

Health Impacts of Gem Mining and Related Industrial Work in Sri Lanka : A Systematic Review

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Gem mining and Gem Industry is a key feature in Rathnapura District, Sabaragamuwa province. The industry has definite benefits but not without adverse effects to the environment, agriculture, human health and cities, villages and roads. However, there are not enough studies conducted to identify the hazards associated with gem mining. We planned this systematic review to help fill this vacuum. It is aimed at identifying the effects on human health. We searched the PubMed, Google Scholar and ResearchGate data bases for the articles published on health hazards of gem mining in Sri Lanka. The selection criteria used for selection of articles are as follows: Inclusion criteria, 'articles describing the health hazards of gem mining' and 'articles Published after 2010 up to date'; Exclusion criteria: 'Articles published before 2010' and 'Those articles published coal mining and other mining work but not gem mining', 'Articles published on mining work in countries other than Sri Lanka'. At the end of the search, filter and removal of duplicates, we collected four articles that met our inclusion criteria. Study of these articles led to identify the common health hazards of gem mining such as; physical injuries, gaseous hazards, respiratory effects, heavy metal poisoning, dehydration, dermatoses, infections, snake bites, flooding and drowning, increase in mosquito borne diseases, psychological effects, heat effects, effects on vision and hearing and joint diseases. The whole process in gem industry carries a range of risks that includes health hazards while working in pits, damage to environment and roads from pits, open unclosed pits leading to drowning, injuries and becoming mosquito breeding sites and inhalations of dust during gem cutting. It is important to conduct scientific studies to further identify, minimize hazards, educate people and lay out appropriate legislation on the subject.

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