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ORIGINAL ARTICLE

A short survey about drug deprescribing

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Aim

The main purpose of the survey is to discover practices about deprescribing of potentially inappropriate polypharmacy among doctors working within the Department of Geriatric Medicine in Malta.

Methods

An online questionnaire was distributed via electronic mail to all doctors more senior than foundation year 1 working within the mentioned department between August and September 2021.

Results

A response rate of 54% was obtained. Just over half of the participants admitted to deprescribe at every opportunity, with psychiatric medications being mostly deprescribed. One of the commonest reasons for deprescribing included medication not indicated. Lack of knowledge about the reason for prescription and being prescribed by others were primary barriers to deprescribing. The role of a clinical pharmacist and need for a guideline was reflected in the results.

Conclusion

The importance of deprescribing is appreciated by many doctors working in geriatrics in Malta, but there is still room for improvement.

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Potentially inappropriate polypharmacy (PIP) is a growing concern particularly among older adults (>65 years) who have multiple co-morbidities. PIP implies that more drugs are prescribed than is necessary, having unacceptable side effects, wrong dosages, and/or having harmful interactions.[1]

Deprescribing is defined as the process of withdrawal of PIPs with the goal of reducing pill burden, and improving clinical outcomes.[2] There is lack of evidence about whether effective deprescribing is cost-effective.[3] There are various deprescribing tools including the STOPP criteria, STOPPFrail Beers Criteria and Bruyère Research Institute Deprescribing Guidelines.[4-7]

This survey was carried out in order to obtain more insight into the practice and perspectives of deprescribing among medical doctors working in the Department of Geriatric Medicine in Malta.

METHODOLOGY

Approval was obtained from the research committees of Karin Grech Hospital (KGH) and Saint Vincent de Paul long term care facility (SVP). An electronic survey was distributed to all second year foundation doctors, basic specialist trainees, higher specialist trainees, resident specialists, general practitioners and consultants working within the Department of Geriatric Medicine between August and September 2021. It included doctors working at KGH, SVP, orthogeriatric section at Mater Dei Hospital (MDH) and community. A total of 63 doctors were invited to participate. A second reminder was sent via electronic mail the following week.

RESULTS

Thirty-four out of 63 doctors accepted the invitation resulting in a response rate of 54%. All the results obtained were anonymous.

Table 1 The number of respondents from each professional group

Grade	n	Number of responses	% response
Consultant	18	14	78%
Resident specialist General Practitioner	7	4	57%
Higher Specialist Trainee	14	7	50%
Basic Specialist Trainee	5	2	40%
Foundation doctor	19	7	37%

Table 1 shows how the majority of respondents were consultants (41%).

A total of 53% of the respondents were male whilst 41% were female. A total of 6% of the participants preferred not to reveal their gender. (Table 2)

The age of the respondents is demonstrated in Table 3.

Figure 1 shows the different workplaces of the respondents. Several respondents are employed across different work settings within the geriatric department as shown below. A total of 7 respondents work both in KGH and in SVP.

Figure 2 shows how the majority of the respondents (52.9%) deprescribe at every opportunity. None of the respondents claimed that they never deprescribe.

Figure 3 shows how psychiatric medications including benzodiazepines and antipsychotics are commonly deprescribed. Around 85% (29) of the participants mentioned benzodiazepines as commonly deprescribed while 59% (20) of the respondents quoted antipsychotics as well as medications with anticholinergic properties, pro re nata basis (PRN) medications and antihypertensives as commonly deprescribed as well. Antidepressants, treatment for

Table 2 *The gender of the respondents*

Gender	n
Male	18
Female	14
Prefer not to say	2

Table 3 *Age groups of the respondents*

Age range	n
21 - 30	14
31 - 40	4
41 - 50	4
51 - 60	11
61 - 70	1

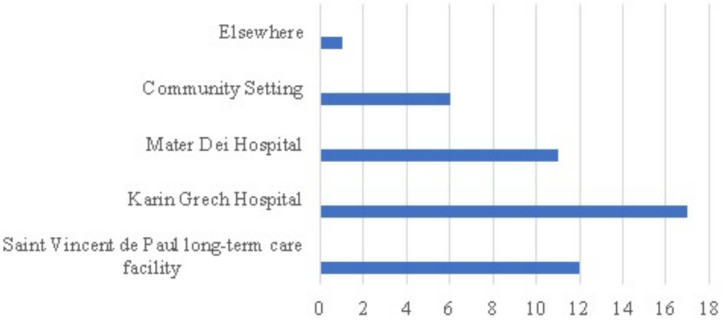

Figure 1 *Workplaces of the respondents*

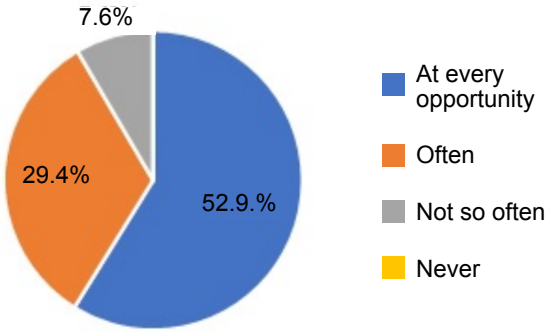

Figure 2 *Reported frequency of deprescribing attempts*

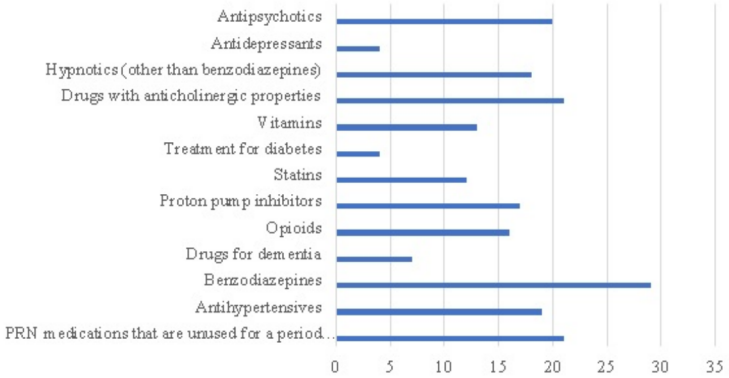

Figure 3 *Commonly deprescribed drugs*

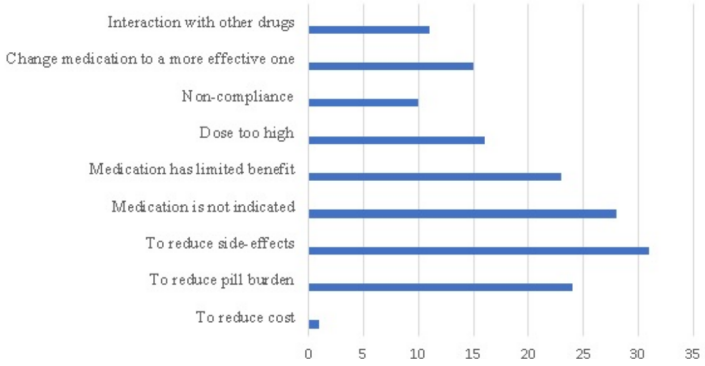

Figure 4 *Reasons for deprescribing*

diabetes and drugs for dementia were the least commonly deprescribed drug classes locally.

Figure 4 reveals some of the most common reasons for deprescribing, including to reduce side effects, when the medication is no longer indicated and to reduce pill burden. Cost of drugs seems to be the least common reason for deprescribing possibly reflecting the local system for free medications.

Figure 5 shows some of the barriers to deprescribing. A total of 8% of the participants do not understand the reasoning behind deprescribing. Not knowing why the medication was introduced, resistance from the patient or being prescribed by someone else are common barriers in Malta.

Figure 6 indicates how clinical pharmacists and guidelines about deprescribing may encourage doctors to deprescribe.

Figure 7 demonstrates how having a clinical pharmacist on the ward, having more deprescribing tools and teaching are keys for improvement. Of note clinically is that at present clinical pharmacists are only present at KGH.

Several comments from individual respondents were submitted in the survey. These are included in **Table 4.**

DISCUSSION

The survey had a very good response rate considering that 54% answered the questionnaire. This is better than quoted response rates in a study about deprescribing among geriatricians where only 26% answered.[8]

In this survey all the respondents answered that they all attempt to deprescribe at some point, with more than half trying to do so at every opportunity available and 29% do so often. There were, however, around 8% of respondents who did not do so regularly. The most commonly deprescribed drugs are benzodiazepines, drugs with anticholinergic properties, antipsychotics as well as medications which are prescribed on a PRN basis and rarely administered. Antihypertensives are the most deprescribed medication other than psychiatric medications.

The main reasons for deprescribing were to reduce the side-effect profile of medications, when the medication is not indicated, to reduce the medication burden and if the medication has limited benefits. This was also reflected in the study by Goyal et al carried out in 2018.[8]

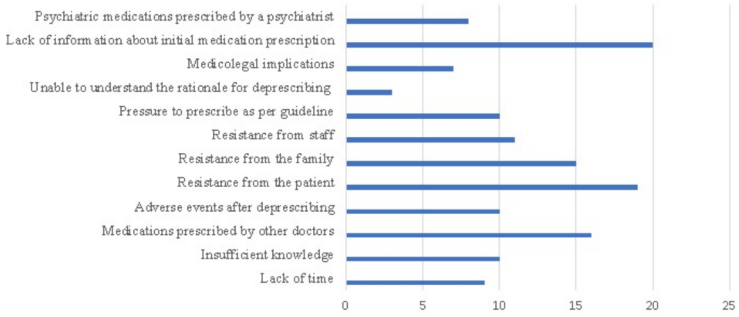

Figure 5 *Barriers for deprescribing*

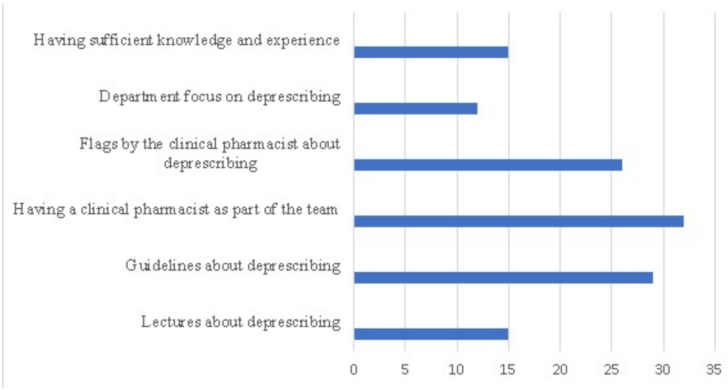

Figure 6 *Factors that encourage deprescribing*

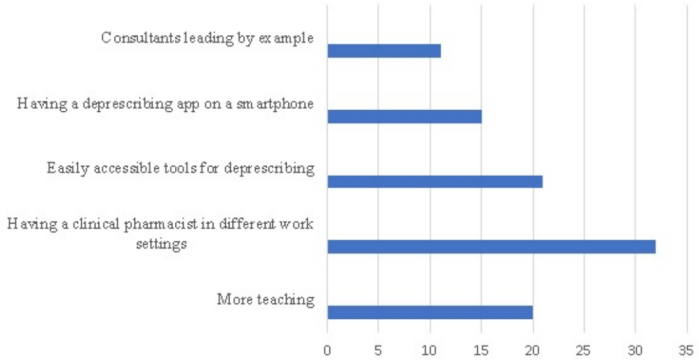

Figure 7 *Suggestions for improvement*

The most commonly encountered barriers to deprescribing were a lack of information of why and when the medication was prescribed and resistance from the patient to stop medications. The first two factors mentioned here were reflected in a study carried out in Singapore.[9] These scenarios are very common within the Maltese geriatric setting. Patients are referred to the geriatric team after being under the care of other professionals both in the acute setting as well as in primary health care and medical documentation may not always be available or up-to-date. Patients may not always remember the circumstances as to when and why certain medications were prescribed in the first place. Some patients may not be under the care of a general practitioner but rather resort to primary health care in times of need only, so geriatricians are very often in a difficult position where the patient has different medications prescribed by different doctors and an unclear drug history. Lack of time was not commonly quoted in the Maltese study, while this was one of the main barriers quoted by Nadarajan et al.[9]

The respondents of this survey feel that the role of the clinical pharmacist within the team is vital and important for deprescribing. This was also reflected in a study carried out by Kuntz et al.[10] The latter study also highlighted the importance of patient education, which was not highlighted in this study. The presence of a clinical pharmacist on the ward, the pharmacist role within the team to facilitate deprescribing and the availability of guidelines regarding deprescribing have proven crucial for the respondents.

The areas for improvement for the deprescribing efforts within the Maltese geriatric department according to the respondents include the presence of the clinical pharmacist in different work settings within the local geriatric field, easily available tools for deprescribing and more teaching. Several respondents of the survey also noted the importance of having senior doctors of the department leading

Table 4 *Comments*

Comments
The need to study the pharmacology of the drugs that the prescriber frequently prescribes.
The current trend of overprescribing, sometimes prescribing medications to counter the side-effects of other drugs.
The presence of a clinical pharmacist in different work settings, including in long- term care for guidance to doctors at both prescribing and deprescribing would be greatly beneficial.
To perform deprescribing during ward rounds of stable cases as deprescribing in acute scenarios may be impractical.
Drugs are not candy.

by example and the availability of deprescribing electronic applications on smart phones.

A deprescribing guideline is currently being adapted for use in Malta and will serve the purpose of having a readily available tool for medical professionals. Other online tools such as smart phone apps may be developed in the future, allowing a more widespread availability of updated resources regarding deprescribing across different work settings.

CONCLUSION

The results obtained from this survey are very important and shed light on the practices amongst doctors working within the Department of Geriatric Medicine in Malta. This is the first national survey which is crucial for the development of further quality improvement in Maltese practice. Whilst it is very encouraging that the vast majority of doctors within the department try to deprescribe drugs frequently, doctors to this day still face daily challenges in doing so during every clinical encounter.

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