



香港藥學會
The Pharmaceutical Society of Hong
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Press Release

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The Pharmaceutical Society and HKU unveil the situation of drug wastage among the elderly living at old age homes in Hong Kong

The concept of medicines waste has not been comprehensively studied in Hong Kong. However, the overseas experiences suggest that it can place considerable burden on the health care system through a waste of resources and lead to economic and environmental concerns.

In view of this, the Pharmaceutical Society of Hong Kong commissioned the University of Hong Kong to conduct a descriptive study measuring the quantities of obsolete drugs (drugs no longer required by patients) from old aged homes in a delegated community pharmacy which serves 3,020 senior residents in 2012. It is found that from September 2012 to January 2013, the drug wastes amounts to about 170,000 unit items of oral solid drugs, 80 litres of liquid drug and 5 kilograms external preparation drugs which is estimated to value at HK\$96,924. It is projected that a substantial monetary loss at HK\$5.8 million is generated annually from senior citizens living in old aged homes, without calculating the many more wastage generated from the elderly living at homes.

Research result

The study finds that the scale of the medicine waste problem, especially the impact to the environment is substantial. It is estimated that 10 million of oral solid preparations, 4850 litres of oral liquid preparations, 320 kilograms of creams, ointments, and other external preparations will require disposal annually for all elderly living at old aged homes in Hong Kong. The total extrapolated cost was HK\$5.8 million. Wastes could be reduced if the long prescription duration is cut short, like from 6 month to a month, simply by issuing repeated prescriptions instead and the supply logistics could be effectively managed if dispensing service is provided by community pharmacies using Monitored Dosage Systems.

While these findings are only extrapolated for the elderly living in old aged homes, the amount of drug wastage for those living at home remains unknown. According to Social Welfare Department, there were approximately two million of elderly aged 60 or above at 2011, of whom, 60,000 of them lived in old aged homes as of March 2012, and this only accounts for 2.6% of all the elderly in Hong Kong. If it is to assume that the amount of drugs dispensed are the same among all elderly in Hong Kong, the amount of drug wastes could even be significantly greater.

“The impact of such pharmaceutical wastes on the environment needs further investigation, however this huge volume of disposed drugs undoubtedly creates a burden for the environment,” Professor Ian Wong Chi-kei, Head of Department of Pharmacology and Pharmacy of The University of Hong Kong Li Ka Shing Faculty of Medicine, commented on

the result.

As current practice for disposal of drug wastes, staff at old aged homes would contact the authorized chemical waste collectors to collect the waste. The collectors would then dispose the drugs by incineration. In contrast, there may potentially be inappropriate disposal methods in the community. The potential impact of improper disposal of medications should not be overlooked.

Mrs Mary Cheng, President of the Pharmaceutical Society of Hong Kong stated, “Six-months (the mean prescription duration from public health providers) is, by any standard in terms of quality and safety of patient care, much too long for a prescription. Any changes to treatment during this period will lead to a large amount of drug wastage, not to mention the potential confusion caused to the patients when these remain in the hands of the patients.”

Mrs Cheng recommends the deployment of repeat prescriptions scheme, allowing patients with stable clinical conditions to obtain drugs on monthly basis from community pharmacies after the first attendance at health institution(s), such as hospital and out-patient clinics which could be a much improved way in meeting the ongoing needs of the patients. By outsourcing the dispensing and supply of repeat prescriptions to community pharmacies, it could also relieve the heavy burden of public health care sector. The community pharmacists can monitor the conditions of the patients more frequently and provide them with appropriate drug advice and better monitoring of drug compliance.

“There is also a lack of understanding for the collection of drug wastes from the public for disposal” Professor Wong said. He suggested that the government should collaborate with other health care institutions to establish an integrated mechanism for the collection and disposal of drug wastes. He also recommended having a system in place for the return of drugs no longer required by the patient. That will help to reduce the damages caused by disposed medicines to our environment.

The analysis of this study was conducted by the Centre for Safe Medication Practice and Research of Department of Pharmacology and Pharmacy, The University of Hong Kong Li Ka Shing Faculty of Medicine.

Media enquiries

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