A systematic review on risk factors for reduced lung function due to occupational respirable dust exposures; 2005 -2015

ABSTRACT

Background: Occupational exposures to respirable dust includes various hazardous substances were commonly associated with acute and chronic health effects especially on respiratory system and lung function performance among workers in various industries.

Objective: The purpose of this review was to identify the risk factors that lead to reduced lung function among workers due to occupational respirable dust exposure in the industry. Materials and

Methods: A systematic review of articles related to occupational exposure and its effects on lung function among workers was compiled using a series of keywords in databases (ProQuest, PubMed and ScienceDirect). Studies that were conducted between 2005 to 2015, written in English and used a quantitative design that focus on occupational respirable dust exposure were included in this review.

Result: Most of the studied reviewed concluded that there were at least two associated factors that caused the reduction of lung function among the subjects studied. These factors were later classified into two major factors namely occupational related factors and nonoccupational related factors.

Conclusion: Risk factors influence the lung function test results among exposed workers in many ways, either through direct effect or due to combination effect such as synergistic action.

Keywords: Respirable dust; Reduced Lung function; Risk factors