

Background/Significance

Health equity education is essential in developing competent and compassionate health professionals. It highlights the Social Determinants of Health, emphasizing how income, education, and environment affect health outcomes and the need to address disparities. Health Equity education promotes cultural competence, reduces health disparities, and improves patient outcomes by addressing barriers in marginalized communities. It prepares students for diverse populations, builds community trust, supports ethical practices, and aligns with policy and accreditation standards.

Research Question

How does participation in an Interprofessional Education (IPE) Poverty Simulation impact healthcare students' empathy, understanding of health equity, and interprofessional collaboration skills?

Intervention

The Health Equity Simulation is designed to foster empathy and understanding by simulating the challenges faced by individuals living in poverty. Participants engage in activities that mimic real-life situations, such as managing finances, accessing healthcare, and navigating social services. The simulation aims to demonstrate how social determinants of health impact health outcomes and to develop interprofessional collaboration skills.

LOGISTICS

Timeline

Duration 1 hour representing 1 month

Every 15 minutes = 1 week

Weekly activities & expenses

Groceries
Child Care

Monthly activities & expenses

Rent
Utilities

Health Equity Simulation Indicators

Insurance Status

Health Insurance

No Health Insurance

Pre-existing Condition

Food Allergy

Diabetes

Hard of Hearing

Asthma

Anxiety and/or Depression

Chronic Pain

Literacy Level

High Literacy

Low Literacy

Housing

Unhoused

Housing Voucher

HUD \$1200/month

Own \$2000/month

Employment

Unemployed

Part-Time Employment \$1000/month

Contract Worker \$2000/month

Full-Time Salaried \$3000/month

Education

Some school

GED

High School Graduate

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Methods

- Design:** Pre-test/Post-test
- Participants:** Students, faculty, staff from UNCW College of Health and Human Services, Cape Fear Community College, UNC School of Medicine, and community partners
- Tools:** Jefferson Scale of Empathy, quality-of-life measures related to social determinants of health
- Procedure:** Simulation activities include pre-brief, case portfolios, real-world scenarios, and debrief

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Outcomes

- 85 participants engaged with the **Elevating Health Equity Simulation**
- A wide range of ages (Figure 1 below) was represented by the participants.

| Age Group | Count |
|-----------|-------|
| <19 | 3 |
| 19-21 | 24 |
| 22-24 | 21 |
| 25-27 | 13 |
| 28-30 | 4 |
| 31-33 | 4 |
| 34-36 | 8 |
| 37-39 | 5 |
| 40-42 | 3 |
| 43-45 | 1 |
| 46-48 | 5 |
| 49-51 | 1 |
| >51 | 1 |

Table 1. Survey Questions for Quality-of-Life Attributes

| Question Number | Quality-of-Life Attribute |
|-----------------|--|
| 1 | Ability to access regular medical care |
| 2 | Capacity to afford and obtain medications |
| 3 | Management of chronic conditions |
| 4 | Access to healthy food options |
| 5 | Stress levels from daily challenges |
| 6 | Impact of language barriers on communication |
| 7 | Transportation access to essential services |
| 8 | Ability to gain employment |
| 9 | Ability to maintain employment |
| 10 | Housing stability |
| 11 | Food security and nutritional access |
| 12 | Ability to pay for utilities |
| 13 | Financial stability for basic necessities |
| 14 | Access to educational opportunities |

- 81 and 65 participants engaged with the Quality of Life pre- and post-surveys, respectively. An independent Samples T-test assessed significant changes in pre-/post-scores.

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Table 2. Independent Sample T-Test Results.

| Independent Samples T-Test | | |
|----------------------------|----------|--------|
| | U | p |
| Q1 | 3178.500 | 0.002 |
| Q2 | 2850.000 | 0.217 |
| Q3 | 3178.500 | 0.006 |
| Q4 | 3165.000 | 0.009 |
| Q5 | 3226.500 | 0.006 |
| Q6 | 3198.000 | 0.003 |
| Q7 | 3289.000 | < .001 |
| Q8 | 3194.000 | 0.007 |
| Q9 | 3140.000 | 0.009 |
| Q10 | 3273.000 | < .001 |
| Q11 | 3117.000 | 0.002 |
| Q12 | 3336.000 | < .001 |
| Q13 | 3182.500 | 0.004 |
| Q14 | 3125.000 | 0.025 |

Note. Mann-Whitney U test.

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Figure 2. pre-/post-average scores with difference bar graph for Quality-of-Life survey questions.

| Question | Pre-Survey | Post-Survey | Difference |
|----------|------------|-------------|------------|
| Q1 | 4.65 | 4.95 | 0.30 |
| Q2 | 4.75 | 4.85 | 0.10 |
| Q3 | 4.60 | 4.85 | 0.25 |
| Q4 | 4.55 | 4.80 | 0.25 |
| Q5 | 4.45 | 4.70 | 0.25 |
| Q6 | 4.55 | 4.85 | 0.30 |
| Q7 | 4.60 | 4.90 | 0.30 |
| Q8 | 4.50 | 4.80 | 0.30 |
| Q9 | 4.45 | 4.75 | 0.30 |
| Q10 | 4.65 | 4.95 | 0.30 |
| Q11 | 4.65 | 4.90 | 0.25 |
| Q12 | 4.45 | 4.85 | 0.40 |
| Q13 | 4.65 | 4.90 | 0.25 |
| Q14 | 4.40 | 4.65 | 0.25 |

Discussion

- There were significant changes in each of the quality-of-life scores except for attribute 2, capacity to afford and obtain medications which was the highest pre-survey score item.
- The three attributes with the largest change ($p < .001$) include: 1) The ability to pay for utilities, 2) Housing stability, and 3) Transportation access to essential services.

Implications

The Health Equity Simulation has shown to be an effective teaching strategy for understanding complex concepts related to health equity. It fosters clinical judgment, critical thinking, and decision-making skills. By enhancing empathy and interprofessional collaboration, the simulation prepares healthcare professionals to address health disparities and improve patient outcomes. The findings suggest that incorporating health equity training into healthcare curricula is vital for workforce development and aligns with policy and accreditation standards.

References