UNDERUSE OF INDICATED MEDICATIONS IN ELDERLY POPULATION

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Introduction: Treatment omissions are very important to value the quality of pharmacological therapy. In fact, *suboptimal prescribing* has been defined as overuse (polypharmacy), inappropriate prescribing (drug whose risks are greater than the benefits in older adults) and underuse of indicated medications. This omission of drug therapy may be linked to certain health outcomes in older patients, such as, for instance, the greater risk of cardiovascular events and mortality

Material and methods: A cross-sectional study was performed. The study population comprised 407 community-dwelling residents over the age of 65 on Lanzarote (Canary Islands, Spain), where there are 15 primary healthcare centres. Data recorded included socio-demographic characteristics, clinical status, functional and cognitive assessment, and complete information about drugs intake. Potential prescribing omissions (PPO) were evaluated according to Screening Tool to Alert doctors to Right Treatment (START).

Results: A total of 1844 medications were prescribed to the patients included in our study (median number per patient: 4.5 drugs; range: 0-14: polypharmacy prevalence: 45%). Omeprazole was the most frequently used drug followed by aspirin, furosemide and enalapril. START identified PPO in 170 (41.8%) subjects. Sixteen of the 22 START criteria (72.7%) were used to identify these PPO. The endocrine system accounted for over half the omissions (51.8%), followed by the cardiovascular system (26.7%), where the main omission was anticoagulants in the presence of chronic atrial fibrillation. Multiple logistic regression analysis revealed that the risk of PPO increased by 60% for every additional point in the Charlson Comorbidity Index (OR 1.60, 95% CI 1.35-1.91). Increasing numbers of medications also independently predicted the odds of at least one PPO according to START criteria (OR 2.19, 95% CI 1.36-3.55).

Conclusions: Our findings show high rates of polypharmacy and PPO, as well as a clear relationship between these two concepts.