ABSTRACT

BACKGROUND

Respiratory disease following exposure to dust in cement factories has been widely studied. This study was to assess the prevalence of respiratory symptoms and lung function abnormalities in cement loaders working in depots in Jos, Plateau State.

METHODS

In this cross-sectional study, 90 male cement loaders were randomly selected with 90 age and sex matched control. Subjects and control were interviewed with a modified Medical Research Council respiratory questionnaire to assess for respiratory symptoms.

Lung function assessment for FEV1, FVC and PEFR was done using a spirometer and a peak flow meter. Environmental dust level was also measured.
RESULTS

The crude prevalence of respiratory was 55.5% in the subjects and 23% in control.

Cough, sputum, breathlessness and chest tightness had significantly higher frequencies in cement loaders than control. Subjects who were current smokers had significantly higher frequencies of cough (53.6%; OR 6), sputum (28.6%; OR 3.14), and breathlessness (21.4%; OR 5.8) than their non-smoking counterparts.

The mean values of FEV1, FVC and PEFR were significantly lower in subjects than control. FEV1/FVC was significantly lower in current smokers compared to non-smoking subjects and control.

CONCLUSION

Cement dust has deleterious effects on the lungs and occupational exposure to the dust needs to be limited. The ill effects of exposure to cement dust are compounded by cigarette smoking.