

Occupational health problems among door to door solid waste handlers in Surat city, Gujarat

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Background: The waste collectors have the seventh most dangerous job in the world. Because of inadequate understanding of magnitude of the problem & poor financial resources, risks of waste collectors are still largely unmanaged in most of developing countries like India.

Objectives: To study the prevalence of occupational related morbidities among the door-to-door solid waste collectors and factors related to reported morbidities.

Methodology: A cross-sectional study was conducted in Surat Municipal Corporation. 300 door to door waste collectors were selected randomly. The data was collected by semi-structured interview schedule analysed using SPSS window version 17.0

Results: 77.7 percent injuries, 71 percent skeletomuscular, 62.3 percent respiratory, 39.3 percent gastrointestinal, 36.3 percent eye and 30 percent skin disorders were major morbidities reported.

Major risk factors identified in bivariate analysis were:

*Risky and unhygienic sorting of waste. *Alcohol consuming. *Temporary workers and workers working empty stomach. Female waste handlers were having higher risk of gastrointestinal disorders.

Multiple logistic regressions indicate risk factors were:

Workers new to job of waste handling, untrained workers, manual handlers, risky and unhygienic sorting of waste, non-use of protective equipments, part time job and workers collecting household waste three tons/day. The poor hygienic behaviours and poor socio economic conditions, consuming alcohol and slum dwellers aggravate risk of morbidities. Female waste handlers were having more risk of skeletomuscular and GIT disorders.

Conclusions: The door to door solid waste collectors are suffering from significant level of morbidities because of physical, chemical and biological hazards; therefore they suffer from health effects probably due to their occupational exposures. Provision of personal protection, training, supervision, engineering controls, monitoring of exposures, education, and other interventions appears to be under-utilised in protecting waste handlers from exposure and health effects. Additional research is needed to further characterise exposures and health effect of the waste handlers.