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Beyond the Water Seal: On-Field Observations of Occupational Hazards of Faecal Sludge Management in Southern Karnataka

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Abstract : Faecal sludge management (FSM) is an unorganized sector, and in India, there is an absence of regulations regarding the collection, transport, treatment, and disposal of faecal sludge. FSM has a high degree of occupational hazards that need to be thoroughly understood in order to shape effective solutions. On-field observations of five FSM operations were conducted in Anekal Taluk of southern Karnataka. All five of the FSM operations were privately owned and snowball method of sampling was employed. Two types of FS operations observed were: mechanical emptying involving direct human contact with faecal sludge and mechanical emptying without direct human contact with faecal sludge. Each operation was manned by 3-4 faecal sludge operators (FSOs). None of the observed FSOs used personal protective equipment. According to the WHO semi-quantitative risk assessment, the very high risk occupational hazards identified were dermal contact with faecal sludge, inhalation of toxic gases, and social stigma. The high risk hazards identified were trips and falls, injuries, ergonomic hazards, substance abuse, and mental health problems. In all five FSM operations, the collected faecal sludge was discharged untreated onto abandoned land. FSM in India is fraught with occupational and environmental hazards which need to be urgently addressed. This includes formalizing the institution of FSM, contextualized behaviour change communication, capacity building of local bodies, awareness programmes among agriculturists and FSOs, and designation of sites for the safe harnessing of faecal sludge as soil nutrient.

Keywords: faecal sludge, faecal sludge management, FSM, occupational hazards, sanitation

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