

Patient values and preferences literature review

Patients and caregivers are generally willing to deprescribe medications if recommended by healthcare providers, with 84% of patients and 80% of caregivers expressing openness.(1) Older adults also show similar willingness, regardless of the number of medications they take.(2) Key factors influencing preferences include the need for clear explanations, as fear of withdrawal symptoms and uncertainty about stopping medications are common concerns.(3,4) Patients value medications based on their effectiveness, impact on quality of life, cost, and trust in their healthcare provider.(5,6) Strong relationships with providers are critical for deprescribing discussions.(7,8) Barriers include lack of awareness, fear of withdrawal, and specific challenges like benzodiazepine dependence, where gradual tapering is preferred.(8,9) Facilitators for deprescribing include clear communication, involvement of caregivers, and support for alternatives to current treatments.(4,10)

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“Living a normal life”: a qualitative study of patients’ views of medication withdrawal in rheumatoid arthritis

Baker, K.F., Isaacs, J.D. & Thompson, B. “Living a normal life”: a qualitative study of patients’ views of medication withdrawal in rheumatoid arthritis. *BMC Rheumatol* 3, 24 (2019). <https://doi.org/10.1186/s41927-019-0070-y>

Background: Withdrawal of disease-modifying anti-rheumatic drugs (DMARDs) once disease remission is achieved is endorsed by current international rheumatoid arthritis (RA) management guidelines. However, very little data exists concerning patients’ views of this practice. In this qualitative study, we aimed to explore patients’ perspectives on DMARD withdrawal in the setting of established RA.

Methods: In this qualitative interview study, patients with stable established RA were recruited from rheumatology outpatient clinics at a large UK teaching hospital. The perceived advantages and disadvantages of DMARDs and views on DMARD withdrawal were explored in semi-structured interviews. Interview transcripts were analysed using standard qualitative techniques to construct an analytical framework.

Results: Thirteen participants (8 female, median [IQR] age 65 [61–73]) expressed their views of DMARD treatment in the context of their “normal lives”. For some patients, disadvantages such as medication side-effects and the inconvenience of safety monitoring were sufficient hindrances to their lifestyle to justify DMARD withdrawal. However, patients who were vulnerable to loss of physical function, or who had prior experience of severe rheumatoid arthritis, expressed a strong preference against DMARD withdrawal, viewing the potential for increased pain and future disability as unacceptable risks.

Conclusions: Patients view DMARD withdrawal in the context of either restoring or threatening their “normal lives”. In this model, social and personal factors play a crucial role in influencing patients’ opinions of DMARD therapy beyond a simple consideration of medication side-effects alone. A formulaic approach to DMARD withdrawal determined and imposed by clinicians would not be successful. Instead, the discussion of DMARD withdrawal should take place with the identification of patients’ priorities and in the context of their personal disease experiences.

Patient Attitudes Toward Deprescribing Among Community-Dwelling Older Mainers

Carver J, Springer SP. Patient Attitudes Toward Deprescribing Among Community-Dwelling Older Mainers. *Sr Care Pharm.* 2024;39(1):30-41. doi:10.4140/TCP.n.2024.30

Background: The excess use of medications has become an increasingly prevalent issue in health care. Deprescribing can be an important tool in combating polypharmacy.

Objective: To assess the attitudes of community-dwelling older persons in Maine toward their medications and the concept of deprescription. An additional aim of this research was to assess the association between the revised Patient Attitudes Toward Deprescribing Questionnaire (rPATDQ) domains by polypharmacy status.

Methods: Researchers conducted a cross-sectional study utilizing the rPATDQ. Authors recruited older Mainers via a longitudinal cohort study through the University of New England Center for Excellence in Aging in Health. Respondents were stratified by polypharmacy status (fewer than five medications, five or more medications).

Results: Total daily medications ranged from 1 to 30 (average of 8.6). Overall, 83.6% of respondents agreed/strongly agreed to the statement "If my doctor said it was possible, I would be willing to stop one or more of my regular medicines." 70.6% agreed/strongly agreed to the statement "Overall, I am satisfied with my current medicines." Those with and without polypharmacy experienced low overall medication burden and a high belief in the appropriateness of their medications. There were no statistically significant differences between polypharmacy groups.

Conclusion: The results of this survey indicate that the factors affecting attitudes toward deprescribing are complex. While many indicated willingness to deprescribe at least one medication, there was a high degree of satisfaction with current medication regimens. This study highlights the need for further qualitative research to identify potential barriers to deprescribing.

Beliefs about prescribed medication among older patients with polypharmacy: a mixed methods study in primary care

Clyne B, Cooper JA, Boland F, et al. Beliefs about prescribed medication among older patients with polypharmacy: a mixed methods study in primary care. *Br J Gen Pract.* 2017;67(660):e507-e518. doi:10.3399/bjgp17X691073

Background: Polypharmacy (≥ 5 medications) is common in older patients and is associated with adverse outcomes. Patients' beliefs about medication can influence their expectations for medication, adherence, and willingness to deprescribe. Few studies have examined beliefs about prescribed medication among older patients with polypharmacy in primary care.

Aim: To explore medication-related beliefs in older patients with polypharmacy and factors that might influence beliefs.

Design and setting: A mixed methods study utilising data from a randomised controlled trial aiming to decrease potentially inappropriate prescribing in older patients (≥ 70 years) in Ireland.

Method: Beliefs were assessed quantitatively and qualitatively. Participants completed the Beliefs about Medicines Questionnaire by indicating their degree of agreement with individual statements about medicines on a 5-point Likert scale. Semi-structured qualitative interviews were conducted with a purposive sample of participants. Interviews were transcribed verbatim and a thematic analysis conducted. Quantitative and qualitative data were analysed separately and triangulated during the interpretation stage.

Results: In total, 196 patients were included (mean age 76.7 years, SD 4.9, 54% male), with a mean of 9.5 (SD 4.1) medications per patient. The majority (96.3%) believed strongly in the necessity of their medication, while 33.9% reported strong concerns. Qualitative data confirmed these coexisting positive and negative attitudes to medications and suggested the importance of patients' trust in GPs in establishing positive beliefs and potential willingness to deprescribe.

Conclusion: Participants reported strong beliefs in medications with coexisting positive and negative attitudes. The doctor-patient relationship may have influenced beliefs and attitudes towards medicines, highlighting the importance of strong doctor-patient relationships, which need to be considered in the context of deprescribing.

Older patient perspectives on long-term anxiolytic benzodiazepine use and discontinuation: a qualitative study

Cook JM, Biyanova T, Masci C, Coyne JC. Older patient perspectives on long-term anxiolytic benzodiazepine use and discontinuation: a qualitative study. *J Gen Intern Med.* 2007;22(8):1094-1100. doi:10.1007/s11606-007-0205-5

Objective: The objective of the study is to understand patient factors contributing to the chronicity of benzodiazepine use by older adults as a first step in the development of acceptable intervention strategies for taper/discontinuation or prevention of chronic use.

Design: The design of the study consists of qualitative semi-structured patient interviews.

Setting and participants: The participants were 50 anxiolytic benzodiazepine users, 61-95 years of age, recruited through referrals from primary care physicians who practiced in the general Philadelphia, Pennsylvania area.

Results: Many older chronic users have come to rely and psychologically depend on benzodiazepines for their unique soothing properties, attributing to these medications characteristics that extend beyond an ordinary medication, i.e., affording control over daily stress, bringing tranquility, and even prolonging life. Most of the patients denied or minimized side effects and expressed resistance to taper or discontinuation, ranging from subtle reluctance to outright refusal and fear of being left suffering without these medications.

Conclusions: The reluctance of older chronic benzodiazepine users to taper or discontinue use highlights the importance of prevention and early intervention strategies to avoid the development of chronic use. Suggestions for curbing chronic use are presented.

Barriers and enablers for deprescribing benzodiazepine receptor agonists in older adults: a systematic review of qualitative and quantitative studies using the theoretical domains framework

Evrard P, Péteïn C, Beuscart JB, Spinewine A. Barriers and enablers for deprescribing benzodiazepine receptor agonists in older adults: a systematic review of qualitative and quantitative studies using the theoretical domains framework. *Implement Sci.* 2022;17(1):41. Published 2022 Jul 8. doi:10.1186/s13012-022-01206-7

Background: Many strategies aimed at deprescribing benzodiazepine receptor agonists (BZRA) in older adults have already been evaluated with various success rates. There is so far no consensus on which strategy components increase deprescribing the most. Yet, despite an unfavourable benefit-to-risk ratio, BZRA use among older adults remains high. We systematically reviewed barriers and enablers for BZRA deprescribing in older adults.

Methods: Two reviewers independently screened records identified from five electronic databases-Medline, Embase, PsycINFO, CINAHL and the Cochrane library-and published before October 2020. They searched for grey literature using Google Scholar. Qualitative and quantitative records reporting data on the attitudes of older adults, caregivers and healthcare providers towards BZRA deprescribing were included. Populations at the end of life or with specific psychiatric illness, except for dementia, were excluded. The two reviewers independently assessed the quality of the included studies using the mixed-methods appraisal tool. Barriers and enablers were identified and then coded into domains of the theoretical domains framework (TDF) using a combination of deductive and inductive qualitative analysis. The most relevant TDF domains for BZRA deprescribing were then identified.

Results: Twenty-three studies were included 13 quantitative, 8 qualitative and 2 mixed-method studies. The points of view of older adults, general practitioners and nurses were reported in 19, 9 and 3 records, respectively. We identified barriers and enablers in the majority of TDF domains and in two additional themes: "patient characteristics" and "BZRA prescribing patterns". Overall, the most relevant TDF domains were "beliefs about capabilities", "beliefs about consequences", "environmental context and resources", "intention", "goals", "social influences", "memory, attention and decision processes". Perceived barriers and enablers within domains differed across settings and across stakeholders.

Conclusion: The relevant TDF domains we identified can now be linked to behavioural change techniques to help in the design of future strategies and health policies. Future studies should also assess barriers and enablers perceived by under-evaluated stakeholders (such as pharmacists, psychiatrists and health care professionals in the hospital setting).

Patient values and preferences on polypharmacy and deprescribing: a scoping review

Forest E, Ireland M, Yakandawala U, et al. Patient values and preferences on polypharmacy and deprescribing: a scoping review. *Int J Clin Pharm.* 2021;43(6):1461-1499. doi:10.1007/s11096-021-01328-w

Background: Understanding how patient values and preferences towards polypharmacy and deprescribing have been studied is important to gain insight on current knowledge in this area and to identify knowledge gaps.

Aim: To describe methods and outcomes for studying patient values and preferences towards polypharmacy and deprescribing, and to identify gaps in the existing literature.

Method: A scoping review was conducted on English-language studies that examined patient preferences and values related to polypharmacy and/or deprescribing among community-dwelling adults. MEDLINE, Embase, PubMed, PsycINFO, EconLit, Social Science Citation Index, Science Citation Index Expanded, International Pharmaceutical Abstracts, and CINAHL/AgeLine were searched.

Results: Thirty articles were included. Surveys (n = 17, 56.7%), interviews/focus groups (n = 9, 30.0%), and mixed methods (n = 3, 10.0%), were commonly used methods. Patients Attitudes Towards Deprescribing (PATD) was the most common tool used (n = 9, 30.0%). Twelve themes related to attitudes, social pressure, and control of polypharmacy/deprescribing were identified. The most frequently-encountered themes included desire or willingness to reduce medication load and influence of healthcare provider on medication use.

Conclusion: PATD was commonly used to assess preferences and values towards polypharmacy and limited knowledge on patient-important outcomes were addressed. Future research should focus on shared decision-making and communicating risk versus benefit of medications.

Factors which influence the deprescribing decisions of community-living older adults and GPs in Australia

Gillespie R, Mullan J, Harrison L. Factors which influence the deprescribing decisions of community-living older adults and GPs in Australia. *Health Soc Care Community*. 2022;30(6):e6206-e6216. doi:10.1111/hsc.14058

Deprescribing aims to reduce polypharmacy and inappropriate medication use. Both General Practitioners (GPs) and older adults have expressed a willingness to consider deprescribing. However, deprescribing is often deferred in practice. The aim of this study was to identify factors which influence GP and older adult decisions about deprescribing in primary care. Semi-structured interviews were used in this qualitative study, conducted in a regional area in Australia. Participants included GPs and adults aged 65 years or older, using five or more medications and living independently in the community. Data were collected between January 2018 and May 2019. Thematic analysis was used to analyse the verbatim transcribed interviews using NVivo 12. A total of 41 interviews were conducted, 25 with older adults and 16 with GPs. Four key themes influenced deprescribing decisions: views of ageing, shared decision-making, attitudes toward medication use and characteristics of the health care environment. Discussions of deprescribing were limited by the influence of negative stereotypes toward age and ageing, a lack of older adult participation in shared decision-making, a positive attitude towards ongoing medication use and perception of the normality of using medications in older age. Time constraints, poor communication about prescribing information and unclear roles regarding responsibility for deprescribing also prevented discussions. Continuity of care, involvement of older adults in medication reviews and GPs who asserted their generalist role were the main factors which promoted discussion of deprescribing. GPs are well placed to discuss deprescribing with their older patients because they are trusted and can provide continuity of care. Actively encouraging and involving older adults in medication reviews in order to understand their preferences, supports shared decision-making about deprescribing. Active involvement may also reduce the influence of negative views of ageing held by both older adults and GPs.

"I simply don't know, because I don't know which drugs I get": Perspectives on deprescribing among older adults with limited life expectancy and their relatives.

Graabaek T, Lundby C, Ryg J, Søndergaard J, Pottegård A, Nielsen DS. "I simply don't know, because I don't know which drugs I get": Perspectives on deprescribing among older adults with limited life expectancy and their relatives. *Basic Clin Pharmacol Toxicol.* 2021;128(1):115-127. doi:10.1111/bcpt.13476

Use of medications of questionable benefit is common in end of life care. In order to effectively carry out deprescribing, it is important to gain insight into the perspectives of patients and their relatives. Thus, our objective was to explore perspectives on deprescribing among older adults with limited life expectancy and their relatives. We conducted semi-structured interviews with ten nursing home residents and nine relatives. Interviews were analysed using systematic text condensation. Four main themes were identified: "Medication as a necessity and to feel well," "Frailty as a barrier for taking responsibility," "Patient autonomy and faith in authority" and "A wish for being involved." Most participants had not considered the possibility of deprescribing but were open towards medication change if proposed by a healthcare professional. Most participants did not have in-depth knowledge about medication but would like to be informed or involved in decisions. The participants generally had faith in healthcare professionals despite limited contact. Our study implies that older adults with limited life expectancy and their relatives are generally interested in deprescribing activities; however, the initiative of deprescribing lies with the healthcare professionals.

Attitudes towards deprescribing among multi-ethnic community-dwelling older patients and caregivers in Malaysia: a cross-sectional questionnaire study

Kua KP, Saw PS, Lee SWH. Attitudes towards deprescribing among multi-ethnic community-dwelling older patients and caregivers in Malaysia: a cross-sectional questionnaire study. *Int J Clin Pharm*. 2019;41(3):793-803. doi:10.1007/s11096-019-00829-z

Background: Deprescribing describes a process of medication regimen optimization with the aim to reduce adverse events and improve quality of life. There is limited research on perceptions of older adults, defined as those 60 years of age and older, about their willingness to cease a medication in developing countries.

Objective: To ascertain patients' attitudes, beliefs, perceptions, and experiences regarding the number of medications they were taking and their opinions regarding deprescribing.

Setting: A primary care health clinic and three community pharmacies in Malaysia.

Method: A multicenter cross-sectional study was conducted by administering the revised Patients' Attitudes Towards Deprescribing (rPATD) questionnaire to older adults aged 60 years and over or caregivers attending a health clinic and three community pharmacies in Malaysia. Descriptive results were reported for participants' characteristics and questionnaire responses. Analysis of correlation between participant characteristics and their responses was performed using Spearman's correlation.

Main outcome measure: Patients' and caregivers' attitudes and beliefs towards reducing medications and characteristics of patients such as age, gender, education level, number of medication taken and number of medical center managing the patient.

Results: 650 participants were approached and the response rate was 85.2%. A total of 554 participants completed the questionnaire (502 older adults and 52 caregivers). Older adults in the study were taking a median of three medications and/or supplements compared to four in caregiver recipients. 88.1% of older adults were satisfied with their current medication regimen and 67.7% would like to try stopping or reducing the dose of their medicines when their doctor recommended. 82.7% of caregivers were satisfied with their care recipient's current medications and 65.4% were willing to stop taking or reduce the number of drugs taken by their care recipient's upon doctor's recommendation. Older adults ($p = 0.003$) and those with lower education level ($p < 0.001$) were more willing to have their medications deprescribed. Other demographic characteristics such as gender, number of medication taken or number of doctors managing patient were not found to be correlated with willingness to stop a medication.

Conclusion: Older adults taking multiple medications for various medical conditions were largely accepting of a trial of cessation of medication.

Barriers and Facilitators to the Deprescribing of Nonbenzodiazepine Sedative Medications Among Older Adults

Kuntz J, Kouch L, Christian D, Peterson PL, Gruss I. Barriers and Facilitators to the Deprescribing of Nonbenzodiazepine Sedative Medications Among Older Adults. *Perm J.* 2018;22:17-157. doi:10.7812/TPP/17-157

Introduction: Nonbenzodiazepine sedative-hypnotic medications, or "Z-drugs," are commonly used to treat insomnia among older adults (≥ 65 years), despite a lack of evidence of long-term effectiveness and evidence linking long-term use with poor outcomes.

Objective: To understand patient and clinician barriers and facilitators to deprescribing, or discontinuation, of Z-drugs.

Methods: We conducted a qualitative interview study among older adults who received a deprescribing intervention and among their clinicians at Kaiser Permanente Northwest. Semistructured interviews explored perceived barriers and facilitators to successful deprescribing of Z-drugs. Interviews were audiorecorded with participant permission. Content was analyzed using QSR NVivo 10 software.

Results: From the perspectives of patients, the greatest challenges to deprescribing are factors related to their insomnia, including the need for effective treatment of their insomnia; health care system factors, including a desire for personalized approaches to care; and their own positive personal experiences with sedative medication use. From the clinician perspective, a lack of institutional structures and resources to support deprescribing, the attitudes and practices of previous clinicians, and patient-related factors such as dependence and a lack of alternatives to treat insomnia were the most important barriers to deprescribing.

Conclusions: Health care systems must provide individualized care that supports patient goals for restful sleep and quality of life while also providing evidence-based care that takes patient safety into account. To accomplish this, systems must support patients and clinicians and provide a multidisciplinary approach that addresses insomnia treatment, provides patient education about sedative medication use, and supports the discontinuation process.

High-dose benzodiazepine dependence: a qualitative study of patients' perception on cessation and withdrawal

Liebrenz M, Gehring MT, Buadze A, Caflisch C. High-dose benzodiazepine dependence: a qualitative study of patients' perception on cessation and withdrawal. *BMC Psychiatry*. 2015;15:116. Published 2015 May 13. doi:10.1186/s12888-015-0493-y

Background: Benzodiazepine withdrawal syndrome has been reported following attempts to withdraw even from low or therapeutic doses and has been compared to barbiturate and alcohol withdrawal. This experience is known to deter patients from future cessation attempts. Research on other psychotropic substances shows that the reasons and motivations for withdrawal attempts – as well as the experiences surrounding those attempts – at least partially predict future efforts at discontinuation as well as relapse. We therefore aimed to qualitatively explore what motivates patients to discontinue this medication as well as to examine their experiences surrounding previous and current withdrawal attempts and treatment interventions in order to positively influence future help-seeking behavior and compliance.

Methods: To understand these patients better, we conducted a series of 41 unstructured, narrative, in-depth interviews among adult Swiss patients with a long-term dependent use of benzodiazepines in doses equivalent to more than 40 mg diazepam per day and/or otherwise problematic use (mixing benzodiazepines, escalating dosage, recreational use or illegal purchase). Mayring's qualitative content analysis was used to evaluate findings.

Results: These high-dose benzodiazepine-dependent patients decision to change consumption patterns were affected by health concerns, the feeling of being addicted and social factors. Discontinuation attempts were frequent and not very successful with fast relapse. Withdrawal was perceived to be a difficult, complicated, and highly unpredictable process. The first attempt at withdrawal occurred at home and typically felt better than at the clinic. Inpatient treatment was believed to be more effective with long term treatment (approaches) than short term. Patients preferred gradual reduction of usage to abrupt cessation (and had experienced both). While no clear preferences for withdrawal were found for benzodiazepines with specific pharmacokinetic properties, participants frequently based their decision to participate in treatment on the availability of their preferred brand name and furthermore discarding equivalent dosage rationales.

Conclusions: Our findings provide greater understanding of the factors that motivate high-dose benzodiazepine-dependent individuals to stop taking these medications, and how they experience withdrawal and treatment strategies. They underscore how patients' perceptions of treatment approaches contribute to compliant or non-compliant behavior.

Deprescribing in the context of multiple providers: understanding patient preferences

Linsky A, Meterko M, Bokhour BG, Stolzmann K, Simon SR. Deprescribing in the context of multiple providers: understanding patient preferences. *Am J Manag Care*. 2019;25(4):192-198.

Objectives: Deprescribing could reduce the risk of harm from inappropriate medications. We characterized patients' acceptance of deprescribing recommendations from pharmacists, primary care providers (PCPs), and specialists relative to the original prescriber's professional background.

Study design: Secondary analysis of national Patient Perceptions of Discontinuation survey responses from Veterans Affairs (VA) primary care patients with 5 or more prescriptions.

Methods: We created 4 relative deprescribing authority (RDA) outcome groups from responses to 2 yes/no (Y/N) items: (1) "Imagine...a specialist...prescribed a medicine. Would you be comfortable if your PCP told you to stop...it?" and (2) "Imagine...your VA PCP prescribed a medicine. Would you be comfortable if a VA clinical pharmacist [Pharm] told you to stop...it?" Multinomial regression associated patient factors with RDA.

Results: Respondents (n = 803; adjusted response rate, 52%) were predominantly men (85%) and older than 65 years (60%). A total of 281 (38%) respondents said no to both questions (PCP-N/Pharm-N) and 146 (20%) said yes to both (PCP-Y/Pharm-Y). A total of 155 (21%) said no to a PCP stopping a specialist's medicine but yes to a pharmacist stopping a PCP's (PCP-N/Pharm-Y). A total of 153 (21%) said that a PCP could stop a specialist's medication but a pharmacist could not stop a PCP's (PCP-Y/Pharm-N). In adjusted models (reference, PCP-N/Pharm-N), those with greater medication concerns were more likely to respond PCP-Y/Pharm-Y (odds ratio [OR], 1.45; 95% CI, 1.09-1.92). Those with more interest in shared decision making were more likely to respond PCP-N/Pharm-Y (OR, 1.41; 95% CI, 1.04-1.92). Those with greater trust in their PCP were less likely to respond PCP-N/Pharm-Y (OR, 0.52; 95% CI, 0.34-0.81) but more likely to respond PCP-Y/Pharm-N (OR, 2.16; 95% CI, 1.31-3.56) or PCP-Y/Pharm-Y (OR, 1.83; 95% CI, 1.13-2.98).

Conclusions: Understanding patient preferences of RDA can facilitate effective design and implementation of deprescribing interventions.

Patient attitudes and experiences that predict medication discontinuation in the Veterans Health Administration

Linsky A, Simon SR, Stolzmann K, Meterko M. Patient attitudes and experiences that predict medication discontinuation in the Veterans Health Administration. *J Am Pharm Assoc* (2003). 2018;58(1):13-20. doi:10.1016/j.japh.2017.10.012

Objectives: Polypharmacy is associated with adverse medication effects. One potential solution is deprescribing, which is the intentional, proactive, rational discontinuation of a medication that is no longer indicated or for which the potential harms outweigh the potential benefits. We identified patient characteristics, attitudes, and health care experiences associated with medication discontinuation.

Design, setting, and participants: We conducted a national mail survey, with the use of the Patient Perceptions of Discontinuation (PPoD) instrument, of 1600 veterans receiving primary care at Veterans Affairs (VA) medical centers and prescribed 5 or more concurrent medications.

Main outcome measures: The primary outcome was the response to: "Have you ever stopped taking a medicine (with or without your doctor's knowledge)?" The primary predictors of interest were 8 validated attitudinal scales. Other predictors included demographics, health status, and health care experiences.

Results: Respondents (n = 803; adjusted response rate 52%) were predominantly male (85%); non-Hispanic white (68%), 65 years of age or older (60%), and with poor (16%) or fair (45%) health. Participant attitudes toward medications and their providers were generally favorable. One in 3 patients (34%) reported having stopped a medicine in the past. In a multivariable logistic regression model ($P < 0.001$; pseudo-R² = 0.31; c-statistic = 0.82), factors associated with discontinuation included being told or asking to stop a medicine, greater interest in deprescribing and shared decision making, and higher education. Factors associated with decreased discontinuation were more prescriptions, higher trust in provider, and seeing a VA clinical pharmacist.

Conclusion: More highly educated patients with interest in deprescribing and shared decision making may be more receptive to discontinuation discussions. Future research evaluating how to incorporate this survey and these findings into clinical workflow through the design of clinical interventions may help to promote safe and rational medication use.

Patients' experience and perceptions of polypharmacy in chronic kidney disease and its impact on adherent behaviour

McKillop G, Joy J. Patients' experience and perceptions of polypharmacy in chronic kidney disease and its impact on adherent behaviour. *J Ren Care*. 2013;39(4):200-207. doi:10.1111/j.1755-6686.2013.12037.x

Aims: To explore attitudes towards medicines, polypharmacy and adherence in patients with chronic kidney disease (CKD).

Background: Polypharmacy is common in CKD and associated with medication non-adherence.

Methods: As part of a mixed methodology project, a purposive sample of ten participants were recruited and interviewed to explore attitudes to medicines and reasons for adherent and non-adherent behaviour.

Results: Several reasons for non-adherence were reported. Interviewees described a variety of attitudes towards medicines. Complex medicine regimes were a frequently cited contributing factor in poor adherence. Concerns about or experience of side effects had a negative impact on adherence. Prioritisation of medicines was evident and the importance of communication with health professionals was a consistent theme.

Conclusions: Non-adherence with prescribed medicines in CKD is a complex phenomenon, which has implications for clinical outcomes and cost. Adherent behaviour may change over time. Further research in this field is needed. No single intervention is likely to enhance adherence for all and clinicians should consider a variety of options to improve adherence with prescribed medicines.

Deprescribing: What are the views and factors influencing this concept among patients with chronic diseases in a developed Asian community?

Ng WL, Tan MZW, Koh EYL, Tan NC. Deprescribing: What are the views and factors influencing this concept among patients with chronic disease in a developed Asian community? *Proc Singap Healthc*. 2017;3:172-9. doi:10.1177/2010105817699633

Objective: Public primary healthcare clinics in Singapore manage a large proportion of elderly patients with chronic diseases. Inappropriate prescribing of medications and polypharmacy in the elderly are associated with adverse outcomes. It is hence important to stop potentially inappropriate medications in this vulnerable group. An approach coined 'deprescribing' has been used to describe a patient-centred process of optimising medication regimens. The study aimed to elucidate patients' attitudes towards the number of medications they were taking and identify factors that might influence acceptance of deprescription.

Method: A cross-sectional study using the validated Patients' Attitudes Towards Deprescribing (PATD) questionnaire was performed at two public primary healthcare institutions in Singapore. Participants were on regular follow-up at the clinics for chronic disease management and had at least five regular prescription medications.

Results: The study found that participants (with a mean age of 68) had an average of four medical conditions and six prescription medications, with the majority (60.3%) expressing that they were taking a large number of medications. Of note, 93.4% of participants were willing to stop one of their medications if advised by the doctor. This was associated with a younger age (<65 years old), not having a discount card for medications and having a higher physician trust score (Wake Forest Physician Trust Score).

Conclusions: This study showed that majority of the participants were willing to cease a medication that their physician thought was no longer required. Factors were also identified which potentially may be targeted to facilitate deprescription.

The patient's perspectives of safe and routine proactive deprescribing in primary care for older people living with polypharmacy: a qualitative study

Okeowo DA, Fylan B, Zaidi STR, Alldred DP. The patient's perspectives of safe and routine proactive deprescribing in primary care for older people living with polypharmacy: a qualitative study. *BMC Geriatr.* 2024;24(1):844. Published 2024 Oct 16. doi:10.1186/s12877-024-05435-x

Background: The process of identifying and discontinuing medicines in instances in which harms outweigh benefits (deprescribing) can mitigate the negative consequences of problematic polypharmacy. This process should be conducted with a focus on the patient and involve collaborative decision-making. Evidence is needed regarding patients' views on how deprescribing should be safely and routinely implemented in English primary care to improve its application. This study aimed to identify optimal methods of introducing and actioning deprescribing from the patient's perspective.

Methods: Participants in England aged 65 and above who were taking five or more medicines and residing in their own homes were recruited through social media and service user groups. An interview guide was created from deprescribing literature and input from patients and the public, guided by the Normalisation Process Theory (NPT). The interviews were held online using Microsoft Teams® or via phone, recorded, and then transcribed. The data was analysed using the Framework analysis.

Results: Twenty patients (mean age of 74.5, SD = 6.93), with 75% being female, were enrolled in the study. Three main themes emerged: (1) 'Why deprescribe now?' emphasised the significance of explaining the reasons behind deprescribing; (2) 'Monitoring and follow-up' underscored the necessity of safety measures during deprescribing and patients' willingness to self-monitor post-intervention; (3) 'Roles and relationships' explored patient perceptions of various healthcare professionals involved in deprescribing and the essential interpersonal skills for fostering therapeutic relationships.

Conclusion: Optimal methods of introducing deprescribing included communicating a convincing rationale for stopping medicines and preparing patients for deprescribing conversations. Patients required support from a range of healthcare professionals with whom they had an existing therapeutic relationship. Whilst patients were motivated to self-monitor unwanted/unexpected effects post-deprescribing, timely support was required. The nature of such bolstered collective action and cognitive participation within NPT enhances the normalisation potential of deprescribing. These findings highlight the significance of considering the content and process of deprescribing consultations to enhance normalisation and tackle problematic polypharmacy. This provides a deeper understanding of patients' needs for implementing safe and routine deprescribing in primary care, which should be considered when designing medication review and deprescribing services.

Older Patient and Caregiver Perspectives on Medication Value and Deprescribing: A Qualitative Study

Pickering AN, Hamm ME, Dawdani A, et al. Older Patient and Caregiver Perspectives on Medication Value and Deprescribing: A Qualitative Study. *J Am Geriatr Soc.* 2020;68(4):746-753. doi:10.1111/jgs.16370

Objectives: Shared decision making is essential to deprescribing unnecessary or harmful medications in older adults, yet patients' and caregivers' perspectives on medication value and how this affects their willingness to discontinue a medication are poorly understood. We sought to identify the most significant factors that impact the perceived value of a medication from the perspective of patients and caregivers.

Design: Qualitative study using focus groups conducted in September and October 2018.

Setting: Participants from the Pepper Geriatric Research Registry (patients) and the Pitt+Me Registry (caregivers) maintained by the University of Pittsburgh.

Participants: Six focus groups of community-dwelling adults aged 65 years or older, or their caregivers, prescribed five or more medications in the preceding 12 months.

Measurements: We sought to identify (1) general views on medication value and what makes medication worth taking; (2) how specific features such as cost or side effects impact perceived value; and (3) reactions to clinical scenarios related to deprescribing.

Results: We identified four themes. Perceived effectiveness was the primary factor that caused participants to consider a medication to be of high value. Participants considered a medication to be of low value if it adversely affected quality of life. Participants also cited cost when determining value, especially if it resulted in material sacrifices. Participants valued medications prescribed by providers with whom they had good relationships rather than valuing level of training. When presented with clinical scenarios, participants ably weighed these factors when determining the value of a medication and indicated whether they would adhere to a deprescribing recommendation.

Conclusion: We identified that perceived effectiveness, adverse effects on quality of life, cost, and a strong relationship with the prescriber influenced patients' and caregivers' views on medication value. These findings will enable prescribers to engage older patients in shared decision making when deprescribing unnecessary medications and will allow health systems to incorporate patient-centered assessment of value into systems-based deprescribing interventions.

Beliefs and attitudes of older adults and carers about deprescribing of medications: a qualitative focus group study

Reeve E, Low LF, Hilmer SN. Beliefs and attitudes of older adults and carers about deprescribing of medications: a qualitative focus group study. *Br J Gen Pract.* 2016;66(649):e552-e560. doi:10.3399/bjgp16X685669

Background: Deprescribing describes the complex process that is required for the safe and effective cessation of medications that are likely to cause more harm than benefit. Knowledge of older adults' and carers' attitudes towards deprescribing will enhance shared decision making in medication optimisation.

Aim: To explore the views, beliefs, and attitudes of older adults and carers on deprescribing.

Design and setting: Qualitative focus group study in New South Wales, Australia.

Method: Four focus groups with 14 older adults and 14 carers were conducted. Results were analysed using a previously developed framework (directed content analysis) with additional conventional content analysis.

Results: The willingness of both older adults and carers to have one or more medications deprescribed was influenced by the following main themes: their perception of the appropriateness of that medication; fear of outcomes of withdrawal; dislike of taking medications; and the availability of a process for withdrawal (including a discussion with a healthcare professional and knowing that the medication could be restarted if necessary). A patient's regular GP was identified as a strong influence both for and against medication withdrawal. The identified themes supported the previously developed framework. An additional theme unique to the carers was the complexity involved in making decisions about medications for their care recipients.

Conclusion: This study highlights that discussions between the healthcare professional and the older adult or carer about withdrawing medications should address reasons for deprescribing. GPs should be aware of their major influence on patients and regularly discuss appropriateness of current medication use with older adults and their carers.

Community-dwelling older people's attitudes towards deprescribing in Canada

Sirois C, Ouellet N, Reeve E. Community-dwelling older people's attitudes towards deprescribing in Canada. *Res Social Adm Pharm.* 2017;13(4):864-870. doi:10.1016/j.sapharm.2016.08.006

Background: While there is evidence that supervised withdrawal of inappropriate medications might be beneficial for individuals with polypharmacy, little is known about their attitudes towards deprescribing.

Objective: This study aimed to describe the situation among older community-dwelling Canadians.

Methods: A self-administered survey was adapted from the Patients' Attitudes Towards Deprescribing questionnaire and distributed to 10 community pharmacies and 2 community centers. The participants rated their agreement on statements about polypharmacy/deprescribing on a 5-point, Likert-type scale. Correlations between the desire to have medications deprescribed and survey items were evaluated using Spearman's Rho and Goodman and Kurska's gamma rank correlations.

Results: From the 129 participants, 63% were women [median age: 76 (IQR:71-80); median number medication: 6 (IQR: 3-8)]. A proportion of 50.8% (95%CI: 41.6%-60.0%) expressed the desire to reduce their number of medications. This desire was strongly correlated with the individuals' feeling of taking a large number of medications and moderately correlated with the belief that some of the medications were no longer needed or that they were experiencing side effects.

Conclusions: The results show that older individuals in the community are eager to undertake deprescribing, especially if they have a large number of medications, are experiencing side effects or feel some medications are no longer necessary.

Stopping long-term drug therapy in general practice. How well do physicians and patients agree?

Straand J, Sandvik H. Stopping long-term drug therapy in general practice. How well do physicians and patients agree?. *Fam Pract.* 2001;18(6):597-601. doi:10.1093/fampra/18.6.597

Background: GPs have a particular responsibility to limit the occurrence of polypharmacy and adverse drug reactions, and to discontinue unnecessary drug therapy.

Objective: The aim of the present study was to measure the extent to which patients and physicians agree upon information communicated in a consultation when a drug is withdrawn.

Methods: A total of 272 Norwegian GPs and 272 patients filled in questionnaires after a consultation in which a long-term drug therapy had been discontinued. Their answers were compared and the agreement measured by kappa statistics.

Results: There was 100% concordance between physicians and patients as to what drug had been discontinued. Most of the drugs (72%) were cardiovascular. There was fair agreement as to whether the drug was to be stopped abruptly or gradually withdrawn (kappa 0.61) and whether a follow-up appointment had been scheduled (kappa 0.41). Physicians were not able to judge patients' satisfaction accurately (kappa 0.20). Most patients (73%) were satisfied or very satisfied with the decision to withdraw the drug, and many commented that good communication and close follow-up is a prerequisite for successful withdrawal of long-term drug treatment.

Conclusions: Discontinuation of drug treatment was welcomed by most patients. Physicians and patients agreed completely as to what drug was to be discontinued, and fairly well about other factual aspects, but physicians were not able to judge patients' satisfaction accurately.

Older patients' perception of deprescribing in resource-limited settings: a cross-sectional study in an Ethiopia university hospital

Tegegn HG, Tefera YG, Erku DA, et al. Older patients' perception of deprescribing in resource-limited settings: a cross-sectional study in an Ethiopia university hospital. *BMJ Open*. 2018;8(4):e020590. Published 2018 Apr 20. doi:10.1136/bmjopen-2017-020590

Objective: To assess older patients' attitude towards deprescribing of inappropriate medications.

Design: This was an institutional-based, quantitative, cross-sectional survey.

Setting: Outpatient clinics of the University of Gondar Referral and Teaching Hospital in Ethiopia.

Participants: Patients aged 65 or older with at least one medication were enrolled in the study from 1 March to 30 June 2017. Excluded patients were those who had severe physical or psychological problems and who refused to participate.

Main outcome measures: Older patients' attitude towards deprescribing was measured using a validated instrument, 'the revised Patients' Attitudes towards Deprescribing' (rPATD) tool for older patients. Data were collected on sociodemographic characteristics and clinical data such as comorbidity and polypharmacy, and the main outcome was older patients' willingness to deprescribe inappropriate medications.

Results: Of the 351 eligible participants, 316 patients completed the survey. Of the 316 patients, 54.7% were men and were taking a median of 3 (IQR: 2-4) medications daily. Overall, most of the participants (92.1%; 95% CI 89% to 95%) were satisfied with the medications they were taking; however, still a significant number of participants (81.6%; 95% CI 77% to 86%) were willing to stop one or more of their medications if possible and agreed by their doctors. This willingness was correlated with seven items of the rPATD, including a strong correlation with the overall satisfaction of patients with the medications taken.

Conclusion: Many older patients have shown their willingness to reduce one or more of their medications if their doctors said it was possible. Healthcare providers should be proactive in discussing and evaluating potentially inappropriate medications for better clinical decision making.

Factors influencing deprescribing in primary care for those towards the end of life: A qualitative interview study with patients and healthcare practitioners

van der Waal MS, Teunissen SC, Uyttewaal AG, et al. Factors influencing deprescribing in primary care for those towards the end of life: A qualitative interview study with patients and healthcare practitioners. *Palliat Med.* 2024;38(8):884-892. doi:10.1177/02692163241261202

Background: For people with limited lifetime expectancy, the benefit of many medications may be outweighed by their potential harms. Despite the relevance of reducing unnecessary medication use, deprescribing is poorly enacted in primary care practice.

Aim: This study aims to describe factors, as identified by primary care professionals and patients, that influence deprescribing in the last phase of life.

Design: Semi-structured interviews were conducted and analysed using a thematic approach.

Setting/participants: This study was performed in primary care settings, including general practices, hospices and community care teams in The Netherlands. Purposefully identified primary care professionals (general practitioners, pharmacists, nurses) and patients with limited lifetime expectancy due to advanced chronic illness or cancer and their caretakers were interviewed.

Results: Three themes emerged detailing factors influencing deprescribing in the last phase of life in primary care: (1) non-maleficence, the wish to avoid additional psychological or physical distress; (2) reactive care, the lack of priority and awareness of eligible patients; and (3) discontinuity of care within primary care and between primary care and specialty care.

Conclusions: Deprescribing is an incremental process, complicated by the unpredictability of life expectancy and attitudes of patients and health care professionals that associate continued medication use with clinical stability. Opportunities to facilitate the deprescribing process and its acceptance include the routinely systematic identification of patients with limited life expectancy and potentially inappropriate medications, and normalisation of deprescribing as component of regular primary care, occurring for all patients and continuing into end-of-life care.

Consumer Attitudes Towards Deprescribing: A Systematic Review and Meta-Analysis

Weir KR, Ailabouni NJ, Schneider CR, Hilmer SN, Reeve E. Consumer Attitudes Towards Deprescribing: A Systematic Review and Meta-Analysis. *J Gerontol A Biol Sci Med Sci.* 2022;77(5):1020-1034. doi:10.1093/gerona/glab222

Background: Harmful and/or unnecessary medication use in older adults is common. This indicates deprescribing (supervised withdrawal of inappropriate medicines) is not happening as often as it should. This study aimed to synthesize the results of the Patients' Attitudes Towards Deprescribing (PATD) questionnaire (and revised versions).

Methods: Databases were searched from January 2013 to March 2020. Google Scholar was used for citation searching of the development and validation manuscripts to identify original research using the validated PATD, revised PATD (older adult and caregiver versions), and the version for people with cognitive impairment (rPATDcog). Two authors extracted data independently. A meta-analysis of proportions (random-effects model) was conducted with subgroup meta-analyses for setting and population. The primary outcome was the question: "If my doctor said it was possible, I would be willing to stop one or more of my medicines." Secondary outcomes were associations between participant characteristics and primary outcome and other (r)PATD results.

Results: We included 46 articles describing 40 studies (n = 10,816 participants). The meta-analysis found the proportion of participants who agreed or strongly agreed with this statement was 84% (95% CI 81%–88%) and 80% (95% CI 74%–86%) in patients and caregivers, respectively, with significant heterogeneity (I² = 95% and 77%).

Conclusion: Consumers reported willingness to have a medication deprescribed although results should be interpreted with caution due to heterogeneity. The findings from this study moves toward understanding attitudes toward deprescribing, which could increase the discussion and uptake of deprescribing recommendations in clinical practice.