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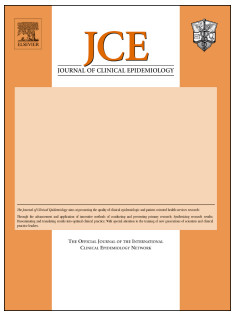

Polypharmacy, defined as taking five or more drugs, is inadequate in the cardiovascular setting

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Polypharmacy, defined as taking five or more drugs, is inadequate in the cardiovascular setting

ABSTRACT

Background: By how much polypharmacy (defined by number of drugss) differs from polyactive ingredient use (defined by the number of pharmacologically active ingredients) has not been assessed.

Objectives: to compare the extent of polypharmacy vs. polyactive ingredients among patients taking CV medicines.

Methods: Prospective, 10-year follow-up study conducted among 880 participants of the CoLaus study taking CV drugs at baseline. Polypharmacy was defined as the use of 5 or more CV medicines; polyactive ingredient use was defined as the use of 5 or more pharmacologically active CV ingredients.

Results: The prevalence of polypharmacy increased from 1.4% (0.7 - 2.4) [prevalence rate and (95% confidence interval)] at baseline to 11.9% (9.9 - 14.3) at follow-up, and the prevalence of polyactive ingredients increased from 2.4% (1.5 - 3.6) at baseline to almost 17.6% (15.2 - 20.3) at follow-up. The prevalence of combination drugs increased from 15.7% (13.3 - 18.3) at baseline to 25.9% (23 - 28.9) at follow-up, and the prevalence of 3-component combination use increased from 0.1% (0.0 - 0.6) at baseline to 2.3% (1.4 - 3.5)at follow-up. At baseline, 9/21 participants on polyactive ingredients were not considered as being on polypharmacy; at follow-up, the rate was 50/155 participants.

Conclusion: Among individuals taking CV drugs, polypharmacy as defined by the number of drugs underestimates the prevalence of individuals taking five or more pharmacologically active drugs. Polypharmacy should no longer be based on the number of drugs but on the number of pharmacologically active drugs.

Keywords: polypharmacy; epidemiology; prevalence; prospective study; pharmacoepidemiology