad J, Johannesen B, Fossum M, et al. (2019) Nursing students' transfer of learning outcomes from simulation-based training to clinical practice: a focus group study. *BMC Nursing* 18: 1-8.
16. Sams LD, Lampiris LN, White T, et al. (2019) Enhancing allied health dental students' understanding of poverty through simulation. *The Journal of Dental Hygiene* 93: 6-12.
17. Garrett-Wright D, Haughtigan K, Link K (2021) Interactive poverty simulation: nursing students' perceptions of poverty. *Nursing Education Perspectives* 42: 380-382.
18. Cavnar K, Van Der Like J, Hobby-Burns L (2017) Promoting safety through interprofessional simulation. *Clinical Laboratory Science* 30: 228-232.
19. Gordon R, Flecknell M, Fournier T, et al. (2017) Partnering for Patti: shaping future healthcare teams through simulation-enhanced interprofessional education. *Canadian Journal of Respiratory Therapy* 53: 81-87.
20. Hitchcock LI, Peterson DT, DeBiasi L, et al. (2018) Learning about poverty through simulation. *Journal of Social Work Education* 54: 517-531.
21. Quick facts, Hartford city, Connecticut. United States Census Bureau.
22. PEARLS Healthcare Debriefing Tool. Debrief2Learn.