

Building a Better Workforce: Integration of Social Determinants of Health

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Received Date: 28 January 2025 | **Accepted Date:** 06 February 2025 | **Published Date:** 20 January 2025

Citation: Jennifer Sherry, Kelli D. Whittington, (2025), Building a Better Workforce: Integration of Social Determinants of Health; Clinical research and Clinical reports 7(2): DOI: 10.31579/2835-8325/146

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Abstract

Background: Faculty from dental hygiene and nursing programs collaborate to examine student understanding of SDOH, as well as personal experiences and perception of how SDOH impacts professional responsibility within the workplace.

Aim: This paper will describe how faculty members in a School of Health Sciences integrate Social Determinants of Health (SDOH) into their curriculum with a goal of enhancing understanding the implications of SDOH on individual wellness and promoting workplace readiness.

Methods: A survey study design using themes and qualitative data collection was used for the BSN and DH students. Data themes were organized into more concise categories. Once streamlined themes were determined, specific statistical analyses were calculated using the IBM SPSS Version 29.0.2.0

Results: Dental hygiene and nursing students explored the Social Determinants of Health through the lens of how they personally identify with the SDOH objectives. Students were encouraged with the opportunity to examine challenges associated with how difficult SDOH objectives are to meet, as well as pondering the importance of financial and research implications associated with SDOH objectives and individual wellness.

Conclusions: Intentionally embedding SDOH into health occupation curriculum is crucial to developing a health care workforce designed to act on health inequity.

Key words: social determinants of health; health care access; education access; social and community context; economic impact; environment

Highlights

1. Assisting students' healthcare programs to understand the implications of the Social Determinants of Health (SDOH) within the curriculum can assist those individuals in the profession to identify the impact of SDOH on disease management, associated care costs, and health improvement.
2. This research specifically looks at two different programs within a school of health science: dental hygiene students and BSN-prepared nursing students, and how those students assess the SDOH.
3. By identifying existing knowledge regarding SDOH, healthcare programs can strategically
4. tailor learning opportunities in the classroom to provide and promote educational equity.

Abstract

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Background: Faculty from dental hygiene and nursing programs collaborate to examine student understanding of SDOH, as well as personal experiences and perception of how SDOH impacts professional responsibility within the workplace.

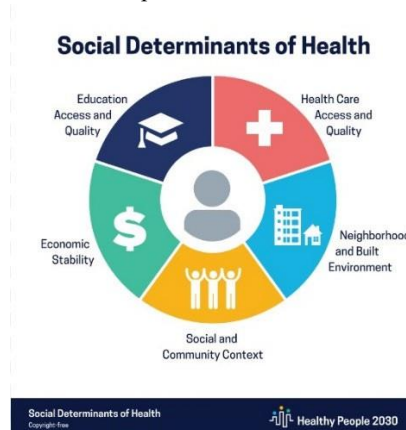
Discussion: Dental hygiene and nursing students explored the Social Determinants of Health through the lens of how they personally identify with the SDOH objectives. Students were encouraged with the opportunity to examine challenges associated with how difficult SDOH objectives are to meet, as well as pondering the importance of financial and research implications associated with SDOH objectives and individual wellness.

Public Health Implication: Intentionally embedding SDOH into health occupation curriculum is crucial to developing a health care workforce designed to act on health inequity.

Introduction

Integration of Social Determinants of Health (SDOH) are vital in preparing students of health-related occupations for workplace readiness. Fostering an understanding of SDOH can assist individuals to identify the impact on disease management, associated care costs, and health improvement¹. Identifying inequity in health specifically related to SDOH allows health care practitioners to act, targeting venues that strengthen public health equity². Detection of ineffective policies designed to address SDOH provides an

opportunity to strengthen policies in a meaningful way, positively minimizing inequity³. One challenge with fleshing out ineffective policies is the challenge of some SDOH rooted in larger, encompassing issues dependent upon local provisions of money and power⁴. Because SDOH may be interpreted differently based on the health care provider's practice background, it is essential that clarity is used when discussing SDOH and possible social interventions among members of the health care team⁵. Palmer et al believed that understanding of the SDOH impact the "lived experience" is crucial to the development of effective interventions that can ultimately minimize health disparities⁶.



Research is abundant on the impact access/barriers of care and health inequity. Wray, Khare, and Keyhani found that individuals with private insurance (typically younger, employed, with higher academic success) reported higher health care satisfaction than individuals with public insurance plans (typically older, not employed, with lower academic success⁷. Additionally, other barriers to care exist including distrust in the health care system and accessing clinics that care for individuals on public insurance⁸. Okonkwo et al assert that marginalized populations continue to have accelerated health inequities, citing incarcerated peoples, peoples with disabilities, immigrants, and unhoused individuals specifically⁹. Integration of SDOH concepts within the curriculum of health care providers is essential to develop the workplace professional poised to address access, barriers, and health inequity.

The purpose of this study is to compare the different perspectives of dental hygiene students and nursing students as they assess the SDOH. Identifying these perspectives could provide both Dental Hygiene (DH) and Bachelor of Science in Nursing (BSN) faculty with valuable insight of student population, tailoring learning opportunities in the classroom to provide and promote educational equity.

Methods

The study population consists of students in the junior year of the DH program and senior year of the BSN program at Southern Illinois University Carbondale (SIUC). Research was approved by the Institutional Review Board (IRB) at SIUC. Recruitment methods were an emailed Survey Monkey link in a BSN course and DH students had an existing "Writing to Learn" assignment in the Community Oral Health course. A survey study design using themes and qualitative data collection was used for the BSN and DH students. Data themes were organized into more concise categories using the following survey questions: After reviewing the "Social Determinants of Health", along with the objectives for each topic area, 1) select ONE area that interests you and how it personally links to yourself, your family members, or your community. 2) How important is it to meet or exceed the objective that you selected? 3) Do you think the objective should be increased or decreased? Once streamlined themes were determined, specific

statistical analyses were calculated using the IBM SPSS Version 29.0.2.0 (20).

The data was used to determine types of student experiences and how they parallel to the existing SDH and BSN program objectives along with comparing DH and BSN student cohorts. Trends or themes in the data will be identified and descriptive statistics will be calculated.

Results

Response rate for the online survey was 22% for BSN and 100% for DH due to the mandatory nature of the course assignment. Individual dendrogram analyses were conducted using the individual sections of the SDOH.

The results of the survey highlighted differences in perceptions across two groups: BSN and DH students, analyzed using the Social Determinants of Health (SDOH) framework.

Health Care Access and Quality: The DH group showed more consistency in responses, with clear clusters indicating less variability. The BSN group exhibited broader variability, especially around socioeconomic factors, insurance coverage, and travel concerns, with distinct separation between categories like "Stigma Due to Identity" and "Underlying Disease Condition". DH students were more unified, with fewer barriers and perceptions of health care quality disparities compared to BSN.

2. **Education Access and Quality:** Strong intergroup similarities were found within both groups, but discrepancies in education access and quality, particularly between higher income and education levels, were more pronounced between DH and BSN students.
3. **Social and Community Context:** DH students were more focused on access to affordable dental care, while BSN students expressed broader concerns about social issues like mental health and family dynamics, reflecting the psychosocial factors of their community care contexts.
4. **Economic Stability:** Two clusters emerged--one showing economic challenges (relevant to BSN students), where families face financial instability and resource limitations, and another reflecting concerns about legal and employment status (relevant to DH students), with implications for care access.

Neighborhood and Built Environment: BSN students were more concerned with how neighborhood conditions affect quality of life, while DH students focused on how the environment influences physical activity, particularly in relation to oral health. These findings suggest tailored interventions for each group based on their specific needs.

Overall, the results indicate that while both groups share concerns around SDOH, their responses differ based on the nature of their professions, highlighting distinct priorities and challenges in health care, education, economic stability, and social environments.

Discussion

In this study, with regards to “Health Care Access and Quality”, the DH group did not have as many concerns with barriers to care as the BSN group. However, there were many similarities within the two groups regarding “Education Access and Quality” including income levels and education. Both professions must have higher educational training, certification, and/or licensure. Most students in both groups had a distinct concern within “Social and Community Context” for dental, social, and

mental health. “Economic Stability” aligns with concerns of financial stability and legal issues which is very true today. “Neighborhood and Built Environment” data found more consistency and concern for well-being and quality-of-life within both groups. Further research should consider how current students compare to future students within the fields of dental hygiene and nursing and how to help develop strengths and understanding in these categories to best serve future clients.

Public Health Implication

Building the capacity to work with clients from a variety of socioeconomic situations and with a myriad of life experiences is crucial in the development of professional skillsets. Dental hygiene and nursing students must work collaboratively to grow their professions into a public health mindset and not just a clinical practice approach. More public health facilities are going to be necessary to help clients who have financial constraints, uninsured, and/or have limited or no access to transportation. Developing sensitivity to the

needs of all clients is critical in moving forward for the future of public health facility.

No grant support or financial assistance was received by the authors for this research study.

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