Impact on students of taking pharmacology courses with SDOH integrated specifically into course topics

Linda Felver, Ph.D. and Christina Leese, B.S., MNE student School of Nursing; Oregon Health and Science University

Keywords

Social Determinants of Health; Education, Nursing; Education, Medical; Pharmacology

Abstract

BACKGROUND: Social determinants (drivers) of health (SDOH) are "conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life" (WHO, 2023). Although SDOH are influential in adherence to medication therapy (Wilder, 2021) they traditionally are not integrated into specific topics in pharmacology courses for health professions students. For example, discussion of insulin emphasizes the importance of teaching patients to keep opened insulin vials refrigerated, but typically omits mention of teaching people who live in a car or a tent how to manage insulin. Discussions of the anticoagulant warfarin and the mood stabilizer lithium emphasize teaching patients the importance of periodic blood draws for monitoring, but usually omit mention of SDOH such as access to transportation or childcare that are necessary to travel to laboratory appointments. Integration of SDOH into courses in health professions education occurs primarily through clinical experiences, intermittent case studies, or special presentations (Doobay-Persaud, 2019; Mueller, 2023), creating a gap between the general concept and real-world application with patients.

PROJECT OBJECTIVE: Explore the impact on student self-described knowledge, attitudes, and behavior of taking pharmacology courses with pharmacology-related SDOH integrated into every course topic.

METHODS: Students in the OHSU baccalaureate nursing program learn about the concept SDOH in their first nursing course. In their two pharmacology courses, topic-specific SDOH are integrated into every topic.

To explore the impact of this integrated approach on students, an anonymous survey was made available to students near the end of the two-course pharmacology sequence. Survey questions focused on self-reported current knowledge, attitudes, and behaviors related to SDOH in patient care related to pharmacology. Two cohorts of students were surveyed. RESULTS: Response rate was 95%.

KNOWLEDGE: Of the 74 respondents, 93% reported increased knowledge of SDOH; 96% reported the courses helped them understand how SDOH influence adherence to drug therapy. ATTITUDES: 82% reported that integration of SDOH concepts into these courses caused them to reconsider one or more of their attitudes.

BEHAVIORS: 96% reported the courses helped them incorporate SDOH into patient teaching; 100% envisioned themselves addressing their patients' SDOH in their future practice. Student responses to open-ended questions were positive, highlighting aspects that were important to them. The presentation will include themes from these responses.

IMPACT/POSSIBLE APPLICATIONS: This project clearly demonstrates positive impacts of integrating SDOH into every pharmacology course topic on nursing student knowledge, attitudes, and behaviors. This effective integration of SDOH throughout these courses can serve as a template for other health professions faculty.

DEI: Discussing SDOH aspects of every topic creates an inclusive approach, facilitating effective care for everyone.

Learning Objectives

- 1. After viewing the presentation, the audience will be able to:
- 2. Explain the difference between presenting SDOH as a stand-alone conceptual topic and integrating specific SDOH considerations into every course topic.
- 3. Describe the impact on student self-described knowledge, attitudes, and behavior of taking pharmacology courses with pharmacology-related social determinants of health (SDOH) integrated into every course topic.
- 4. Identify how SDOH interface specifically with one of the topics that they teach or study.
- 5. Decide whether or not to commit to developing the educational skill of incorporating a specific aspect of SDOH into one of the topics that they teach or study.

References

- 1. Doobay-Persaud, A., et al. (2019). Teaching SDOH in undergraduate medical education: scoping review. J Gen Intern Med, 34(5):720–730.
- 2. Mueller, K., et al. (2023). Integrating SDOH into prelicensure nursing pharmacology. J Nurs Ed 62(3), 175-179.
- 3. WHO (2023). Integrating SDOH into health workforce education and training. https://www.who.int/publications/i/item/9789240064256
- 4. Wilder, M., et al. (2021). The impact of SDOH on medication adherence. J Gen Intern Med, 36(5), 1359-1370.