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INTRODUCTION

Silicosis has been the most common occupational disease in Hong Kong for the past decades. There are about 150-200 cases notified a year. Total number of cases confirmed by the Pneumoconiosis Medical Board in 1993 were 235.¹

These cases happened frequently among workers who have had a long working history in the quarrying or construction industries. In fact about 95% of silicosis cases were quarrying and construction workers.

Silicosis is caused by prolonged inhalation of respirable particles containing crystalline free silica, a major component of sand and granite rocks found in Hong Kong. This fine dust which inhaled penetrates deep into the lung paranchyma. It reacts with and gradually destroyed lung tissues it comes into contact. As a consequence the efficiency of the lung become progressively impaired.² The silicosis victims are particularly vulnerable to tuberculosis and vice versa; the more advanced the silicosis is the greater the incidence of active tuberculosis is likely to be.³

There is no effective treatment for silicosis once it has been contracted; whatever medical treatments that can be given is for symptomatic relief only.

Hence prevention is particularly important. In general in quarrying and construction industries it comprises of :

1. Engineering dust control measures at the workplace.
2. Environmental and health monitoring.
3. Health promotion on the prevention of silicosis.

The Pneumoconiosis Fund Board of Hong Kong was established in November 1980 by the enactment of the Pneumoconiosis (Compensation) Ordinance in 1980. Its main function is concerned with compensation of confirmed silicotic patients on or after 1 January 1981. About the same time, the Occupational Health Division of the Labour Department became actively involved in assessing and monitoring the working environment with silica dust hazard. Quarries and construction sites were surveyed and air samples were taken to assess the level of silica dust in the working environment. Health surveillance was carried out for quarry workers. Based on these activities, recommendations for improvement in dust control were given to the management and employees.

Since then, marked improvements in the working environment in quarries were achieved with the enhancement of engineering control measures and the use of personal protection devices. However, working environment in construction sites remained more or less the same.

Since the last ten years, efforts of all health education and promotion on the prevention of silicosis were intensified by concerned parties using various means. This was further enhanced in 1987 when the Pneumoconiosis (Compensation) Ordinance was amended allowing the Board's resources to be used for promotional and educational purposes. Together with the Occupational Health Division of the Labour Department, the Occupational Safety and Health Council and Other voluntary organizations, promotional activities flourished in the form of propaganda through the mass media, publications, exhibitions, seminars and on-site group health talks.

In order to understand the effectiveness of these promotional and educational activities towards the prevention of silicosis, the nursing officers of the Occupational Health Division conducted a descriptive survey to study the knowledge, awareness and practice among quarry and construction workers on silicosis.