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AIR QUALITY AND RESPIRATORY DISEASE IN THE CITY OF PALEMBANG, INDONESIA. GEMA ASIANI*; TAN MALAKA**; HILDA ZULKIFLI***; HATTA DAHLAN***; ASEP SOFYAN**** *Post Graduate Study on Environmental Management, Sriwijaya University, Palembang, Indonesia. *Post Graduate Study on Environmental Management, Sriwijaya University, Palembang, Indonesia. *Post Graduate Study on Environmental Management, Sriwijaya University, Palembang, Indonesia. *Post Graduate Study on Environmental Management, Sriwijaya University, Palembang, Indonesia. *Post Graduate Study on Environmental Management, Sriwijaya University, Palembang, Indonesia. *Post Graduate Study on Environmental Management, Sriwijaya University, Palembang, Indonesia.

ABSTRACT

The aim of the study was to look at the determinants of respiratory diseases in the city of Palembang, Sumatra, Indonesia. A case control study design was used to look at the exposures among cases and controls. Ninety six cases of respiratory diseases were selected from patients who sought medical treatment at Public Health Centers in the city during 2013. The controls, 288 persons, were also selected randomly from the patients at the PHCs who did not have respiratory diseases. As an estimate of the ambient air pollution exposure, the city was divided into two categories high and low pollution area. The following variables were found as good predictors of respiratory morbidity: Residence location, housing quality, medical history of respiratory disease, workplace exposure to air pollutant, and length of stay at the polluted area. As a conclusion it was found that ambient air pollution as well as indoor air quality was associated with respiratory disease morbidity.

Keywords: Air Pollutant; Respiratory Disease; Exposure; Case-control