## Impact Of Educational Intervention On Hygiene-knowledge And Practices Of Sanitation Workers Globally: A Systematic Review

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Abstract: Sanitation workers are also known as "garbage workers" who play a significant role in the sanitation chain. For many generations sanitation workers' level of knowledge regarding hygiene practices remains low due to a lack of educational programs on hygiene. As a result, they are widely exposed to hygiene-related diseases such as cholera, skin infections and various other diseases, increasing their risk of mortality to 40%. This review aimed to explore the global impact of educational programs on the hygiene knowledge and practices of sanitation workers. The systematic literature search was conducted for studies published between 2013 and 2023 using the following databases: MEDLINE (via EBSCOHost), PubMed, and Google Scholar to identify quantitative studies on the subject. Study quality was assessed using the Joanna Briggs Institute Critical Evaluation Instruments. Data extracted from the included articles was presented using a summary of findings table and presented graphically through charts and tables, employing both descriptive and inferential statistical methods. A one-way repeated measures ANOVA assessed the pooled effect of the intervention on mean scores across studies. Statistical analysis was performed using Microsoft Office 365 (2019 version), with significance set at p<0.05. The PRISMA flow diagram was used to present the article selection process. The systematic review included 15 eligible studies from a total of 2 777 articles. At least 60% (n=9) of the reviewed studies found educational program relating to hygiene to have a positive impact on sanitation workers' hygiene knowledge and practices. The findings further showed that the stages (pre-post) of knowledge intervention used lead to statistically significant differences in mean score obtained [F (1,7) = 22.166, p = 0.002]. Likewise, it can be observed that the stages of practice intervention used lead to statistically significant differences in mean score obtained [F (1,7) = 21.857, p = 0.003]. However, most (n=7) studies indicated that, the efficacy of programs on hygiene knowledge and practices is indirectly influenced by educational background, age and work experience (predictor factors). Educational programs regarding hygiene have the potential to significantly improve sanitation workers knowledge and practices. Findings also suggest the implementation of active and intensive intervention programs, to improve sanitation workers hygiene knowledge and practices.

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