

Evaluation of Potential Drug- Drug Interactions in Elderly Patients in Palestine

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Abstract:

Background:

Drug-drug interactions (DDI) in elderly are a major cause of morbidity and mortality; this is not surprising considering that the number of medications taken by many elderly patients is high. Various studies have documented a direct correlation between number of medications and the risk of an adverse drug reaction. Because of the changes in metabolism that come with aging, some drugs stay in the body of an elderly person more than twice as long as in a younger counter part.

Methods:

The study was a cross-sectional study that was conducted in two health care centers in Nablus between August and December 2016. Data collection form was completed by interviewing a convenience sample of patients in addition to reviewing their medical records. A software program for drug interactions and a book were used for screening the potential DDIs. SPSS program was used for data analysis.

Results:

The study included 393 patients. During the study, a total of 1709 different medications were used by the patients. The patients were taking a minimum of 1 and a maximum of 10 medications. The mean number of medications prescribed was 4.34 ± 1.75 . Among patients, a total of 19 different OTC and self- medications and 21 different herbal medications were used. Among them, 348 (88.5%) patients had from 1 to 21 potential interactions. The mean number of interactions was 3.87 ± 3.70 . The most common interaction was between aspirin and amlodipine in 74 patients .There was a positive correlation (P value < 0.001, Pearson correlation = 0.741) between number of medications used by the patients and number of DDIs.

Conclusion:

The prevalence of drug- drug interactions among elderly patients is very common; it is highly expected and depends on the number of drugs used by the patients to treat co-morbid conditions. The use of medication in disease condition is necessary, but unnecessary load of drugs to patient

will increase the safety problem. Polypharmacy can be avoided by sharing treatment goals and plans. To improve drug safety in elderly population, appropriate prescribing might be more than simply reducing the number of prescribed drugs.