

Abstract

Solid waste management is a complex problem in most developing countries. Poor waste management is associated with adverse effects on human health and environment

A descriptive cross sectional study was conducted using 404 respondents to ascertain knowledge and practices regarding solid waste management among Students in Kurunegala regional center of Open University.

The mean age of the study sample is 22 years and Standard Deviation is 2.57. There was a female preponderance. The knowledge regarding waste management among the students were high, 72% and 74% of the respondents identified open dumping and open burning as unhealthy solid waste disposal methods. But significant gaps in knowledge regarding waste management were observed. Out of the population surveyed 18% did not consider recyclable waste as a category of solid waste. Only 62% of the respondents were able to correctly identify the national color code for solid waste segregation.

Despite perceiving a causal relationship between improper solid waste management and environmental and health hazards there were significant gaps in the respondents' knowledge. Only 44% of the respondents were aware of the ground water and soil contamination risk due to improper waste disposal. Only 62% were aware of the ability of solid waste to accumulate in biomasses through adding into food chain and to cause diseases.

At least 30% of the respondents were practicing the unhealthy practice of open dumping of waste. Only 35% of the respondents used reusable material as against single use non-biodegradable material and 35% of the respondents practiced separating and handing over recyclable items to collectors/collecting units. Conversely only 63% of the respondents reported to be taking measures to reduce waste generation at home and only 44% reported to be composting biodegradable solid waste domestically, indicating poor knowledge utilization.

Multisectoral collaboration in developing education and awareness programmes and periodic reinforcement is recommended to translate the knowledge into sustained practice. Further research to understand the population's thoughts, feelings and beliefs about waste management behavior will be helpful to develop and implement effective programmes.

(Key words: Solid waste, waste disposal, knowledge, practices)