

# RISK FACTORS OF INJURY IN URBAN AND RURAL AREAS IN SLEMAN, YOGYAKARTA

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## ABSTRACT

**Background:** WHO estimates that 9% of the causes of death in the world are injury. About 90% of these events occur in low- Middle income countries (LMICs). Injury can also lead to disability that increases burden to economy and health system. Injury is often ignored in these countries. In Indonesia, the prevalence of injury increased from 7.5% in 2013 to 8.2% in 2013. Yogyakarta is one of the provinces with a high prevalence of injury (12.4%). This study aimed to estimate the risk factors of injury in urban and rural areas in Yogyakarta.

**Subjects and Method:** This was a cross sectional study carried out in Sleman, Yogyakarta, using data from the Sleman Health and Demographic Surveillance System (HDSS Sleman). A sample of 19,814 subjects was selected for this study. The dependent variable was injury. The independent variables were age, gender, marital status, level of knowledge, job, and social-economic position. The data were collected by questionnaire. The data were described in percent and analyzed by a multiple logistic regression.

**Results:** The incidence of injury was 5% in the study population. The incidence of injury was higher in the rural area (6.5%) than the urban area (4.9%). Conversely, the incidence of severe injury was higher in the urban area (15.8%) than the rural area (9.5%), with traffic accident (35.1%) as the leading cause of injury in the urban area and fall (35.0%) in the rural area. The common places of injury were roads and surrounding house area. Half of them chose medical treatment (urban 50.31%, rural 48.1%), while the rest of them opted for traditional therapy or self-medication. In urban area, the risk of injury increased with male (OR= 1.40; 95%CI= 1.20 to 1.60), divorced/ widow (OR= 1.60; 95%CI= 1.10 to 2.40), students (OR= 1.30; 95%CI= 1.05 to 1.70) and low to moderate socio-economic position (OR= 1.30; 95%CI= 1.10 to 1.70). In rural area, the risk of injury increased with older age (OR= 1.90; 95%CI= 1.50 to 2.20) and businessman (OR= 2.10; 95%CI= 1.20 to 3.40).

**Conclusion:** Urban and rural populations have different burden, characteristics, and risk factors of injury. The intervention program should be designed according to these differences.

**Keywords:**injury, rural, urban, area, risk factor

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