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ORIGINAL ARTICLE

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

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Abstract

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.

KEYWORDS
deprescribing, general practice, older adult, polypharmacy, practice-based evidence, shared decision-making

1 | INTRODUCTION

Many health systems in the world are facing the growing public health challenge presented by polypharmacy (World Health Organization., 2019). Australia has one of the highest rates of polypharmacy use amongst older adults aged 65 or older (Page et al., 2019). Polypharmacy, commonly defined as the use of five or more medications, may be appropriate and deliver an overall benefit to older adults with multiple morbidities (Duerden et al., 2013; Lee et al., 2020). However, compared to younger populations, polypharmacy use in older age groups results in a higher risk of preventable medication-related adverse events, resulting in poor health outcomes (Assiri et al., 2018). Additionally, the burden of managing complex medication regimens is high and may negatively impact quality of life (May et al., 2009, 2014).

Deprescribing or ceasing medications aim to reduce inappropriate polypharmacy use and is most commonly recommended in the context of older adult medication management (Reeve et al., 2015; Scott et al., 2015). Interventions to promote deprescribing mostly focused on the use of comprehensive medication reviews have resulted in small decreases in mortality and a reduction in the use of potentially inappropriate medications (Bloomfield et al., 2020). Recent quantitative studies indicate that the majority of General Practitioners (GPs) are comfortable to deprescribe medications for older adults (Carrier et al., 2019; Gillespie et al., 2019b) and that most older adults are willing to consider deprescribing (K. R. Weir et al., 2021). However, rates of polypharmacy and inappropriate medicine use have continued to increase, suggesting that deprescribing is not yet widely implemented in practice (Ailabouni & Reeve, 2019; Ronquillo et al., 2018). This study aimed to explore the factors which influence GP and older adult decisions about deprescribing in primary care in order to understand why prescriber and older adult willingness to deprescribe do not translate into action. The objective is to inform changes in practice.

What is known about this topic

- Compared to younger populations, polypharmacy use in older age groups results in a higher risk of preventable medication-related adverse events with potentially poor health outcomes.
- Rates of polypharmacy and inappropriate medicines use in older adults have continued to increase.
- Deprescribing as an intervention is not yet widely implemented in practice.

What this paper adds

- Deprescribing decisions were limited by the influence of older adults and GP negative stereotypes towards age and ageing. Opportunities for shared decision-making were missed. Attitudes towards medication use favoured ongoing prescribing and key health system barriers worked together to limit discussions of deprescribing.
- Implications for practice include active involvement of older adults in medication reviews to facilitate shared decision-making and opportunities to consider deprescribing.

2 | METHOD

The COREQ Checklist was used to guide the reporting of this study (Tong et al., 2007). The work was conducted as part of a mixed methods research project examining deprescribing from the perspective of older adults and GPs (Gillespie et al., 2019a, 2019b). Following initial surveys, a qualitative design was chosen to allow an in-depth exploration of initial findings including attitudes and practices related to deprescribing and shared decision-making. Semi-structured interviews were selected because of the importance of gathering individual, detailed accounts from participants (O'Leary, 2017).

2.1 | Research team

The three-member research team were all female. The lead investigator, a PhD candidate with previous qualitative research experience and a background in Nursing and Public Health was responsible for data collection and the development and application of the coding scheme to the data. The remaining two researchers were academics with extensive qualitative research experience; one with 25 years' experience as a pharmacist, the second with a background in nursing, social anthropology and public health.

The study was approved by the University of Wollongong/Illawarra Shoalhaven Local Health District Health and Medical Human Research Ethics Committee (#HE15/086). All participants were provided with written information about the study which was described as being part of a PhD program designed to improve medication management for older adults. Written consent was obtained (or verbal in the case of telephone interviews).

2.2 | Study setting, participants and sampling

A geographic area, the Illawarra Shoalhaven, was selected for the study comprising a major regional city and surrounding rural areas, south of Sydney, Australia. The demographic profile of residents of the area broadly reflects Australia as a whole, including the percentage of people aged over 65 years, socio-economic status and provision of and utilisation of GP services (Ghosh et al., 2013).

Autonomous, community-living older adults were chosen as the target group as they make up the majority of the older population in Australia (Australian Institute of Health and Welfare, 2018). GPs were selected as they are the group of health professionals most involved in ongoing medication management for older adults living in the community (Britt et al., 2016).

Convenience sampling was employed to recruit initial participants. GPs were recruited via professional networks by telephone or email. Four were known to the interviewer either professionally or socially. Older adults were recruited via pharmacies and community groups to participate in the initial survey phase. Respondents were subsequently invited to participate in the qualitative phase. Seven were known to the interviewer socially. Snowballing was used to reach additional GP and older adult participants willing to participate. We aimed to recruit diverse samples of both GPs and older adults regarding gender, varying ages or levels of experience and from different locations, as determined by the socio-economic status of the area. Older adults were selected based on three additional criteria: aged 65 years or older, living independently in the community and taking five or more medications. It was not a requirement that they were a patient of one of the included GPs.

2.3 | Data collection

Separate interview question guides were developed for the older adult and GP samples (see supplementary file A—Older Adult Interview Guide and supplementary file B-GP Interview Guide). These guides were based on the results from the two earlier quantitative studies (Gillespie et al., 2019a, 2019b) and other literature which explored older adult or GP attitudes and practices towards deprescribing (Anderson et al., 2014; Anthierens et al., 2010; Linsky et al., 2016; Moen et al., 2010; Reeve et al., 2013; Schuling et al., 2012). Each guide was pilot tested with one GP and one older adult and refined prior to the interviews. Interviews with older adults were conducted from January to October 2018. GP interviews took place between November 2018 and May 2019.

All 25 older adult interviews were conducted in their own home. Three spouses were present during some of the interviews but did not participate. Of the 16 interviews conducted with GPs, eight were in person and the remainder via telephone, which was a more convenient option for some participants. Interviews ranged in length from 17 to 53 min and field notes were taken following the interviews. Data saturation was achieved with both groups with no new material arising in later interviews. Interviews were audio recorded with permission, transcribed verbatim anonymised and checked for accuracy.

2.4 | Analysis

All transcripts were analysed alongside field notes using thematic analysis (Braun & Clarke, 2006; Clarke et al., 2015). NVivo 12 was used to manage the data and assist in the coding process (QSR International Pty Ltd, 2018). Codes were developed inductively by the lead author using an iterative process, reflecting on the development and allocation of codes across the entire data set throughout the analysis process (Nowell et al., 2017). An example of a coded transcript is included in box 1 to demonstrate the coding technique.

BOX 1 Example of the coded transcript

Example of coded transcript GP 1 (2 years experience)

Transcript	Codes
Participant: If things are going well, that's really hard where the patient's happy, fit, healthy, just coming in for the annual review, for their scripts or something like that, and there's like one you're thinking, "Oh, you probably don't need to be on this." But—I suppose—well, if it's been prescribed by a specialist and they're only really seeing specialists for ongoing scripts, sort of having that power play between—I think you don't need to be on this but your specialist is saying that you should be—who's actually right in that instance?	Challenge: Maintain status quo or deprescribe? Hierarchy of prescribers. Confusion about deprescribing responsibilities Exploration of GP and specialist treatment goals only.
Researcher: And how would you negotiate that, if you felt strongly about stopping?	Communication between GP and specialist facilitated by familiarity.
Participant: If I knew the specialist, sometimes I communicate with them directly, either through letter or phone if you're happy to chat to them. Sometimes I talk to the patient and I say, "In this letter, I'm just going to say—talk with them about this at the next appointment," when I'm redoing the referral. I don't think I'd stop it and not talk to them. That's a bit hard and not professional either	Not willing to deprescribe meds prescribed by others Deferring deprescribing responsibility for action to older adult with specialist.

Coded text was reviewed and organised into themes that represented a discrete core idea or concept based on similarities, patterns and/or relationships between codes (Clarke et al., 2015). The team met weekly to review the coding scheme and discuss and reach a consensus regarding the themes.

3 | RESULTS

3.1 | Description of participants

A total of 41 interviews (16 GPs and 25 older adults), were conducted. Table 1 describes the participants' characteristics. Within the GP sample, the larger number of males and high numbers of very experienced GPs reflect similar patterns in the Australian GP workforce (Britt et al., 2016). Similarly, the number of older adult participants born in Australia is comparable to nationwide figures (Australian Institute of Health and Welfare, 2018).

TABLE 1 Participant characteristics

Participants		
GPs ($n = 16$)	Male	10
	Female	6
	SEIFA decile of practice	
	High	6
	Low	10
	Years of experience	
	≤6	6
	6–20	1
	21+	9
Older adults ($n = 25$)	Male	11
	Female	14
	SEIFA decile of residence	
	High	11
	Low	14
	Age range	67–95 years
	Median age	79 years
	Country of birth	
	Australia	18
	UK/Ireland	5
	Europe	2
	Number of daily medications	Median 10, Range 5–25
	Self-reported health status	
	Poor	1
	Fair	4
	Good	10
	Very good	9
	Excellent	1
	Self-reported quality of life	
	Poor	0
	Fair	3
	Good	6
	Very good	13
	Excellent	2

Abbreviation: SEIFA, socio-economic indexes for areas.

Most older adults reported excellent or very good quality of life ($n = 16$) with fewer reporting excellent or very good health ($n = 10$). A median of 10 medications was used (range 5–25). Those in higher socio-economic areas were all born in Australia and were more likely to be taking more medications.

3.2 | Major themes

Four key themes illustrated the factors that influence decisions about deprescribing for older adults using polypharmacy in Australia (see Figure 1). These included: views of ageing, shared decision-making, attitudes toward medication use and health system factors.

3.3 | Views of ageing

Both GPs and older adults presented largely negative views toward age and ageing. For example, the study was described to participating GPs as being about medication management in the context of polypharmacy use for their patients aged ≥65 or older. However, during the interviews, GP's responses focused on their frail older patients mentioning dementia, cognitive loss or confusion, physical limitations, and the need for informal caregivers. Whilst these characteristics are true for some older adults and would complicate decision-making, they are not typical of the majority of older adults who remain relatively healthy and independent, even when using polypharmacy.

> 'I think generally with older patients, it's a longer consult, -- it takes longer to get them in the room and to get them comfortable. And then, also making sure that things are understood'. GP ID 5.

Additionally, most GPs discussed the concerns they held about their older patients' medication management capabilities. They described their older patients as being forgetful and non-compliant. They suggested that their older patients had limitations in their ability to understand and remember information about their medications. GP communication strategies appeared to be coloured by these negative views and were often described as a one-way transfer of information rather than a collaborative discussion.

> 'You're looking at not necessarily good compliance, so you have to be very careful with the instructions that you give them because they don't necessarily know. When you give an instruction, they may not really understand it, so you've got to be very clear what you're saying because they'll often come back and haven't been taking it the way that you've instructed.' GP ID 12.

A more nuanced view of their older patients' limitations was sometimes presented by experienced GPs. These GPs acknowledged the challenges faced by older adults including poor communication of medication changes during hospitalisations and from specialists, the potential for confusion resulting from the use of generic medication brands and lack of information when medications were packaged in blister packs. However, only four GPs, who were more positive about their older patients' capabilities, noted techniques they employed to actively engage their older patients in decision-making, taking time to hear and respect their preferences. They explained the risks and benefits of medications and entered into a dialogue with patients.

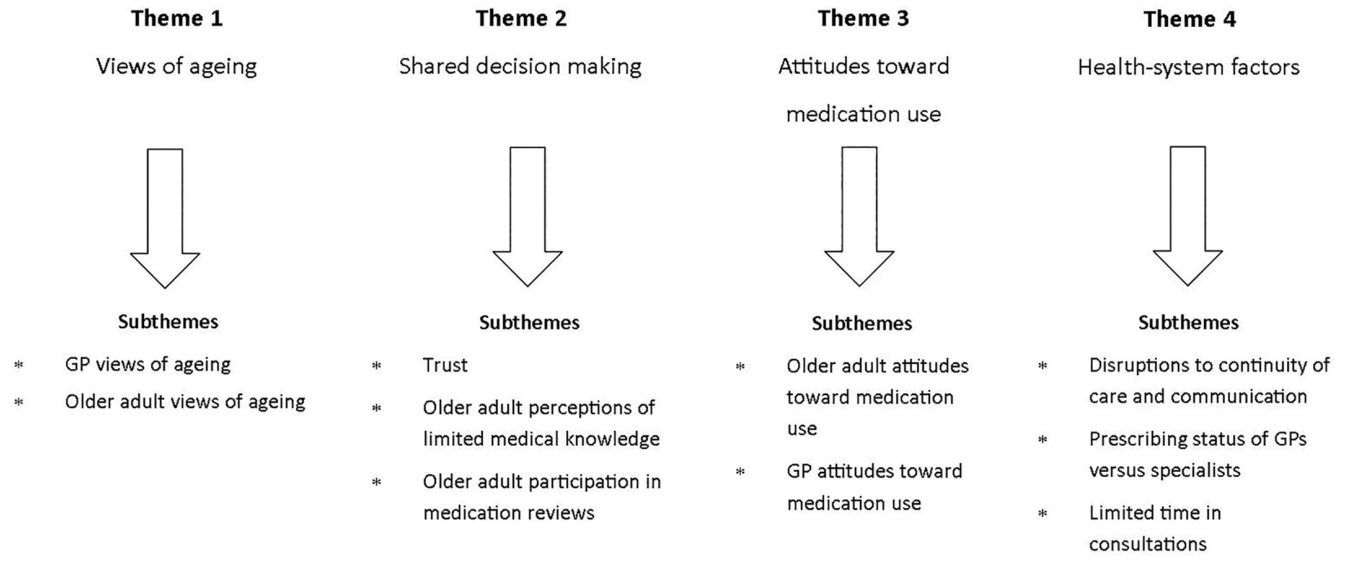

FIGURE 1 Themes and subthemes.

> 'So it's also what the person wants as well as what I want and so we negotiate something that we can both live with… Explain the good effects and the bad effects of a medicine to the person, their likelihood of getting good effects, their likelihood of getting bad effects, and then seeing what they want.' GP ID 11.

Older adults were sometimes complicit in perpetuating a negative view of ageing, marked by emphasising their own experience of a progressive loss of role and purpose, lack of hope, deterioration and limitations.

> 'And you have the conversation and as we're getting older, we forget.' Older adult ID 4, aged 67.

> 'I can tell I'm getting old, every year it brings on—I'm not as good as I used to be and I can't do what I used to do.' Older adult ID 17, aged 79.

> 'I think it's more on the downhill slide at my age.' Older adult ID 13, aged 80.

> 'I'm sitting here, I'm useless'. Older Adult ID 20, aged 95.

However, some voiced their irritation when GPs treated them as though they were less capable or less worthy of treatment because of their age, demonstrating their awareness of negative views about ageing within healthcare encounters.

> 'I've changed GPs in the beginning of the year because I wasn't happy with the GP I was seeing. Everything as far as she was concerned was down to age…. I didn't feel I was ready to be discarded quite yet.' Older adult ID 8, aged 82.

3.4 | Shared decision-making

Older adult participation in shared decision-making was influenced by the role of trust, perceptions of limited medical knowledge and limited opportunities to participate in shared decision-making during medication reviews.

3.4.1 | Trust

Both GPs and older adults saw interpersonal trust as a fundamental facilitator of frank discussions about medications. Trust enabled older adults to share openly their concerns and share personal information, including treatment goals and/or end-of-life preferences. Trust was also necessary because of the complexity and uncertainty of deprescribing decisions in the context of managing multimorbidity. Components which contributed to trusting relationships included the length of time that older adults had been seeing the same GP, repeated positive experiences of care and their GPs' perceived medical expertise.

However, most older adults noted that their trust in their GP resulted in them choosing not to participate in shared decision-making, adopting a passive approach and deferring medication decisions to their GP.

> 'I take my—whatever they've given me -it's trust really, a trust issue. It's a definitely trust issue, because if I wouldn't trust these doctors, I probably would have questioned it more often. But until now, they have done the right thing, I'm feeling okay, I'm feeling good.' Older adult ID 18, aged 78.

GPs did not mention this negative effect of trust on shared decision-making. They perceived that a social norm of trust influenced

their older patients, as suggested by GP ID 5, '(they) *were bought up in…a culture of respect for GPs*'. They understood this to be why patients were not worried to accept and follow their advice without question. In the absence of trust, GPs were reticent to discuss deprescribing for fear that their older patients would reject their suggestion.

3.4.2 | Perceptions of limited medical knowledge

Older adults were aware of their own inadequate medical knowledge compared to their GP and for some, this contributed to a reluctance to initiate discussions about medications and deprescribing.

> 'I—not ask him if I should be stopping any minute – I trust that he knows best because I'm not a medical man, and I – never tried to be.' Older adult ID 21, aged 86.

This even resulted in instances where they followed their GP's advice even when they knew from knowledge based on personal experience that it was likely to be incorrect.

> '"Well, I don't want you to take Lisinopril anymore"…I didn't like that idea, but I did it and it didn't work. So, I didn't say too much… I just said, "All right then. So, yeah, they're the doctor. I'm not a doctor… I'm not one to interfere with things that I shouldn't interfere with.' Older adult ID 3, aged 72.

Despite regarding themselves as having no medical knowledge, evidence of lay knowledge was demonstrated by the participants' accounts of how they understood and managed their health problems and medications between consultations. Older adults also actively gathered information about their medications from healthcare providers, lay sources, such as various forms of media, family and friends and the Internet.

> 'Well…you pick up Google, don't you? And you look for reliable – as far as you know – thing and read it. But it gives me the basis for asking a question…. Not believing everything they say by any means, but giving me a bit more understanding'. Older adult ID 9, aged 87.

Notably, the majority of older adult participants mentioned searching the internet for information about their medications whilst GP participants thought that they rarely used the Internet at all.

3.4.3 | Participation in medication reviews

Both older adults and GPs noted that the use of medication reviews varied and as a result opportunities for participation in shared decision-making during reviews were often missed. Only six older adults described how their GP conducted regular, comprehensive medication reviews, either during a consultation, with the practice nurse or via a home medicines review. These older adults explained how reviews enabled them to express their medication preferences and concerns. Others were less certain that their GP ever reviewed their medications, or described ad hoc reviews that did not involve them.

> 'We talk about the medications… she sort of runs through them all, but she doesn't necessarily talk about them all, you know what I mean? I think she just sort of seems to accept that if things are going okay that we'll stick with that.' Older adult ID 11, aged 88.

GP responses supported the lack of a consistent approach to medication reviews. Descriptions varied as to who conducted the review and how often. GPs noted that reviews varied from desktop reviews with no patient involvement to comprehensive medication reviews with the active encouragement of older adult participation.

3.4.4 | Attitudes towards medication use

Medication use was an accepted and expected aspect of ageing for both older adults and GPs, as expressed in the following quotes;

> 'It's (medication use) a mark of being elderly' Older adult ID 1, aged 70.

> 'You're never going to be painless at 74'. Older adult ID 7, aged 74.

> 'So there always seems to be something going wrong, and one of the ways of treating health conditions is using medication'. GP ID 2.

Older adults perceived that their medications were necessary and beneficial for the protection and promotion of their health, as well as the extension of their independence and life. The continued prescribing of their medications also implied that they were still necessary. In light of this attitude, the idea of stopping medications appeared unwise and unlikely and generated fear for some participants.

> 'I firmly believe that all these medicines are keeping me alive. So, something drastic has got to happen to stop one of them'. Older adult ID 24, aged 78.

The burden associated with polypharmacy use, such as the inconvenience of complex daily medication regimes, side effects and cost were also described by the older adults. However, these burdens were considered in light of the overall perceived benefit of ongoing medication use, which is why many accepted inconvenience in order to gain the perceived benefits from medication use.

> 'I get fed up with it. I think I rattle. But anyway it's a means to an end, if it works, it's good'. Older adult ID 8, aged 82.

Like older adults, GPs described similar benefits of medication use including increased life expectancy, improved health and quality of life outcomes. GPs were also concerned about managing side effects, adherence and negative consequences for themselves if others such as specialists or family members disapproved of their deprescribing decisions. They commonly described their older patients as being fearful of stopping medications and noted patient expectations of ongoing medication benefits. When considering deprescribing, GPs were sometimes unclear about what could be deprescribed and what the outcome might be.

> 'Sometimes it's very challenging if somebody has got multiple conditions and they're on multiple medications, treating different things. Sometimes you just think, "Well, it can be hard to stop anything."' GP ID 13.

GPs also noted the challenge of optimising medication regimens and of finding an acceptable outcome.

> 'I'm asking myself and you can ask the patient, "Do you mind having slightly puffy ankles or kidneys that don't work?"' GP ID 15.

3.4.5 | Health system factors

This study highlighted that the GP's role to coordinate medication regimens between prescribers and across healthcare settings is an important facilitator of medication management and such continuity of care was valued by older adults. However, a number of factors undermined the effectiveness of this role. These included: poorly coordinated and incomplete communication of medication information between healthcare providers, a lack of clarity for the GP to act within their generalist role to make deprescribing decisions and limited time to provide comprehensive, person-centred medication reviews.

GPs expressed a sense of powerlessness to prevent polypharmacy when multiple specialists were involved. A lack of continuity of care results in poor communication about medication regimens.

> 'Things are getting out of hand with all the different specialists.... it's just causing more and more problems because each specialist looks at one thing and they often don't know what all the other ones are doing so you just see all these medications started and you just know that's going to cause problems'. GP ID 4.

Less experienced GPs also mentioned that they preferred to avoid deprescribing medications prescribed by others, with one describing this area as a *'power play'* (GP ID 1). This was reflected in the comments from an older adult who was asked by his GP to refer deprescribing decisions to his specialist.

> 'He's a bit reluctant to, sometimes. He's a bit reluctant to change what they've changed. He says, "Oh, no, I think I'm going to leave it for them. Talk to them"'. Older Adult ID 2, aged 69.

However, most older adults expressed a greater level of trust in their specialists whom they perceived had higher status and expertise compared to their GP. As a result, they did not believe GPs could stop medications originally prescribed by a specialist.

Limited time in consultations influenced both GP and older adult decisions to raise discussions about deprescribing. GPs sometimes deferred these conversations to subsequent consultations or asked patients to return for follow-up consultations to address deprescribing separately. Similarly, some older adults were deterred from raising medications concerns or asking for more medication information because of an awareness of time pressures.

> 'I think they write it and they tell you, you need to be taking this. I mean – and I think they're time-poor. They're pushing you through, so you really don't get very much information'. Older Adult ID 4, aged 67.

4 | DISCUSSION

This study investigated the factors which influence deprescribing decision-making within medication management for older adults in primary care in Australia. It found that negative stereotypes toward age and ageing, positive attitudes toward polypharmacy use and health system barriers mostly worked together to limit opportunities for shared decision-making about deprescribing. These findings help to explain why there is a persistent gap between the intention on the part of GPs and willingness on the part of older adults to consider deprescribing and actual deprescribing action in practice.

Many GPs' ageist and generally negative views of their older patients' capabilities and trustworthiness to manage their medications impeded initiation and participation in shared decision-making. Communication about medications was mostly described as a one-way delivery of information. GPs' perceptions of their patients' willingness or capability to be involved in decisions may not reflect their patients' real preference or level of functionality but may be shaped by the GP's own negative stereotypes. This result is not unexpected as ageism in healthcare is prevalent (São José et al., 2019). Similar effects of ageism on shared decision-making were reported in a recent nationwide Korean study which demonstrated that older adults are less likely to be included in decision-making because of the negative stereotypes held by health professionals (Shin et al., 2019).

Older adults' own ageist views, trusting attitudes and lack of confidence in their own knowledge about their health and medication

use often led to passive involvement in shared decision-making. These findings provide further insight into why the majority of older adults prefer leaving deprescribing decisions to their doctor, as documented in an earlier Australian study (Weir et al., 2017). Other earlier work illustrates that older adults are more likely to adopt expected behaviours that typify a stereotyped view of an older person during consultations, for example, becoming dependent and compliant (Wyman et al., 2018). In this way, older adults contribute to their own disempowerment, as they take on ageist views, conforming to the behaviour they believe is expected, thus shaping their own perception of their capability (Hausknecht et al., 2020).

An additional factor contributing to a lack of shared decision-making was the GPs' limited awareness of the extent of their older patients' knowledge and knowledge-seeking behaviours. Despite confidently applying this knowledge to manage their medications between consultations, older adults generally deferred to their GP's greater medical knowledge and experience during consultations.

These findings have important ramifications for the current emphasis on person/patient-centred deprescribing processes (Le Bosquet et al., 2019; E. Reeve et al., 2014) and shared decision-making within deprescribing (Jansen et al., 2016; Mangin et al., 2019; Pickering et al., 2020). They suggest that prescriber assumptions about their older patients' capability and older adults' own view of their lack of capability may inhibit the application of patient-centred deprescribing process, including shared decision-making about deprescribing.

The emphasis on the benefits of medication use expressed by both older adults and GPs created a bias toward prescribing new or continuing existing medications. Concurrently, uncertainty and sometimes fear about deprescribing outcomes undermined considerations of the benefit of deprescribing. This bias towards maintaining the status quo resulting in ongoing medication use reflects the results of studies conducted elsewhere (Reeve et al., 2022). For example, GPs in Denmark were more likely to decide to continue medications because of ambiguity about the appropriateness of deprescribing (Nixon & Vendelø, 2016). Similarly, older adults in a Canadian study were more likely to want to continue their medications. They externalised medication-related harm to other older adults, believed well-being in later life is reliant on the use of a personalised medication routine and that age-related illness is common in later life (Ross & Gillett, 2020).

The positive views toward ongoing medication use discussed by both older adults and GPs led to a pragmatic approach to decision-making. Medication benefits were assessed alongside the complexity of managing multiple morbidities and the possibility of poor medication outcomes. In practice, this meant that both older adults and GPs worked toward a goal of satisficing or finding a solution that was good enough rather than optimising medication regimens. Sinnott et al. (2015) have previously used the term satisficing to describe how GPs make decisions when prescribing for multimorbid patients. Satisficing makes sense in the context of deprescribing as it is a strategy to manage decision-making when there are multiple decision criteria and significant uncertainty (Hafenbrädl et al., 2016). What was not clear in this study is if older adults and GPs ever discussed the compromises on goals of care they were each making in order to find an acceptable medication regimen. This requires further study.

Time constraints, communication and continuity of care disruptions, uncertainty about deprescribing responsibilities and the status of specialists compared to GPs, were key factors within the healthcare environment that undermined GPs' ability to deprescribe. A recent review confirms the influence of these factors on clinical practice (Reeve et al., 2022). Opportunities for older adults to share their medication concerns, preferences or discuss medication burden were often missed as the nature of medication reviews varied and did not always include older adults in the discussion. The experience of and attitude towards medicine use is unique and dynamic, as health and circumstances change (Le Bosquet et al., 2019). This suggests that the involvement of older adults in regular medication reviews should be routine. Ideally, decision-making to identify appropriate deprescribing takes into account a person's healthcare goals, their environment and quality of life, including the burden of treatment, alongside the GP's own goals of care. Taking into account the older adult's view is necessary to avoid contextual errors where a GP may overlook elements that are essential to appropriate treatment (Weiner et al., 2010).

GPs are well placed to provide individualised medication management, including deprescribing because of their positioning as generalists within the healthcare system and their ability to provide continuity of care (Heaton et al., 2016; Joanne Reeve & Bancroft, 2014). Continuity of care was found to be important to support the development of trust. Over time, older adults developed a trust in the expertise of their GP. This trust was particularly important when outcomes from deprescribing were uncertain. However, whilst trust sometimes facilitated deprescribing discussions and shared decision-making, at other times it resulted in older adults adopting a passive approach or a choice to trust their specialist's view. Previous deprescribing studies also note that trust can act as a barrier to patients' questioning (Belcher et al., 2006; Amy Linsky et al., 2017; Schöpf et al., 2017). Furthermore, trust has been shown to decrease patient involvement in shared decision-making (Blumenthal-Barby, 2017). GPs only noted the benefits of trust to support deprescribing discussions and did not demonstrate an awareness that trust may also undermine shared decision-making.

4.1 | Practice implications

Shared decision-making in the context of deprescribing is important in order to establish patient preferences and goals and consider these alongside the GP's own goals (Jansen et al., 2016). Involving older patients in comprehensive, regular medication reviews, where they are prompted to express their preferences is a practical approach to facilitate shared decision-making and is a foundation of person/patient-centred deprescribing processes (Le Bosquet et al., 2019; Reeve et al., 2014).

Older adults were shown to be curious and keen to develop their own understanding of their medications. Further work is needed to identify relevant information gaps that older adults would like addressed in order for them to better understand when deprescribing is appropriate. This may give them greater confidence to discuss deprescribing in consultations, address fears and help to establish realistic expectations of the benefit of medication use.

4.2 | Limitations

Older populations are not homogenous, however, we were limited in our ability to capture all aspects of diversity. For example, were we not able to account for cultural diversity as those from non-English speaking backgrounds were excluded because interviews were conducted in English, with no interpreter service offered. Only two frail older adults participated. We did attempt to capture a diverse sample in regards to socio-economic status and location across rural and urban areas. Similarly, with GPs, the sample did represent a diverse range of levels of experience.

5 | CONCLUSION

The gap between positive intentions to deprescribe and actual discussions of deprescribing is explained by a combination of factors. These include: negative attitudes toward ageing, limited participation in shared decision-making, a preference for ongoing medication use and health system factors such as limited time in consultations, poor communication about current medications and sometimes poor relationships between prescribers. However, GPs are best placed to be able to explore patient preferences regarding deprescribing because of the trust and long-term nature of most interactions between themselves and their older patients. This remains true regardless of their older patients' willingness to engage in shared decision-making. Medication reviews provide an excellent opportunity to encourage older adults, including those who prefer to take a passive role in decision-making, to share their medication concerns and goals of care. This is a necessary step in determining the appropriateness of deprescribing.

AUTHOR CONTRIBUTIONS

RG designed the research project, completed all data collection, conducted data analysis and wrote the first draft of the manuscript. JM and LH supervised and guided the research design and data analysis and interpretation processes and commented on drafts and revisions of the manuscript. All authors agreed to the final manuscript.

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CONFLICT OF INTEREST

The authors declare they have no known conflicts of interest to declare.

DATA AVAILABILITY STATEMENT

The transcripts of interviews analysed in the preparation of this paper are not publically available as participants only consented to their use by the investigators identified in the Ethics approval. Summaries of extracted data are available from the corresponding author upon reasonable request.

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

This study design and the procedure were approved by the University of Wollongong/Illawarra Shoalhaven Local Health District Health and Medical Research Ethics Committee (#HE15/086). We have followed the ethics protocol, as directed. Written, informed consent was obtained from all participants who took part in the study.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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