

USE OF HIGH ALERT CHINESE MEDICATIONS IN TAIWAN: A RETROSPECTIVE POPULATION-BASED COHORT STUDY

Lin HW¹, Tsai HH¹, Tsai CL², Hsieh YW², Lin SS², Lin WL², Jan SS², Tu CY², Chang KL²

¹China Medical University, Taichung, Taiwan, ²China Medical University Hospital, Taichung, Taiwan

OBJECTIVES: While the utilization of National Health Insurance (NHI) covered Chinese medications (CMs) increased for the past one decade, this study aimed to evaluate the use of high alert Chinese Medications (HACMs) and its contributing factors in Taiwan. **METHODS:** The six potential HACMs (Màn Tuó Luó, Qǐn Niú Zǐ, Chūn Wǔ, Tǐn Nán Xīng, Fù Zǐ, Bàn Xià) were selected upon the evidence-based reviews and expert discussions. The retrospective cohort study was conducted using two million random samples of Taiwan National Health Insurance Research Databases (NHIRDs). The number of prescriptions, average durations, and average doses for these six HACMs across different levels of hospitals (clinics, district hospitals, regional hospitals, medical centers) were compared using descriptive statistics and ANOVA. The inferential analyses using Chi-square, t and logistic regression tests were performed to explore the factors associated with the use of specified HACMs. **RESULTS:** Of 420,637 patients ever prescribed with CMs in 2007, 9.2% were ever prescribed with the six specified potential HACMs. While the average duration was 16.6±23.6 days for all HACM users, the most common used HACMs were Bàn Xià and Fù Zǐ. The traditional Chinese Medicine (TCM) clinics prescribed the majority of HACMs (90.8%) and their average doses were statistically significant higher than that in hospital settings. Those who were female, aged 65-74 year-old, middle income, with 10 to 39 more items of outpatient prescribed medications, with severe hepatic disorders and located in north region of Taiwan tended to use these HACMs, while those located in central region of Taiwan, made outpatient visits more than 2 times and more than 40 items of prescribed medications, and with chronic pulmonary diseases were less likely to use these HCAMs. **CONCLUSIONS:** While the TCM clinics tended to prescribed HACMs, more attention should be made toward them as well as those who possessed specific characteristics.