Tablet splitting of psychotropic drugs for patients with dementia: A pharmacoepidemiologic study in a Brazilian sample

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As of 2010, the global prevalence of dementia was estimated at approximately 35.6 million people, which corresponds to 5% to 7% of the world population. This figure is expected to double every 20 years, reaching 65.7 million in 2030 and 115.4 million by 2050. The objective of this study was to assess the frequency of tablet splitting of psychotropic drugs in a population of older adults with a diagnosis of dementia. This retrospective, cross-sectional study examined a sample of geriatric outpatients seen at a public center specializing in the care of elderly patients, a referral center for management of dementias in general, especially Alzheimer dementia to identify the frequency of tablet splitting of psychotropic drugs and the factors that may be involved in this practice. Comparison of the presence or absence of tablet splitting in relation to several parameters was assessed by means of P values; between group differences with an α < 5% (P < 0.005) were deemed significant. The presence of dementia was significantly associated with prescriptions implying to split tablets, which was found in 88 patients with dementia (34.9%) versus 90 patients without dementia (23.7%) (P=0.002). Among the 88 patients with dementia who split tablets, 64 (72.7%) split tablets of psychotropic drugs. When evaluating the effect of tablet splitting, in clinical practice or in further research, it is important to consider the effect of drug-drug interactions. Because these interactions can also change the bioavailability or pharmacologic activity of many drugs, it is important to observe whether the variations in effectiveness of split tablet are not the result of drug-drug interactions. Nearly onethird of patients who split psychotropic drug tablets in this study had interactions in their drug regimens that could change the effectiveness of the split medications (n=20 [31.2%]). The most significant interactions were those between acetylcholinesterase inhibitors and anticholinergics (such as antipsychotics), which are precisely the agents used to control behavioral disturbances in patients with dementia. These results indicate the importance of identifying the practice of tablet splitting, particularly when it involves psychotropic drugs, because it entails several factors that can reduce the efficacy of the drug therapy.

Biography
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