



Faculty of Pharmacy Airlangga University



Toward Harmonisation of Education and Practice of Asian Clinical Pharmacy

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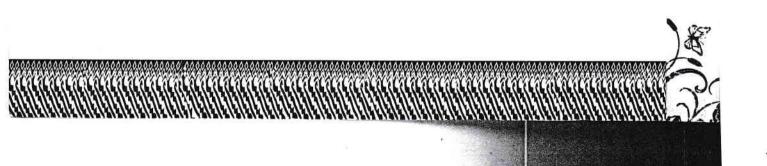
Arie Sulistyarini | Bambang Subakti Zulkarnain | Junaidi Khotib Suharjono | Yunita Nita

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DRUG RELATED PROBLEMS OF GERIATRIC INPATIENTS BASED ON BEERS CRITERIA IN A HOSPITAL OF SUKABUMI JANUARI-MARET 2007

<u>Dyah Aryani Perwitasari</u>, Woro Supadmi, Selvi Septiyanti Ahmad Dahlan University, Yogyakarta, Indonesia

Background: Elderly people have been developing change of pharmacokinetic and pharmacodynamic related with decrease of physiology. They are also experiencing multiple diseases and polypharmacy. These conditions will lead elderly patients to experience drug related problems. Drug related problems are any undesirable events experienced by the patient that involves or is suspected to involve drug therapy and actually or potentially interferes with a desired patient outcome. Beers criteria is used in many countries to asses the appropriateness used of drug in elderly patients. Previous studies have shown that Beers Criteria to be useful in decreasing problems in elderly medications.

Objective: This study used Beers criteria 2003 to analyze drug related problems in elderly patients to know the use of drugs which should be monitored in elderly patients, especially drugs which were listed in Beers criteria 2003.

Method: This research used by descriptive design, while data were taken retrospectively. Data were analyzed based on Beers criteria 2003.

Result: Result of this research showed there were 59 from 73 (80,9%) elderly patients who got drugs listed in Beers criteria 2003. There were 32 elderly patients got cimetidine which can cause confusion and delirium, an elderly patient got hyocinamine with uncertain effectiveness. Alprazolam given to 2 elderly patients should be monitored because higher receptor sensitivity suggested that alprazolam was given with low dose. Elderly patients got clonidine which can cause orthostatic hypotension. Diazepam, long acting drug, can cause long sedative effect and risk of falls and fractures was given to 7 elderly patients. There were 7 elderly patients got ketorolac and 1 patient got piroxicam should be aware of nephrotoxicity and gastrointestinal bleeding because of NSAID, it should be suggested to adjust the dose of ketorolac and piroxicam. Bisacodil was given to 2 elderly patients may exacerbate bowel dysfunction. Nifedipine and amlodipine were given to 3 elderly patients may exacerbate hypotension and constipation. There was an elderly patient who got amitriptilin may experience hypotension. Dyphenhidramine with high sedative effect was given to 2 elderly patients.

Conclusion: There where 59 from 73 elderly patients (80,8%) patients got inappropriate drugs based on Beers Criteria 2003. Patients who got cimetidine and clonidine (45%) were considered to have adverse outcomes with low high severity and 36,6% patients were considered to have adverse outcome with high severity

Keywords: DRPs, elderly, Beers criteria

