# **Evaluation of Drug Adherence and Its Effective Factors in the Elderly**

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## **ABSTRACT**

**Introduction:** In the elderly, health status undergoes significant changes, leading to an increased likelihood of contracting diseases and developing disabilities over time. Aging can precisely change the pharmacokinetic and pharmacodynamic process of drugs. Due to their unique condition, older adults are more exposed to the risk of improper use of medicine and its complications. The aging population is increasing, and without proper planning, it can lead to significant challenges in the 21<sup>st</sup> century. The present study aimed to assess drug adherence and related factors in the old people.

**Methods and Materials:** This cross-sectional descriptive study was conducted in four months. By referring to the Asadabadi polyclinic, the available elderly population was examined. Data collection tools included a demographic information questionnaire and the Morisky questionnaire. The reliability of this tool was reported to be 0.68, with Cronbach's alpha method. Patients who took five or more drugs were considered polypharmacy. Fixed and monthly income was also estimated. After completing the questionnaires, the data were analyzed using SPSS software. Independentt-test, chi-square, and Kendall's tau-b correlation was used to analyze the data.

**Results:** Based on the criteria of the Morisky questionnaire, among the participants, 96, 13, and 1 had poor, moderate, and high medication adherence, respectively. There was no significant correlation between age and medication adherence score and between the medication compliance group and gender. All working people had poor medication compliance. The medication adherence score for unemployed individuals was 1.11 points higher than that of employed individuals, which was statistically significant. All he elderly whose spouses died had poor medication adherence. The average medication adherence score in people with high school literacy levels was slightly higher than in other educational groups. However, no statistical difference was found between the groups' average score of medication adherence. However, a positive and weak correlation was observed between the number of drugs used and the drug compliance score. Although medication compliance among the elderly was mostly low or average, in the data test, there was a significant relationship between the presence or absence of polypharmacy and the quality of medication compliance among the elderly.

**Conclusion and Discussion:** This study investigated the level of medication adherence and its related factors. The prevalence of polypharmacy among elderly patients was high, and a significant percentage of this population exhibited poor medication adherence. Based on these findings, there is essential to provide proper education to both caregivers and patients to improve medication adherence rate.

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