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Primary Care Clinician and Community Pharmacist Perceptions of Deprescribing

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INTRODUCTION

Polypharmacy, often defined as the use of five or more prescription medications, is associated with negative clinical outcomes.[1] The use of potentially inappropriate medications (PIMs), such as those with greater risk of drug-drug and drug-disease interactions, limited patient-centered benefits, or lack of appropriate indication, also increases the risk of negative clinical outcomes, especially among older people.[2] The use of PIMs is common, particularly in patients experiencing polypharmacy, and was found in 59% of patients.[3]

Deprescribing, or the clinical process of stopping medications that may cause harm or lack benefit, is one approach to combat polypharmacy and PIMs use.[4] Studies have shown that deprescribing can reduce falls[5] and can improve cognition and perceived health.[6] Understanding patient, prescriber, and pharmacist attitudes, beliefs, and behaviors regarding deprescribing is essential to the rational design of interventions that promote and support deprescribing. We surveyed primary care clinicians, community pharmacists, and patients (reported separately) to compare their perceptions of deprescribing and inform the development of a deprescribing intervention.

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Author Contributions: MJH, NGH, JWK, DM, MAW, KML, and PRF conceived of and designed the study. MH, JWK, DM, and PRF recruited subjects. NGH conducted the analysis and with MH, JWK, MAW, DM, and PRF interpreted the data. MH, NGH, JWK, DM, and PRF prepared the manuscript.

Conflict of Interest: The authors have no conflicts.

Availability of Materials: The surveys used in this study can be made available upon reasonable request to the corresponding author.

METHODS

We conducted a cross-sectional survey of community-based primary care clinicians ("clinicians") and community pharmacists ("pharmacists") across Kentucky. We aimed to recruit 100 clinicians and 100 pharmacists. Survey invitations were sent electronically through professional society listservs between December 2019 and February 2020 (unavailability of data on listserv membership precludes response rate calculation). We used REDCap, a secure web application for building and managing online surveys and databases, to collect survey data.

We adapted the validated deprescribing instrument created by Linsky et al.[7] to better match the clinical practice setting of our target population. Survey questions addressed deprescribing experiences, beliefs, attitudes, influencing factors, barriers, and facilitators.

We calculated means and standard deviations for continuous data and frequencies and percentages for categorical data. Data analyses were performed using IBM SPSS version 25. This study protocol was approved by the Institutional Review Board of the University of Kentucky (IRB# 53162).

RESULTS

Overall, 306 respondents (248 pharmacists and 58 clinicians) completed the survey. Average age of respondents was 45.5 years; 57.5% of the sample was female and 85.9% was non-Hispanic white. Pharmacists and physicians had positive attitudes toward deprescribing ($M = 6.01$ and $M = 6.50$, respectively; 7-point scale). Pharmacists and clinicians agreed that deprescribing is effective ($M = 4.17$ and $M = 3.89$; 5-point scale). Pharmacists believed that clinicians are important for deprescribing ($M = 4.23$), and clinicians reported that pharmacists are important for deprescribing ($M = 3.90$). Factors with the greatest influence on deprescribing for pharmacists and clinicians were medication-related adverse side effects ($M = 3.84$ and $M = 3.68$; 4-point scale) and patient characteristics like age, comorbidities, and functional status ($M = 3.66$ and $M = 3.39$).

Pharmacist- and clinician-reported facilitators and barriers to deprescribing are listed in Table 1. Pharmacists' top three barriers were (1) difficulty communicating directly with other healthcare providers, (2) insufficient time available to spend with patients, and (3) lack of trust between healthcare providers and pharmacists. Clinicians' top three barriers were (1) patient attitudes toward the medications they take, (2) insufficient time available to spend with patients, and (3) difficulty communicating directly with other healthcare providers. Pharmacists' top three facilitators for deprescribing mirrored their barriers: (1) ability to communicate directly with healthcare providers; (2) adequate time to spend with patients, and; (3) trust between healthcare providers and pharmacists. Clinicians' top three facilitators were (1) adequate time to spend with patients (2) trust between healthcare providers and patients, and (3) patient attitudes toward the medications they take.

DISCUSSION

Our results suggest that deprescribing interventions should focus on communication and address systemic barriers that impede communication between clinicians, pharmacists, and patients. The most frequently identified clinician and pharmacist barriers to deprescribing were related to communication with other healthcare providers and insufficient time with patients to discuss deprescribing. Similarly, adequate time for quality discussions with patients was identified as a top three facilitator by both clinicians and pharmacists, and pharmacists reiterated the importance of being able to communicate directly with healthcare providers about deprescribing. Previous studies reported that communication gaps between clinicians, patients, and pharmacists create barriers to deprescribing.[8]

A successful deprescribing intervention will need to address interpersonal trust between clinicians, pharmacists, and patients. Patients are more likely to accept deprescribing recommendations when they trust the healthcare provider who makes the recommendation.[9] Development of trust between patients, clinicians, and pharmacists is a complex process that builds on the perception of many behaviors, including communication.[10] To succeed, deprescribing interventions need basis in behavioral change models and communication theories that emphasize building trust between the involved parties.

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Table 1.

Clinician (N=58) and pharmacist (N=248) perceived barriers and facilitators to deprescribing

	Pharmacists (N = 248)		Clinicians (N = 58)	
Facilitators	**Total Endorsed***	**%**	**Total Endorsed***	**%**
Ability to communicate directly with healthcare providers about deprescribing recommendations	124	50.0%	18	31.0%
Adequate time to spend with patients to discuss deprescribing recommendations	114	46.0%	29	50.0%
Trust between healthcare providers and pharmacists	86	34.7%	2	3.4%
Training and experience with deprescribing	68	27.4%	22	37.9%
Trust between patients and pharmacists	68	27.4%	1	1.7%
Clinical guideline updates that support deprescribing recommendations	63	25.4%	20	34.5%
Access to electronic health records	59	23.8%	4	6.9%
Patient attitude toward the medications they take	49	19.8%	27	46.6%
Payment/financial incentive for making deprescribing recommendations	41	16.5%	5	8.6%
Personal beliefs in the value of deprescribing	29	11.7%	13	22.4%
Trust between healthcare providers and patients	26	10.5%	28	48.3%
Barriers				
Difficulty to communicate directly with other healthcare providers (e.g. subspecialists) about deprescribing recommendations	139	56.0%	27	46.6%
Insufficient time available to spend with patients and communicate deprescribing recommendations	123	49.6%	34	58.6%
Lack of trust between healthcare providers and pharmacists	79	31.9%	4	6.9%
Perceived authority of pharmacists to discontinue a medication (pharmacist only)	66	26.6%	0	0.0%
Lack of access to information in electronic health records	65	26.2%	12	20.7%
Lack of education and training related to deprescribing activities	52	21.0%	12	20.7%
Patient attitudes toward the medications they take	51	20.6%	40	69.0%
Lack of payment/financial incentives to make deprescribing recommendations	45	18.1%	4	6.9%
Healthcare culture that encourages a “more is better” approach	42	16.9%	17	29.3%
Lack of trust between healthcare providers and patients	26	10.5%	9	15.5%
Insufficient clinical resources (e.g., guidelines) to support deprescribing recommendations	25	10.1%	7	12.1%
Lack of trust between patients and pharmacists	18	7.3%	2	3.4%
Inability to obtain pharmacist input on deprescribing (clinician only)	0	0.0%	6	10.3%

* Number of respondents selecting item as a top three facilitator or barrier to deprescribing