

ABSTRACT

**ANALYSIS DRUG RELATED PROBLEMs (DRPs) CATEGORY
DRUG INTERACTIONS AND ADVERSE DRUG EVENTS (ADEs)
IN PATIENTS WITH KNEE OSTHEOARTHRITIS
(Osteoarthritis Outpatients at Orthopedic Polyclinic RS UNAIR Surabaya)**

HENNY UTAMI SETIAWAN

Osteoarthritis is a chronic progressive disorder of synovial joints, characterized by disintegration of cartilage in joints. Disintegration that affect joints can induce an inflammation that occur to painful condition. This disease most often happened in adults and the elderly with some comorbidities or not. This study aimed to analysis the incidence of drug-drug interaction and adverse drug events in patients with knee osteoarthritis, understanding the profil drug use, frequency of drug interaction, the type of drug interaction and determine the outcome of therapy using pain scale parameter.

This research is an observational study with a retrospective method by searching and recording the medical record data during period 1 January 2018 - 30 June 2018 that fulfilled the inclusion criteria. Data analysis drug interaction was done by the most current reliable source (Drug Interaction Fact, Stockleys Drug interaction, or Medscape.com database) and identify the actual adverse drug events based on medical record data. The outcome of therapy on this study analyzed using Chi Square.

The results showed that 224 medical record there are 143 samples that met the inclusion criteria. Based on results of the study, it can be seen

that the cases of knee osteoarthritis were reported by women as much as 80.42% with the age distribution of at most 46-65 years. The most comorbidities that predominate in knee osteoarthritis patients is hypertension (58.74%) followed by the types drug use to altered pain and inflammation is meloxicam (26,06%), sodium diclofenac (20,21%), mefenamic acid (4,36%) and paracetamol (4,25%). There were 43 patients (82,69%) has pharmacodynamics interaction and 9 patients (17,31%) with pharmacokinetics interaction. Based on severity of the interaction there were minor 7 cases (13,46%), moderate 44 cases (84,62%), and major 1 cases (1,92%). Most of the adverse drug events was induced by NSAID 42 patients (42,66%). Moreover, this study showed that therapeutic intervention on patients with knee osteoarthritis in orthopedic polyclinic RS UNAIR Surabaya significantly reduce the intensity of pain experienced by patient.

Keywords: Osteoarthritis, Knee, Drug Interaction, Adverse Drug Events