Introduction: The objectives of the study were to evaluate potentially inappropriate drug use and medical non-adherence and to determine the risk factors for potentially inappropriate drug use and medical non-adherence in the elderly dwelling in a community health center service area.

Materials and Method: The cross-sectional study included all individuals aged 65 years and older (n=687) dwelling in the area of a community health center in Isparta, Turkey. The dependent variables of the study were potentially inappropriate drug use and medical non-adherence. The structured questionnaire, comprising both dependent and independent variables, was administered to elderly people by conducting face-to-face interviews at home. Chi-square, independent samples t-test, and logistic regression were used for data analysis.

Results: Among the elderly using at least one drug per day, 17.6% were using at least one potentially inappropriate medication. Non-steroidal anti-inflammatory drugs and digoxin (in doses >0.125 mg/day) were the most common drugs that were used inappropriately. Medical non-adherence was determined in 40.6% of the elderly. The most common non-adherent behavior was "forgetting to take the medication." In the multivariate analysis, polymorbidity (p=0.001) and polypharmacy (p=0.016) were risk factors for potentially inappropriate drug use. The only risk factor for medical non-adherence was "not knowing most of the side effects of the drug" (p=0.018).

Conclusion: In this study, lower prevalence rates than those for most previous studies were found for both potentially inappropriate drug use and medical non-adherence. Since polymorbidity and polypharmacy were risk factors for potentially inappropriate drug use, physicians should be cautious in the selection of drugs for elderly patients with polymorbidity.