## ABSTRACT

## Drug Utilization Study of Proton Pump Inhibitor (PPI) in Elderly Patients with Dyspepsia (Study at Geriatric Polyclinic Dr. Soetomo Hospital Surabaya)

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**BACKGROUND:** Dyspepsia is one of major disease in elderly patients caused by gastric physiological alteration. Based on NICE guideline, recommended first line therapy for dyspepsia is proton pump inhibitor (PPI). The high prevalence of polypharmacy with aged-related changes will increase the tendency of drug related problem (DRP), so it needs a careful consideration of therapy related to patient's condition.

<u>AIM</u>: To identify drug utilization pattern and analyze either actual or potential DRP at Geriatric Polyclinic Dr. Soetomo Hospital Surabaya.

**METHOD**: It was an observational-cross sectional study using non-random purposive sampling method that conducted during March to May 2014.

**RESULT:** Total sample obtained was 61 patients showed that women has greater prevalence of dyspepsia than men. Hypertension was the highest comorbid, followed by diabetes mellitus. There were two types of PPI used that were omeprazol and lansoprazol as full dose (54,10%) and double dose (45,90%) accompanied by varied duration of therapy. The DRP that identified in this study were doses too high (19,67%); potential side effects including hip fractures (14,75%), hipomagnesia (14,75%), hypotension (9,84%) and vitamin B12 deficiency (1,64%); and drug interactions with vitamin B12 (63,93%), nifedipine (9,84%), simvastatin (8,20%), and clopidogrel (3,28%). One patient might experience more than one DRP.

**<u>CONCLUSION</u>**: Based on the above explanation, PPI use in elderly requires a careful consideration in achieving the desired outcomes. Therefore, it is necessary to have good cooperation relationship among pharmacist and clinician in prevention of DRP and monitoring therapy on regular basis.

Keyword: proton pump inhibitor, dyspepsia, drug utilization study, elderly, Drug Related Problems