

# Study on adverse reactions of Type A drugs in the elderly in a teaching hospital in northern Taiwan

Ting-Yu Chang-Tsai<sup>1</sup>, Cheng Suzu<sup>2</sup>, Ling-Mei Lee<sup>3</sup>, Jiing-Chyuan Luo<sup>3</sup>, Chin-Feng Lin<sup>3</sup>

1. Department of Pharmacy, Keelung Hospital, Ministry of Health and Welfare

2. Department of Nursing, Keelung Hospital, Ministry of Health and Welfare

3. Keelung Hospital, Ministry of Health and Welfare

## Introduction

Taiwanese people over 65 account for 16.07% of the total population. According to the WHO definition, Taiwan is an "aged society". The elderly have weaker physiological functions and suffer more chronic diseases, which may cause pharmacokinetics to be different from those of young people, and there are problems with multiple medications. Type A adverse reactions caused by drugs are more likely to occur than young people. It will increase medical waste or increase the patient's risk of illness.

## Method

This study is based on a case study of type A adverse drug reactions in elderly people visiting our hospital during the period from 2018 to 2020 in our hospital (Exclude non-ADR, patients who report allergies in the past, and adverse reactions caused by TB drugs). Analyze which drugs are the most common Type A adverse reactions and symptoms in the elderly?

## Results

The study sorted out a total of 272 ADR cases, of which the elderly's ADR accounted for 40.4% (110 cases), including 4 severe ADRs. Among the elderly's ADRs, Type A accounted for 46.3%. Further analysis revealed that the top three were Cardiovascular drugs (12 cases), psychiatric-related drugs (9 cases), and blood circulation drugs (7 cases). In terms of symptoms, neurological toxicity is the most common, followed by cardiovascular toxicity and gastrointestinal toxicity.

## Conclusions

Therefore, it is recommended to pay attention to the initial dose of the drug, the dose adjustment of liver and kidney function, and the drug problems that may be caused by multiple drugs. If necessary, the patient can consult a nutritionist to make daily diet adjustments, which has reached the goal of Holistic Health Care.

## Relevance to HPH

This study can remind medical colleagues that more attention should be paid to the safety of medication for the elderly, Especially in cardiovascular and psychiatric related drugs, and the management of usage and dosage should be paid to achieve the goal of HPH.