## Food security status among informal waste pickers in Johannesburg, South Africa, 2018: A cross-sectional study

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## Abstract:

<u>Background:</u> The scarcity of job opportunities driven by poverty has compelled individuals to seek survival through informal economy jobs, such as waste picking in landfills. In South Africa, an estimated 90,000 people are engaged in waste picking, yet they face significant challenges in maintaining food security due to insufficient income. The study aimed to determine the factors that are associated with food security status of informal waste pickers on landfills in Johannesburg, South Africa, 2018.

Methods: We conducted a cross sectional study using secondary data derived from the 2018 study conducted by the National Institute for Occupational Health titled "Health and Access to Healthcare among Landfill Waste Pickers in Johannesburg, South Africa". Descriptive statistics was used to describe the characteristics of study participants. Logistic regression was used to determine the factors associated with food insecurity among the waste pickers.

Results: Out of 361 waste pickers, the prevalence of food insecurity was 55%. Among those studied, males constituted 73.41% mean age [interquartile range] of the waste pickers was 34 years (SD = 10.26). The majority of the waste pickers have a secondary education (77.84%) and 57.34% earned R3100.00 or more. The odds of food insecurity among female waste pickers were twice compare to their male counterparts (OR=2.47, CI: 1.26–4.85, p=0.008), the odds of food insecurity among current smokers were double compare to non-smokers (OR=2.3, CI: 1.27–4.42, p=0.007), large family size was associated with food insecurity (OR=1.77, CI: 1.01–4.42, p=0.044). Receiving grant lower the odds of food insecurity (OR=0.49, CI: 0.27–0.87, p=0.016).

<u>Discussion:</u> More than half of the waste pickers in Johannesburg experienced food insecurity higher than that of the general population. Overall, the influence of gender, current smoker, and large household size on food insecurity among waste pickers. Keywords: informal waste pickers; Johannesburg; South Africa.