

BACKGROUND

- Structural competency is the capacity for health professionals to recognize and respond to health and illness as the downstream effects of broad social, political, and economic structures. These structures produce the conditions in the environments where people are born, live, learn, work, play, worship, and age - termed social determinants of health (SDOH).
- Dissonance in provider-patient lived experiences of social determinants may create “blind spots”, limiting awareness and ability to address these critical upstream factors that influence health and patient outcomes.

OBJECTIVE: To determine whether pharmacists’ SDOH risk score assessed as historical exposure, is associated with their self-assessed structural awareness (SA) – i.e. their cognizance of structural factors that influence health.

METHODS

DATA COLLECTION

- A web-based cross-sectional survey administered to MN pharmacists.
- Demographic information
- SDOH risk score items: Modified Protocol for Responding to and Assessing Patient Assets, Risks, and Experiences [PRAPARE] questionnaire
- Structural awareness score items: Adapted from Appendix B of the Cultural Competence Self-Assessment Questionnaire [CCSAQ]

DATA ANALYSIS

- Multiple linear regression to examine the association between pharmacists’ structural awareness and SDOH risk score [excluding race/ethnicity], while controlling for year of first licensure, primary pharmacy practice type, race, and gender.
- T-tests to determine the difference in mean SA scores with stand-alone predictor variables: reliance on public transportation, insurance, food insecurity, and housing insecurity.

RESULTS

TABLE 1. – Demographic Characteristics of Respondents

Demographic Characteristics [N=611]	Frequency (%)
Race:	
White	513 (84.0)
Asian	58 (9.5)
Black/ African American	17 (2.8)
American Indian/ Alaskan Native	2 (0.3)
Two or more/Other (n = 6)	21 (3.5)
Gender:	
Male	194 (31.8)
Female	406 (66.6)
Other	11 (1.8)
Highest Level of Pharmacy Education:	
Bachelor of Pharmacy	28 (4.6)
PharmD	579 (94.8)
Other/No response (2)	4 (0.6)
Primary Pharmacy Practice Setting:	
Community	203 (33.2)
Hospital	166 (27.2)
Clinical (ambulatory)	108 (17.7)
Managed Care	22 (3.6)
Other	112 (18.3)

TABLE 2. – SDOH risk and Structural Awareness

SDOH Risk Score	Mean = 4.9 Median = 4 Range: 0 – 20 [Max possible: 21]
Structural Awareness	Mean = 24.5 Median = 25 Range: 0 - 56 [Max possible – 57]
Key Finding:	SDOH Risk score significantly associated with structural awareness (95% CI; p-value = 0.0013)

TABLE 3. – Select Social Determinants of Respondents

Unmet Needs: Have you ever been unable to meet any of the following needs due to cost, availability, and/or accessibility for an extended period (≥ 1 month)?	No unmet needs	461 (75.5%)
Transportation: Has lack of transportation kept you from medical appointments, meetings, work, school, etc. for an extended period (≥ 1 month)?	No needs per transportation	564 (92.3%)
Housing Instability: have you ever worried about losing your housing due to uncertainty of income?	Yes	88 (14.4%)
	No	523 (85.6%)
Housing Situation: Has your housing situation ever been compromised by economic circumstances (e.g. inability to pay rent, find affordable housing)?	Yes	51 (8.3%)
	No	560 (91.7%)
Food insecurity: Have you ever had trouble finding or getting to healthy grocery stores for an extended period (≥ 1 month)?	Yes	44 (7.2%)
	No	567 (92.8%)
Insurance: Have you ever been without health insurance for an extended period (≥ 3 months)?	Yes	102 (16.7%)
	No	509 (83.3%)

TABLE 4. Difference in mean structural awareness by select variables

	Mean Diff (yes-no)	95% CI Mean	p-Value
No Health Insurance	1.48	-0.63, 3.58	0.1683
Public Transportation Reliance	0.55	-1.04, 2.14	0.4956
Food Insecurity	4.45	1.44, 7.47	0.0039
Housing Insecurity	3.39	1.17, 5.61	0.0028

“Having grown up in one of the poorest counties in the state, I have seen how poverty directly impacts my patients’ health, especially in terms of substance use disorders and mental health.” – Respondent #51 [SDOH Risk Score : 9 | SA score: 38]

“... My situation helps me understand the perspectives of low-income patients better, and in some cases I was able to introduce the patients to the resources that they need. This exposure helps me to be more resourceful for my patients” – Respondent #228 [SDOH Risk Score : 13 | SA score: 40]

“I’ve had to learn it all through work and self research. School taught us nothing, so this is part of my training to others, and [it] also has assisted me in understanding where my patients are at in life and how to meet them there.” Respondent #316 [SDOH Risk score: 4 | SA score: 43]

CONCLUSION/RECOMMENDATION

- Pharmacists without lived experience of adverse SDOH, or relevant exposure, are less likely to connect structural factors to clinical presentation of disease, and thus may not address these in patient care.
- Experiential education should include structural competency training to equip pharmacists with the lens to recognize structural determinants and build capacity to contribute to addressing health inequity.

