



Service Priorities and Programmes
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Who can laugh? Occupational exposure to Laughing Gas (Nitrous Oxide)

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Introduction

In Hong Kong, the use of Laughing Gas(entonox which composed of 50% nitrous oxide and 50% oxygen) as analgesia before labour was common. The occupational exposure of healthcare workers raised much concern and anxiety in Prince of Wales Hospital in 2012.

Objectives

To look at the health complaints of healthcare workers with potential occupational exposure to nitrous oxide. Give occupational health advice to workers and the workplace.

Methodology

A retrospective review of the demographic data, years of work, health complaints and investigation results of all the workers who were referred to OMCS clinic in 2012 with occupational exposure to nitrous oxide were reviewed.

Result

67 healthcare workers attended the OMCS clinic. They were all female workers, with age ranged from 27 to 68 yrs old. The mean age was 42.8 yrs old. 49(73%) were midwives. 13(19%) were healthcare assistants and 5(7.5%) were workman, clerk and cord blood donation workers. The mean years of potential exposure to entonox was 6.8 yrs(range 0.5 to 20 yrs). The commonest health complaints were headache, fatigue, insomnia and forgetfulness. The temporal relationship to work varied among different workers. Medical co-morbidities were identified in some workers. Stress-related symptoms were common. Most cases reported improvement in symptoms after administrative controls and engineering controls had been enhanced in the workplace.