Poster ID:
FHSMPP26/157

Correlation of Deprescribing with Specific-Necessity and Concern, General Overuse and Harm and Level of Medication Adherence Among Elderly at the Geriatric Clinic of a Public Hospital in Malaysia

Kamaliah Md Saman[1], Safirah Masturina Zulkipli[1], Nur Athiqah Nazira Rosli[1], Ungku Ameen Ungku Mohd Zam[2], Hakima Makhtar[2], Mathumalar Loganathan[1]

1 Faculty of Pharmacy, Universiti Teknologi MARA (UiTM), Selangor Branch, 42300 Bandar Puncak Alam, Selangor, Malaysia

2 Geriatric Clinic, Hospital Tengku Ampuan Rahimah, 41200 Klang, Selangor, Malaysia

INTRODUCTION

Deprescribing is defined as the process of withdrawal of unnecessary drugs, supervised by a healthcare professional (1). Elderly are prone to polypharmacy due to multiple diseases. Globally, 10% of drugs used by elderly have the potential to cause harm than benefits (2). Time-consuming nature, low confidence in deprescribing knowledge, insufficient patient details, avoiding negative relationship were among the challenges faced by the physicians (3). Eventhough studies showed that deprescribing is safe, yet deprescribing is minimal because prescribers and patients often find it complicated to decrease or discontinue medications.

We hypothesised that patients' beliefs can affect deprescribing and hence medication default. Hence we conducted this study with the aim to explore the prevalence, types and reasons of deprescribing and its correlation with patients beliefs in the specific-necessity and specific concern, general overuse and general harm and their medication adherence level.

MATERIALS AND METHODS

This was a cross-sectional study involving purposive sampling of 45 geriatric respondents who attended the geriatric clinic of a government tertiary hospital between October to Disember 2020 . The patients were required to answer the Belief in Medication Questionnaire (BMQ) developed by Horne et al., in 1999 which contained 18 items and the validated Medication Safety Alert Tool For the Elderly (MeSATE) which contained 17 items and four domains; disease, socioeconomic, treatment and psychosocial, for measuring medication adherence (MA) risk levels.

The inclusion criterias were elderly patients aged 65 years and above, taking at least five medications for their chronic diseases and consented to participate in this study. Patients who do not understand Malay or English language, diagnosed advanced dementia, Alzheimer's disease, major depression, psychosis and were terminally illed/comatosed were excluded.

We subjected the data collected for descriptive (demographics and prevalence), and correlative analysis using statistical software; SPSS version 25.

RESULTS

Table 1: Demographics of respondents (n = 45)

Variables		Frequency
Gender	Male Female	21 (46.7) 24 (53.3)
Age group (year	60-69 70-79 80-89 90-99	11 (24.4) 21 (46.7) 11 (24.4) 2 (4.4)
Race	Malay Chinese Indian	19 (42.2) 9 (20.0) 17 (37.8)
Marital Status	Not married Married Divorced/Widowed	1 (2.2) 43(95.6) 1 (2.2)
Source of income	Family support Pension Allowance Insurance Others	26 (57.8) 6 (13.3) 5 (11.1) 4 (8.9) 4 (8.9)
Education level	None Primary Secondary Tertiary	2 (4.4) 14 (31.1) 20 (44.4) 9 (20.0)
No of current medication	Less than 5 5 or more	4 (8.9) 41 (91.1)

Table 2 Deprescribing prevalence, types and reasons

Variables		Frequency
Deprescribing status	Yes	29 (64.4)
	No	16 (35.6)
Type of deprescribing	Stop medication	19 (46.3)
	Decrease dose	18 (43.9)
	Change to another medication	4 (9.8)
Reasons for deprescribing	Medication risk outweighs potential benefit	16 (31.4)
	Potentially inappropriate medication (PIM)	4 (7.8)
	Medication is not necessary	18 (15.7)
	Medication is ineffective	1 (2.0)
	Medication is burdensome and difficult to adhere to	3 (5.9)
	Medication does not align with patient wishes	3 (5.9)
	Medication contributes to adverse effects	16 (31.4)

ACKNOWLEDGEMENT

The authors would like to thank head of medical outpatient departments, specifically Dr Eswary a/p Mageswaran, staffs and pharmacists of geriatric clinic, HTAR, for the support rendered to conduct this study at their premise.

RESULTS

Table 3 Correlation of deprescribing with belief on medicine and medication non-adherence level

Variable	Pearson (Biseral Point) Correlation coefficient, r_{bp} (p value)
Specific-necessity	0.180 (p = 0.237)
Specific-concern	0.082 (p = 0.594)
General-overuse	0.311 (p = 0.037)
General-harm	0.046 (p = 0.766)
Non-adherence level Pearson Chi Square (X2)(df)	0.257 (1) (p = 0.427)

DISCUSSION

Table 1 showed that that stopping medication and decrease in dose were the most common types of deprescribing. The major reasons were "risk outweighs benefit", and "adverse effects".

Table 2 showed that more than half of the respondents (64.4%) were deprescribed their medication.

Table 3 showed Pearson Chi Square Test result shows no correlation between deprescribing with medication adherence level (p = 0.427).

Patient's belief in specific-necessity (p = 0.237, specific-concern (p = 0.594) and general-harm (p = 0.766), were NOT significantly correlated with deprescribing status.

Only specific-overuse showed weak correlation (p = 0.037) with deprescribing status.

CONCLUSION

This study established that prescribers should priorly based deprescribing on clinical judgement and meanwhile not disregard patients beliefs and preference.

REFERENCES

1. Korenvain C, MacKeigan LD, Dainty KN, Guilcher SJT, McCarthy LM. Exploring deprescribing opportunities for community pharmacists using the Behaviour Change Wheel. Res Soc Adm Pharm. 2020;16(12):1746-53.
2. Chen LL, Tangiisuran B, Shafie AA, Hassali MAA. Evaluation of potentially inappropriate medications among older residents of Malaysian nursing homes. Int J Clin Pharm. 2012 Aug;34(4):596-603.
3. Linda ML. Deprescribing : An Approach to Reducing. TJNP J Nurse Pract [Internet]. 2014;10(2):136-9. Available from: http://dx.doi.org/10.1016/j.nurpra.2013.09.010

For any queries or suggestions, contact corresponding author at kamaliah@uitm.edu.my