



A SURVEY OF DISPOSAL PRACTICES OF UNUSED MEDICATIONS IN GENERAL PUBLIC AND HEALTH PROMOTION HOSPITALS, AND MANAGEMENT OF MEDICATIONS DISCARDED FROM HOUSEHOLD BY THE MUNICIPALITIES



K. KONGCHAT, N. SEANGON, N. JANTRAKOOL, J. PONGWECHARAK
 DIVISION OF PHARMACEUTICAL CARE, FACULTY OF PHARMACY,
 THAMMASAT UNIVERSITY (RANGSIT CENTER), PATHUMTHANI PROVINCE, THAILAND

email: juraporn@tu.ac.th

Background & Importance



- Inappropriate disposing unwanted medications posed potential environmental hazards and health risks.
- In many parts of the world the problem remained prevalent.
- In Thailand, the management guideline intended for public was available but
 - a few data on the general public's actual handling of unused medications and
 - no studies investigating the relevant practices of health promotion hospitals (HPHs) and municipalities being responsible for community waste management.

Aim & objectives

- To identify disposal practices of unused medications by general public, HPHs and municipalities
- To identify factors influencing proper disposal practices of unused medications in general public

Materials & Methods



Setting: one province (Pathumtani), greater BKK area

Populations:



Data collection:

- Questionnaires via QR code for general public and health promotion hospitals
- Semistructure interview for municipality representatives

Data analysis:

Descriptive statistics and multiple logistic regression

Results 1



General public's disposal practices of unused medications



Results 2



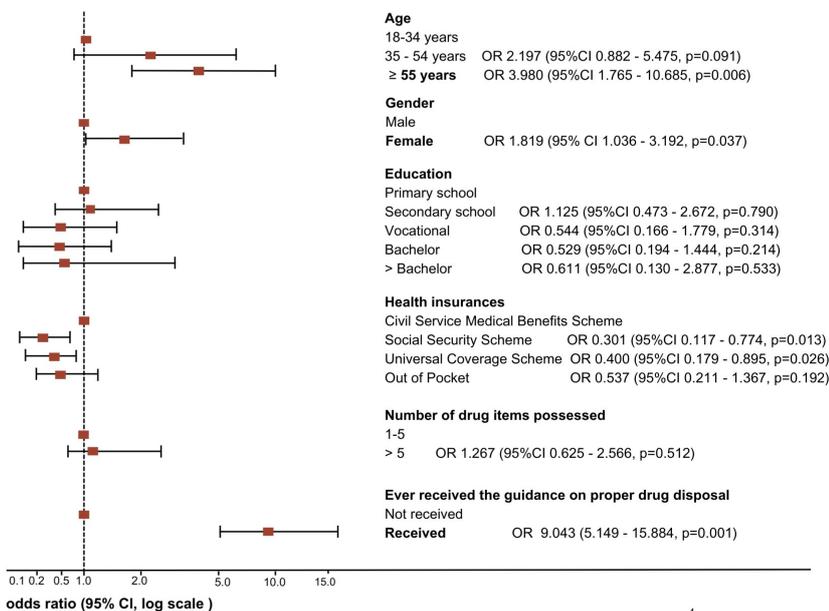
Municipalities



- No specific systems for management of medications discarded from household.
- Relied on health promotion hospitals which collected medications returned by people

Results 3

Factors influencing appropriate drug disposal practices among general public



Conclusion & relevance

- Most general public discarded their unused medications inappropriately.
- Older age group, female, and having received the disposal guideline were significant factors influencing proper disposal practices.
- Majority of health promotion hospitals had proper management practices.
- Municipalities had no formal policies addressing the issues but relied on health promotion hospitals.
- For the general public, a strategy to increase the access to the disposal guideline should be implemented especially for male and younger population.
- Municipalities should take a more proactive and rigorous approach to managing pharmaceutical household waste. This includes providing accessible facilities where residents can return unwanted medicines for appropriate downstream management.
- Returning the medications to hospitals including HPHs is strongly encouraged.

References

- Public Handbook: Guidelines for the Management of Residual Pharmaceuticals in the Community, 2012
- Srijuntrapun P, Maluangnon K. PLOS ONE. 2024 Aug 27;19(8):e0309286.
- Arkaravichien W. et. al, Environment Asia, 2014, Vol. 7 (1), pp 13-18.
- Aakriti Aryal. et. al, Journal of Applied Pharmaceutical Science, April, 2023 Vol. 13(04), pp 045-052.

