

**FACTORS AFFECTING USE OF PERSONAL PROTECTIVE
EQUIPMENT AND THE RISK OF CONTACT DERMATITIS AMONG
SCAVENGERS IN SURAKARTA, CENTRAL JAVA:
APPLICATION OF HEALTH BELIEF MODEL**

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ABSTRACT

Background: Contact dermatitis is triggered by contact with an allergen or substance that causes skin inflammation. Personal protective equipment (PPE) is important to protect individual against health risks while working. The purpose of this study was to determine factors affecting use of PPE and the risk of contact dermatitis among scavengers using health belief model (HBM).

Subjects and Method: A cross-sectional study was carried out at Putri Cempo landfill, Mojosongo, Surakarta, Central Java, from March to April 2019. A sample of 203 scavengers was selected by total sampling. The dependent variable was contact dermatitis. The independent variables were age, education, perceived susceptibility, perceived benefit, and PPE use. The data were collected by questionnaire and analyzed by a multiple logistic regression.

Results: The risk of dermatitis in scavengers increased with age 15-35 years old (OR= 28.71; 95% CI= 2.75 to 302.54; p= 0.005), education <junior high school (OR= 32.72; 95% CI= 2.81 to 380.27; p= 0.005), incomplete PPE use (OR= 251.10; 95% CI= 10.79 to 5843.82; p= 0.001), low perceived susceptibility (OR= 7.64; 95% CI= 1.10 to 53.12; p= 0.040), and low perceived benefit (OR= 18.97; 95% CI= 2.08 to 172.81; p= 0.009).

Conclusion: The risk of dermatitis increases with age 15-35 years old, education <junior high school, incomplete PPE, low perceived susceptibility, and low perceived benefit.

Keywords: contact dermatitis, personal protective equipment, scavenger

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