

Social Determinants of Health Screenings and Conversations in the Community Pharmacy Setting in Low-Income Areas, Its Effect on Medication Adherence, and the Comfortability and Confidence Levels of Pharmacy Personnel

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Background: Addressing the topics of social determinants of health (SDoH) have been shown to improve patient quality of health by improving disparities in aspects of life such as housing, food, and transportation through providing resources focused on assisting with these areas. Research has shown that patients are uncomfortable having personal conversations with pharmacy personnel, although screening for social needs could be beneficial if given the appropriate resources. It has also been shown that although these screenings should be part of patient care, very few pharmacies perform screenings due to lack of resources and adequate training. By determining patient disparities and offering the appropriate resources to help overcome them, patients may be able to afford medications, which could lead to improved medication adherence and overall patient health.

Objectives: The primary objective of this study was to evaluate an SDoH screening and intervention model SDoHto improve medication adherence for patients in low-income areas in a community pharmacy setting. The secondary objective of this study was to explore the comfortability and confidence of front-line community pharmacy personnel when discussing topics pertaining to SDoH with patients.

Methods: For the project's primary objective, screening for SDoH within low-income community pharmacies occurred within one regional division of a large community pharmacy chain over the course of 90 days. Pharmacies with a sustainable vulnerability index (SVI) of greater than 0.63 were selected to target low-income pharmacies within the region. The SDoH intervention was part of a program sponsored by a nationwide pharmacy benefits manager, and enrolled patients received calls from pharmacy personnel between October 1 and December 31, 2021. Patients who received screenings and resources to help with disparities were documented. Follow up was conducted to determine if social screenings and resource delivery increased medication adherence based on proportion of days covered (PDC).

For the secondary objective, pharmacy personnel's confidence and comfortability levels were assessed through pre/post – implementation surveys. A pre-training survey was delivered to pharmacists and pharmacy technicians, followed by a 1-hour CE training on SDoH, and a post – training survey. Likert-scale data was analyzed using descriptive statistics to show trends in overall perceptions of commercial pharmacy personnel. Inferential statistics using Chi-Square and ANOVA examined differences between subpopulations.

Preliminary Results: A total of 35 total patients were referred to the pharmacy team by the program sponsor. Three calls were completed, including screening and intervention for patients. Incomplete interventions included, 20 patients who refused screenings, 7 patients were marked as invalid (patient

no longer at pharmacy) , and 5 calls were incomplete. There were not enough patients to determine if medication adherence increased due to screenings and received resources.

For the secondary objective, a pre-implementation survey was taken by 157 participants, including pharmacists, pharmacy technicians, and pharmacy interns. Although there was agreement that SDoH conversations were important and beneficial (mean 1.15 - 1.55), a trend leaned toward overall personnel being uncomfortable (mean: 2.12) and unconfident (mean: 2.17) when conducting SDoH screenings. A lack of resources (mean: 2.71) and adequate training (mean: 2.8) were the largest gaps in screening ability. Subgroup analyses identified trends among years in practice and role. More experienced pharmacy personnel felt more comfortable explaining to patients why SDoH conversations were important, as well as conducting SDoH screenings ($p>0.05$). However, newer personnel may believe to have had more adequate training, incorporated discussions into workflow more frequently, and were able to make time for these discussions daily ($p>0.05$). There was a significant difference in pharmacy technician perceptions versus pharmacists in almost every category ($p< 0.05$) showing technicians felt they had more adequate training, resources, and daily conversations with patients. Feeling comfortable or confident having SDoH discussions with patients did not show a significant difference between roles. However, those values also displayed a trend toward technicians agreeing more so than pharmacists.

Post-implementation results are ongoing.

Conclusion:

There remains a gap in community pharmacy between patients and pharmacy personnel when discussing SDoH topics. Not only are patients uncomfortable and unsure why they are being asked sensitive questions pertaining to SDoH, pharmacy personnel may not have these conversations with patients for multiple reasons such as inadequate training, lack of knowledge and resources, time in daily workflow, and others.

While both older and newer personnel are confident in screening for SDoH with patients, each group may be lacking in areas which both may benefit from more training. Pharmacy personnel who have been in practice longer may be more comfortable having SDoH discussions with patients due to variables such as increased experience in difficult conversations and ongoing relationships, but those newer to community pharmacy may be more adequately trained in resources due to SDoH being a current topic of discussion within pharmacy such as pharmacy school and conferences. Newer personnel may also find more time to fit these conversations into daily workflow due to the emphasis more recently placed on SDoH within community pharmacy. A larger number of participants would possibly help determine what needs to be addressed for pharmacy personnel to have more productive conversations with patients regarding SDoH. Continued studies are needed to determine how to make these discussions successful and beneficial for both patients and community pharmacies.