

Project Title

Management of Unused Medications in Primary Care Patients – Challenges and Opportunities

Project Lead and Members

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Organisation(s) Involved

SingHealth Polyclinics

Healthcare Family Group Involved in this Project

Pharmacy

Project Period

Start date: Jan 2020

Aims

To identify the reasons for medication wastage by the public, determine their medication disposal practice, and to establish implementation approaches to reduce their medication wastage

Background

See poster appended / below

Methods

See poster appended / below

Results

See poster appended / below

Lessons Learnt

See poster appended / below

Conclusion

See poster appended / below

Additional Information

Singapore Healthcare Management (SHM) Conference 2021 – Shortlisted Project
(Patient Experience Category)

Project Category

Applied/ Translational Research, Quantitative Research, Care Continuum, Primary
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Keywords

Medication Wastage, Survey

Name and Email of Project Contact Person(s)

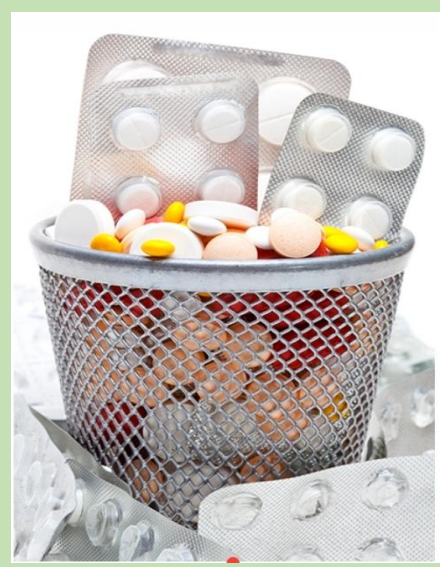
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Background

A study has found that 3-7% of the medications dispensed to patients in the United States (US) were left unused¹. If patients disposed of these medications improperly, this could potentially lead to the development of bacterial resistance to the medications, particularly antibiotics, or physical harm to the people who handle these unused medications.



Improper disposal of medications could also negatively impact on Singapore which depends on recycling of water to supply up to about 40% of the nation's drinking water needs. Currently, there is a lack of data to know if the general population of Singapore are aware of how to dispose their medications properly and the reasons for medication wastage by the public in Singapore.

Aims

This study aimed to identify the reasons for medication wastage by the public, determine their medication disposal practice, and to establish implementation approaches to reduce their medication wastage.

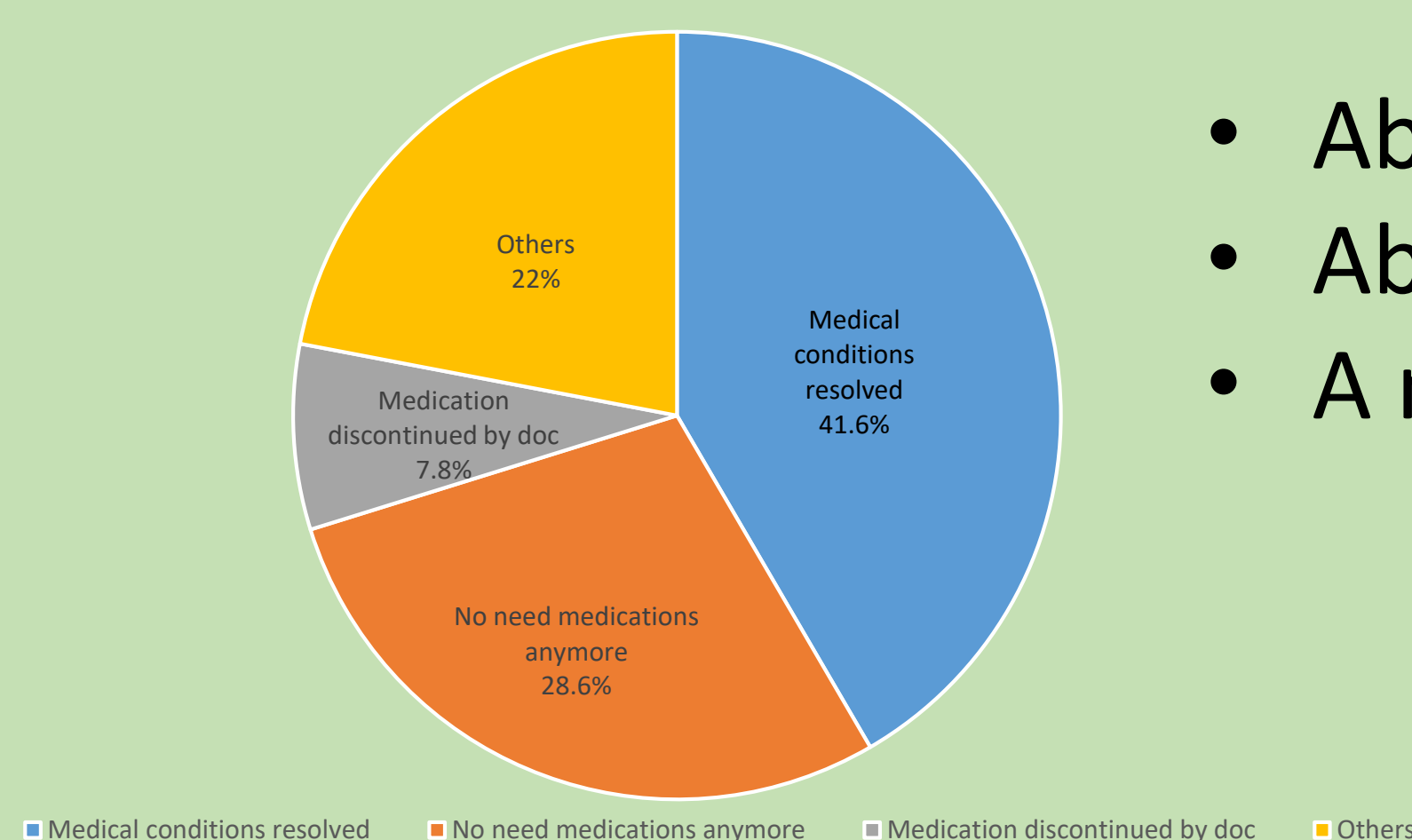
Methodology

This prospective cross-sectional study was conducted in January 2020 at a polyclinic in Singapore. Caregivers or patients who visited the polyclinic and consented to participate in the research completed a hardcopy 4-part survey form conducted face-to-face by trained study team members.

Results

- A total of 471 respondents with a mean age of 45.6±18.9 yrs completed the survey.
- 386 (81.95%) respondents usually collect their medications from the public institutions, 73 (15.5%) from the private GPs or institutions and 12 (2.55%) from both.
- The amount of medications that a majority of the respondents (81.3%) would collect at the pharmacy was based on what the doctors prescribed.
- Almost two-third of the respondents had unused medications at home.

Reasons For Having Unused Medications

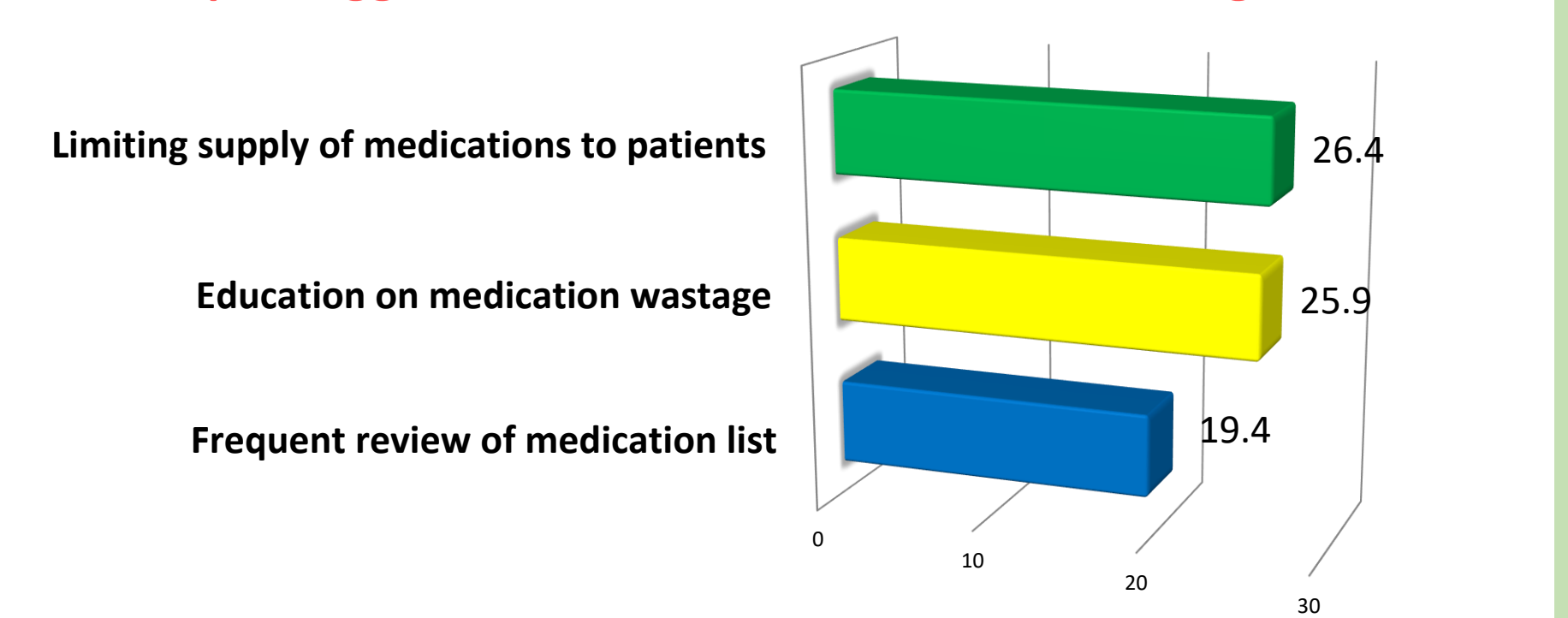


- About 7% of respondents were aware of the availability of medication disposal guidelines.
- About one-third of them never dispose of their unused medications.
- A majority of respondents (60.8%) would discard their unused medications into the trash bin, the rest dispose them in the sink/ toilet, or bring back to the medical clinics or pharmacies to discard.

- About three-quarters of respondents felt that there was a need for medication disposal points to be set up in Singapore.
- They most preferred the disposal points to be set up in the polyclinics (56.8%), followed by the retail pharmacies (20.2%) and hospitals (14.5%).

- Less than half (45.2%) of the respondents would consider donating unused medications as a viable option to reduce medication wastage.
- Amongst these patients, they felt the medications would benefit those who were unable to afford them (58.1%) while some did not want the medications to go to waste as they were still in usable condition (41.9%).

Top 3 Suggestions To Reduce Medication Wastage



Conclusion

This study shows there are opportunities to better manage medication wastage in Singapore. Public education and limiting medication supply to patients are potential solutions to resolve medication wastage issue amongst primary care patients.

Reference

1. Tchen J, Vaillancourt R, Pouliot (2013), 'A Wasted medications, wasted resource', Can Pharm J, 146(4): 181-182, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3734908/>, accessed on 15 Jan 2021