

## Trauma 2018: A cross-sectional survey of factors related to medication non-adherence among elderly patients with diabetes in western China - Min Tan - Sichuan University, China

**Min Tan**

*Sichuan University, China*

**Background:** Medication non-adherence and risk factors related to diabetic patients have been investigated widely in prior studies all over the world. However, those studies mainly focused on adults and conducted in developed countries and high-income cities. It is necessary to find information about the prevalence and correlates of medication non-adherence among older patients with diabetes mellitus in western China in order to achieve optimal glycemic control and prevent diabetes-related complications.

**Method and materials:** A cross-sectional descriptive study was conducted in 1559 older diabetic adults. Our study used a multistage sampling method and conducted in 21 community health centers in 7 cities of western China located in Sichuan Province, Chongqing Municipality, Xinjiang Uygur Autonomous Region, Guizhou Province, Gansu Province, Shanxi Province and Qinghai Province. The variables investigated in the study were demographic, clinical characteristics and medication adherence. Descriptive and Binary logistic regression analysis were performed to determine factors that related to medication non-adherence.

**Results:** The results illustrated that 75.5% of participants were medication adherents and that 24.5% of patients were non-adherents. About 23% of elderly patients suffered from at least four chronic diseases and 11% of patients took more than four prescribed medications for treatment. Multivariate logistic regression demonstrated that number of comorbidity (OR=2.194, 95%CI=1.003, 4.803), number of oral medications (OR=2.088,

95%CI=1.198, 3.638), household income (OR=0.452, 95%CI =0.312, 0.656) and marital status (OR=0.684, 95%CI =0.505, 0.927) were associated with medication non-adherence.

**Conclusion:** Medication non-adherence among elderly patients with diabetes mellitus is a common and vital concern in western China. More attention to geriatric patients with high risk for medication non-adherence is necessary. And strategies should be designed to improve medication adherence especially in those who suffered from comorbidities, taken poly-pharmacy for treatment, had lower household income and married patients.

**Recent Publications:** 1. Xu Y, Wang L (2013) Prevalence and control of diabetes in Chinese adults. *Jama* 310:948-59. 2. Manan MM, Husin AR (2014) Interplay between Oral Hypoglycemic Medication Adherence and Quality of Life among Elderly Type 2 Diabetes Mellitus Patients. *Journal of clinical and diagnostic research* 8:Jc05-9. 3. Wang HH, Wang JJ (2014) Epidemiology of multi-morbidity in China and implications for the healthcare system: cross-sectional survey among 162,464 community household residents in southern China. *BMC medicine* 12:188. 4. Jin H, Kim Y (2016) Factors affecting medication adherence in elderly people. *Patient preference and adherence* 10:2117-25. 5. Li Z, Zhao YP (2016) [The Association Between Multimorbidity and Medication Non-Adherence in Elderly With Hypertension in Western China]. *Hu li za zhi The journal of nursing* 63:65-75