Undergraduate Nursing Education: Culturally Competent

Care Coordination for a Vulnerable Population

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Abstract

Background: Educating undergraduate nursing students to perform care coordination and practice with cultural competence are important considerations for nursing programs. ***Method:*** This project, designed to enhance undergraduate nursing education, introduced cultural competence learning modules into the curriculum and a clinical experience developing care plans for vulnerable patients in a community clinic. Students completed pre- and post-intervention surveys related to cultural awareness and responded to guided reflection questions following their clinical experience. ***Results:*** Survey analysis indicated statistically significant improvement in student's perception of their cultural awareness overall. Guided reflection content analysis revealed themes related to understanding the role of nursing in care coordination, working with interprofessional teams, and increased mindfulness related to vulnerable patients. ***Conclusion:*** Enhanced education for undergraduate nursing students related to cultural competence and a clinical experience providing care coordination for vulnerable patients enhanced students' cultural awareness and understanding of care coordination as a professional nursing role.

Keywords: nursing education, care coordination, cultural awareness, cultural competence, vulnerable populations, social determinants of health, health disparities, community clinics

Undergraduate Nursing Education: Culturally Competent Care Coordination

for Vulnerable Populations

Care coordination is a professional role of registered nurses involving purposeful organization of patient care to promote safer, more efficient, and higher quality care (American Nurses Association, 2012). Effective care coordination is essential to reduce fragmentation, control costs, and improve patient outcomes (Cropley & Sanders, 2013) and includes safe transitions of care from one provider or setting to another (Mood et al., 2014). Nurses are integral to coordinating patient care, but receive limited formal education and training for the role (Allen et al., 2019).

For care coordination to be effective, nurses must recognize and plan care with consideration for social determinants of health (SDoH) such as income, employment, housing, and food sources (Andermann, 2016; Liu et al., 2018). Failure to consider SDoH can result in less effective communication, diminished trust, and the risk that patients may not follow the prescribed treatment plan (Liu et al., 2018). Because patients may be reluctant to disclose SDoH, approaching these topics with cultural awareness, sensitivity, and competency facilitates more effective care planning (Andermann, 2016).

Culturally competent care is critical to reduce health disparities experienced by minorities and other vulnerable populations (Liu et al., 2018). It is projected that by 2060, the United States (US) minority population will reach 235 million, an increase of 105% over 2014 (Govere et al., 2016). Registered nurses are the largest group of healthcare professionals in the United States but lack the racial and ethnic diversity of the nation's population (Loftin et al., 2013). As the population becomes more diverse, training nurses to be culturally competent is a priority for nursing programs (Chen et al., 2017).

To meet the need for nurses trained to effectively coordinate care and practice with cultural competence, the American Association of Colleges of Nurses (AACN) outlines essential professional

competencies required for baccalaureate nursing programs. Competencies include planning and

coordinating care that is compassionate, respectful, and done with consideration for individual values

and beliefs (American Association of Colleges of Nurses [AACN], 2021).

Literature Review

Literature was reviewed to identify studies that evaluated teaching modalities related to care

coordination education and cultural competence development for undergraduate nursing students.

Care Coordination Education

Educating undergraduate nursing students in care coordination prepares them to effectively

organize and facilitate patient care across the healthcare continuum (Swan et al., 2019). Mood et al.

(2014) evaluated the effectiveness of concept-based clinical activities on baccalaureate nursing

students' knowledge of transitional care, a component of care coordination. Reflections written by

students indicated increased understanding of the nursing role in care transitions and increased

mindfulness of the human experience. Holland et al. (2017) conducted a study to determine if focused

learning modules would increase students' knowledge of care coordination and found them effective in

facilitating student learning and understanding.

Cultural Competence Education

Cultural competency training, including clinical experiences, prepares nursing students to

provide care with the awareness, knowledge, and skills needed to meet the needs of a diverse

population (Chen et al., 2017). Repo et al. (2017) measured students' cultural competence and found

that it was positively associated with students from a minority background and those who experienced

more frequent exposure to other cultures. Chen et al. (2017) identified developmental components of

cultural competence and found that students who interacted more with different ethnic groups had

higher levels of cultural awareness. Govere et al. (2016) evaluated the effectiveness of online learning

modules to increase cultural competence in undergraduate nursing students and found that students'

cultural competence increased.

Rationale

Campinha-Bacote (2002) describes cultural competence as care provided within the context of

an individual's culture. The model provides a framework for interventions to improve cultural

competence in undergraduate nursing students and includes cultural awareness, knowledge, skill,

encounters, and desire. The constructs of cultural awareness and knowledge support incorporation of

cultural competency learning modules into the undergraduate curriculum and the community clinical

experience provides opportunities for cultural encounters and skill development.

Purpose

The purpose of this project was to change the undergraduate nursing curriculum to align the

AACN essential professional nursing competencies related to care coordination and development of

student nurses' cultural competence.

Methods

Context

Before educational enhancements**,** care coordination was only observed by student nurses

without any experience organizing and coordinating care for patients in a clinical setting. One course on

diversity was offered in the nursing program but not required in the curriculum. Cultural competence

was discussed in the senior leadership course but no structured content was included to increase

student cultural awareness and move students toward cultural competence.

Interventions

Enhanced education related to culturally competent nursing care was integrated into the

nursing leadership course through a series of self-learning modules developed by the Department of

Health and Human Services, Office of Minority Health (Department of Health and Human Services,

2013). Following completion of modules, students participated in discussion boards with peers to further explore concepts and challenges related to providing culturally competent care.

Care coordination was introduced through a three-day clinical experience at a community clinic where senior students developed patient-centered care plans for vulnerable patients. See Appendix A for care plan template. Over two semesters, students developed 160 care plans and documented each as a case note in the patient's electronic medical record. Structured debriefing following each clinical day facilitated small group discussions as students shared their experiences, observations, and challenges related to coordinating care for vulnerable patients.

Study of Interventions

Student learning related to care coordination was studied using guided reflection questions completed following students' clinical rotations. Student responses were reviewed periodically to determine if content reflected anticipated learning. One question was restated for clarity ten weeks following implementation. Completion of learning modules and discussion board posts were monitored and a seven-day extension was granted based on students' requests for additional time.

Measures

Qualitative measures were chosen to evaluate the effectiveness of enhanced clinical education related to care coordination including the nurses' role in care coordination, the importance of cultural competence in care planning, and the impact of SDoH. This method was selected to better understand the breadth and depth of students' experiences through guided reflections. Reflections were credible as students shared their lived experiences developing care plans for vulnerable patients in a community clinic.

The effectiveness of enhanced education on students' development of cultural awareness was measured using pre- and post-intervention surveys. Survey questions addressed four subscales including

students' general educational experience, cognitive awareness, behavior and comfort with interactions, and patient care/clinical issues (Rew et al., 2003).

Data Analysis

Content of guided reflections was analyzed to measure student learning related to care coordination. Three reflection questions were developed to address the role of nurses in care coordination, cultural competence in care planning, and the impact of SDoH related to vulnerable patients. Two non-specific questions were included for students to share other information related to their experience and learning.

The Cultural Awareness Scale (CAS) instrument developed by Rew et al. (2003) was used to measure students' perceptions of their cultural awareness. Pre- and post-intervention survey data was analyzed using a two-tailed paired samples t-test for overall scales and for each subscale. Cronbach's alpha coefficient was also calculated on both pretest and posttest scales to assess inter-item reliability.

Ethical Considerations

Educational enhancements were approved by the university Institutional Review Board. The clinical site did not require additional approval. An explanation of the project was provided to students and written consent was obtained. Classroom and clinical assignments did not result in letter grades eliminating any perception of coercion and students were given full credit for participating. Anonymity of surveys and guided reflection responses eliminated any risks for students related to data collection.

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Results

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Senior students completed a three-day clinical rotation at a community clinic developing care plans for vulnerable patients. Of 160 patients, 48.75% were non-White, indicating a significant level of diversity. See descriptive statistics Appendix B. Content of students' guided reflections was analyzed for recurring themes, organized into categories, and summarized.

The role of nurses in care coordination as advocate and educator was a recurring theme. Students expressed a sense of autonomy and critical thinking development through the care planning process. One student wrote, "It helped me critically think and connect the dots. I was able to make decisions, create a care plan, and educate the patient based on my assessment." Confidence with patient teaching and the ability to speak with patients about difficult issues such as SDoH increased. Another student stated, "I became more confident talking to patients, asking uncomfortable questions, and experienced many different cultures and situations that I hadn't had before."

The importance of working with an interprofessional team was a consistent theme including the positive experience of team collaboration. One student wrote, "This experience allowed me to practice communication skills with an interprofessional team." Students discussed the value of giving report directly to the provider, gaining confidence, and improving communication skills. A student wrote, "I learned how to give a thorough and complete handoff report to the provider."

Caring for vulnerable patients was highly valued by students. Mindfulness was discussed including an awareness of the challenges vulnerable populations face based on SDoH. One student wrote, "My patient left without completing treatment to get to the soup kitchen before it closed because he had not eaten since the day before." Another student wrote, "I have learned firsthand how social determinants impact people and their ability to get healthcare." Cultural care, compassion, and respect were words used as students described their experience with this patient population.

Quantitative analysis was performed on pre- and post-survey data. A Cronbach's alpha coefficient was calculated for overall Cultural Awareness pretest and posttest scales to assess inter-item reliability. The pretest scale Cronbach's alpha coefficient was 0.76, indicating acceptable reliability and the posttest scale Cronbach's alpha coefficient was 0.86, indicating good reliability. A two-tailed paired samples t-test was conducted on overall pretest and posttest scales. The result was significant based on an alpha value of 0.05, t (33) = -2.94, p = .006. A two-tailed paired samples t-test was also conducted on

each of four subscales for cultural awareness including General Educational Experience, Cognitive Awareness, Behaviors/Comfort with Interactions, and Patient Care/Clinical Issues. All results were statistically significant based on an alpha value of 0.05 except for the Behavior/Comfort with Interactions subscale. See Table 1.

Table 1

Two-Tailed Paired Samples t-Test for the Difference Between Cultural Awareness Pretest and Posttest Overall and for each Subscale

Cultural Awareness Overall and Subscales	Subscale *p*-Values
Cultural Awareness Overall	.006
General Educational Experience	.003
Cognitive Awareness	.014
Behaviors/Comfort with Interactions	.291
Patient Care/Clinical Issues	.006

Note. N = 34.

Discussion

Summary

Cultural competence learning modules combined with a clinical experience planning care for a vulnerable and diverse population positively influenced students' perceptions of their cultural awareness as scores increased overall and in all subscales except for Behaviors/Comfort with Interactions. As students described their clinical experience through guided reflections, significant learning was seen in themes that emerged. An unanticipated benefit was the students' positive experiences working with an interprofessional team and interacting directly with providers, an experience often not possible in traditional clinical settings.

Interpretation

Project interventions resulted in increased cultural awareness among students and knowledge of the role of nursing in care coordination. The impact of this project on students was seen in the guided reflections that were rich in content and discussion of new knowledge and awareness. Outcomes anticipated in this project, increased knowledge of care coordination and increased student cultural awareness, were observed.

Limitations

The small sample size of students from a single private university in the southeast may limit generalizability. A possible limitation is related to the limited diversity of participating students, potentially introducing unintended bias related to cultural awareness.

Conclusions

Enhancements to the undergraduate nursing program and a community clinical experience positively influenced student learning and professional development. Students' positive reflections and increased cultural awareness support incorporation of enhancements into the curriculum, ensuring sustainability. Next steps include integration of enhancements earlier in the program with inclusion of cultural humility as an additional focus. Cultural humility goes beyond cultural competence and requires self-reflection and awareness of one's own thoughts and feelings about different cultures (Isaacson, 2014). By examining implicit biases, nurses can approach care with openness and develop an appreciation for diversity that moves them toward cultural humility (Rebar & Heimgartner, 2021).

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Appendix A

Community Clinic Care Plan Template

Patient Centered Care Plan			
Care Plan to be completed with consideration of patient's values and wishes.			
Date:	**Patient Initials:**	**Age:**	**Gender:**
Patient ID:	**Employment Status:**		
Race/Ethnicity:			**BMI:**
Tobacco Use: Yes No	**Type/Frequency:**		
Dx HTN: Yes No	**BP:**	**Dx Diabetes:** Yes No	**HGB A1C**
Other Health Issues:			

Nursing Actions	List Specifics	By Whom
Patient Education Provided *(Include diet, exercise, medication* *education and compliance, smoking* *cessation, etc.)*		
Referrals		
Follow Up Scheduled		

Social Determinants of Health Assessment and Actions			
Date	**Concerns/Problems**	**Actions/Comments/Referrals/Barriers**	**By Whom**

Appendix B

Frequency Table for Patient Sociodemographic Characteristics of Patients

Variable	*n*	*%*
Gender		
Male	102	63.75
Female	58	36.25
Employment Status		
Employed Full Time	31	19.38
Unemployed	101	63.12
Employed Part Time/Temp	28	17.50
Diagnosis of Diabetes		
Yes	46	28.75
No	114	71.25
Food Insecurity		
Yes	70	43.75
No	90	56.25
Tobacco Use		
Yes	83	51.88
No	77	48.12
Stable Housing		
Yes	121	75.62
No	39	24.38
Race		
White	82	51.25
African American	37	23.12
Asian	6	3.75
Hispanic	35	21.88
Diagnosis of Hypertension		
No	89	55.62
Yes	71	44.38

Note. Due to rounding errors, percentages may not equal 100%.