Deprescribing: moving beyond barriers and facilitators
Keywords

Deprescribing, polypharmacy, knowledge translation
**Deprescribing: moving beyond barriers and facilitators**

Look at geriatrics, pharmacology, and general medicine journals in the last few years, and you will no doubt see an increasing number of articles on ‘deprescribing’ (the planned and supervised process of inappropriate medication discontinuation with the aim of managing polypharmacy and improving outcomes).¹ This is a good thing. Unnecessary polypharmacy continues to be a problem among older persons and causes preventable medication-related harm.² We need international and interdisciplinary efforts to put out this fire.

The World Health Organisation named ‘Medication without harm’ its third Global Patient Safety Challenge, with polypharmacy being one of three key action areas.³ Therefore, healthcare organizations internationally are aiming to identify solutions and implement innovations to increase deprescribing and reduce medication-related harms.

With an increasing focus on polypharmacy and deprescribing across the world, we need to be mindful to undertake research that builds on existing knowledge, addresses known gaps, and advances the field. We need work that will lead to increased and sustained uptake of deprescribing in clinical practice.

**Barriers and facilitators as a research focus**

The study of polypharmacy, and potentially inappropriate/unnecessary medication use, is not new; however, formal study focusing on deprescribing with the aim of increasing deprescribing in practice is a relatively young field. Early deprescribing research focused on understanding barriers and facilitators, with the aim of achieving deprescribing in practice. We came far in a relatively short time. We learned that deprescribing is not easy and it does not always happen, even when we know it should. Barriers to deprescribing are complex and context specific. They can occur at the patient⁴ and healthcare provider level⁵ (individual), healthcare system and policy level (organizational), or be
cultural (e.g., culture of maintaining the status quo). Some barriers exist regardless of the specific medication and medication classes (e.g., prescriber lack of time, fear of patient reaction), while others may apply to specific medications, for example, fear of withdrawal symptoms for medications used for symptom management such as proton pump inhibitors or benzodiazepines or uncertainty surrounding the effects of deprescribing for preventive medications such as statins. A selection of existing evidence on deprescribing barriers and facilitators is in Table 1. Generating this knowledge on barriers and facilitators was necessary in informing work that has pushed deprescribing forward.

At the same time as the field is moving forward in some ways, there continues to be focus on identifying or describing barriers and facilitators. Another challenge is that many new studies on this topic have not harnessed frameworks or concepts derived in earlier studies, or from related fields such as behavior change theory or implementation science. This has made it difficult to compare, and synthesize findings across studies, and to determine what is new knowledge or confirmation of previous knowledge.

**Shifting priorities**

We propose that we have come to the point where barriers and facilitators around deprescribing are well-established. There is now an urgent need to translate this knowledge into strategies and tools that can impact clinical practice and lead to practical and sustained deprescribing efforts. The focus of research should therefore largely shift to developing ways to address known barriers and harness knowledge of facilitators.

For example, contemporary syntheses of barriers have continued to report lack of guidance as a barrier to deprescribing. However, myriad deprescribing tools and guides now exist. So, research needs to be done to examine how we can increase awareness, uptake, use, and evaluation of these tools and approaches in routine practice (in a systematic, sustainable and pragmatic way). Further, provider lack
of knowledge, skills, and self-efficacy is a commonly reported barrier to deprescribing; however, there has been limited investigation or exploration of formal teaching around deprescribing in healthcare provider training curricula.

It is well-established that deprescribing is perceived by clinicians as a delicate topic and is viewed as challenging to discuss with patients and carers. Contemporary studies continue to describe this as a barrier. However, it has been shown over the last several years that most patients are open to discussing deprescribing. So, a next step would be to explore and develop practical techniques for triggering discussions in routine care. Further, establishing and implementing communication tools could address communication barriers.

While there is growing research that aims to address some barriers, many barriers remain unaddressed. Studies continue to report that prescribers are hesitant to stop a medication started by another prescriber especially when the medication was prescribed by a specialist. However, there has been little study of whether this perceived conflict exists in practice, or of possible solutions. A scoping review of deprescribing interventions in primary care published in 2020 found that the majority of existing interventions focus on tools or clinical prompts, provider education, and medication reviews. These strategies address some known barriers and facilitators, but do not necessarily address challenges around addressing patient concerns around deprescribing, changing culture, or increasing patient engagement. This review also found that GPs have been the main target of the intervention, and pharmacists the main agent (i.e. involved in delivering the intervention), while there has been minimal nurse involvement as either the agents or the target of the intervention. Further, there has typically been limited focus on sustainability, practicality, and larger scale implementation of interventions, which are necessary to ensure widespread and sustained uptake of deprescribing in practice.
Moving forward

Encouragingly, some researchers are addressing these topics. For example, developing and testing practical deprescribing strategies, or studying deprescribing communication and decision-making. Therefore, a logical step in the future is to focus on knowledge translation and implementation of already developed strategies that attempt to address known barriers, such as translation, adaption and implementation of existing tools and strategies.

While innovation should not be quashed, continually re-inventing the wheel will waste precious research resources.

We acknowledge there is still room for research on barriers and facilitators. However, such work should focus on creating a deeper understanding of known topics with clear paths to translate knowledge into practice. There is reason to study barriers and enablers in new contexts (e.g. patient populations, understudied healthcare professional groups, or practice types). For example, exploring barriers and enablers in one’s local city (i.e. healthcare system and culture specific) will be important to develop or adapt and implement successful interventions locally (being mindful of existing knowledge and frameworks). Existing theoretical frameworks, knowledge translation and implementation science can all be leveraged to guide such processes. Several deprescribing projects are already do so, for example, using the Behaviour Change Wheel to explore deprescribing opportunities for community pharmacists. We also acknowledge that confirmation and repeatability of results is important in research; however, this needs to be done in a way that allows for direct comparison and summation of findings across studies.

There is a significant time lag between planning and disseminating a study. Recent and ongoing studies still contribute important knowledge to the field. However, when planning a new deprescribing study in
this area, we implore all researchers, both new and established, to look closely at the already well-
known barriers to and facilitators of deprescribing. We need research that builds off existing knowledge
and contributes new information to enhance the translation of research into practice.
References


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<tr>
<th>Barrier</th>
<th>Description</th>
<th>Facilitator</th>
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<tbody>
<tr>
<td><strong>Provider</strong>&lt;sup&gt;5,6&lt;/sup&gt;</td>
<td>Lack of tools or resources to assist with deprescribing</td>
<td>Challenging to implement in practice because unclear how to approach or practically do it (e.g., which medication(s) to deprescribe, what to monitor, if/how to taper)</td>
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<td>Knowledge and skills</td>
<td>Difficulty balancing benefits and harms; uncertainty in decisions due to lack of evidence</td>
<td>Availability of evidence, ability to quantify benefits and harms, formal training/teaching on deprescribing</td>
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<tr>
<td><strong>Patient</strong>&lt;sup&gt;4&lt;/sup&gt;</td>
<td>Fear of stopping</td>
<td>Concern about consequences of stopping (e.g., due to withdrawal symptoms or return of condition)</td>
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<td>Ambivalence about (stopping) medications</td>
<td>Patients may have limited awareness of medications, or may feel medications are necessary for health</td>
<td></td>
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<td><strong>Healthcare system/Policy</strong>&lt;sup&gt;5,16,17&lt;/sup&gt;</td>
<td>Lack of incentive or renumeration for deprescribing</td>
<td>No designated time to conduct medication review or deprescribing, and does not fit into existing workflows or structures</td>
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<td>Feasibility</td>
<td>Multiple prescribers; lack of communication between HCPs, specialists; inadequate or incomplete information about indications or medication history</td>
<td>Mechanisms for communication between prescribers; continuity of care between different sectors</td>
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<td><strong>Cultural</strong>&lt;sup&gt;16&lt;/sup&gt;</td>
<td>Single disease guidelines focused on initiating medications</td>
<td>Guidelines do not consider treatment of people with multiple health conditions or include consideration around when to stop medications; “prescribing culture”</td>
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Note: this table is meant to highlight a few examples of barriers and facilitators and is not meant to be exhaustive.