# PREVENTIVE OCCUPATIONAL HEALTH SERVICES FOR SMALL INDUSTRIES – THE NURSES' ROLE

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# ABSTRACT

This paper discusses a pilot project in occupational health aimed at providing preventive health care for small industries.

The Northern Metropolitan Region of the Health Commission of New South Wales, Australia, has offered small industry an advisory service for the past two years. "Small industry" is defined as any undertaking, primary, secondary, retail or manufacturing which is financially unable to provide its own occupational health service. There are five industrial areas in the Northern Metropolitan Region with an occupational health nurse appointed to each area.

The most important function of preventive occupational health service is to provide advice on occupational health hazards or potential hazards in the work environment. Another function is to provide education on occupational health principles and hygiene. First aid equipment is reviewed in all undertakings and first aid training is also conducted. Some general health screening has been carried out as well as specific monitoring, such as pesticide and zoonoses programmes.

A procedure to evaluate the service has been introduced and hopefully the results will indicate, not only the acceptance of the services, but a positive effect in reducing the incidence of occupational injury and disease.

The services' staff, vehicles and premises are partly funded from The Commonwealth Government Community Health finances and partly from State Government funds.

The delivery of health care to industry in this manner is a new and different approach in this country. As these services continue to operate, others will follow and in this way occupational health services will be available to the smaller industries, which employ the greater percentage of the work force.

Australia has a total population of 14 million people. The work force of 6 million people are engaged in mining, agriculture, construction, manufacturing, retail and service activities<sup>1</sup>. Most large industries employing more than 300 people have occupational health services. These services are staffed by 1 000 occupational health nurses and a corresponding number of medical officers on a full or part-time basis. Legislation in some states requires an occupational health nurse to be employed when more than 300 people are working on the one site at the one time.

It is interesting to note, that when this legislation came into force in one particular state, there was very little increase in the overall number of

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occupational health nurses. The state divisions of occupational health provide advice on request to all sectors of industry. In the manufacturing sector there are 2 000 establishments, employing more than 100 persons, but there are 24 000 factories employing less than 100 people<sup>2</sup>.

These facts give an indications of the volume of establishments in all types of industry which do not receive any particular occupational health services. In Australia at this stage there are only a few developing group occupational health services.

#### NURSING SERVICES

In Sydney, in 1975, the Health Commission of N.S.W. received a special Federal Government grant to commence advisory occupational health nursing services to small industry for a section of suburban and surrounding rural areas. For the purpose of the services, "small" industry is defined as any undertaking, primary, secondary or retail which is financially unable to provide it's own service. It is felt that some of the larger among the small establishments could afford single private assessments by an occupational health physician, and this situation may need closer attention in the future.

There are five areas of small industry in the Northern Metropolitan Health Region of Sydney, with one occupational health nurse appointed to each area.

# **OBJECTIVES**

The current objectives are to survey, and to advise on existing conditions of work in small industry and through education to provide a preventive occupational health service. By creating interest and promoting occupational health it is hoped to encourage small business undertakings to group together in appropriate ways to provide services shared by the group.

### The role of the nurse

As there is no treatment component of the service, the role of the nurse is almost entirely preventive with an emphasis on education. The nurse's overall role encompasses assessing the work environment, educating, and the monitoring and promoting health.

Another government body enforces legislation, therefore the conditions of funding dictate that the service be advisory in nature, and so the nurse holds no statutory power, but must be kept informed of pertinent legislation. In the future, when legislation may tend to develop codes of practice, this situation may have to be altered.

## Work assessment role

The prime role of the nurse is adviser to the small industries on existing or potential occupational health hazards of the work environment. Preventive measures are administered by giving the management an indication of the potentiality of existing hazardous conditions and providing guidelines for the health assessment of persons applying for jobs.

The assessment of the work environment and advice on occupational hazards includes dimensions such as occupational hygiene, ergonomics and the choice of suitable personal protective equipment. At every opportunity the nurse educates management and employees in occupational health principles.

#### Educational role

The nurse is engaged in more formal teaching sessions such as instructing specific groups of employees on the hazards arising from their occupation. Such groups are technical college apprentices who constitute a potential work force in a learning situation. This is an opportune time to teach good habits before a working pattern develops that is often difficult to change.

The nurse utilises existing management groups in the industrial community, who meet to improve productivity or safety, as a forum to conduct sessions on topical occupational health issues. Employees are educated on the shop floor, either on a one to one or one to group basis.

The nurse reviews first aid kits, and whilst teaching first aid uses the session to introduce occupational health principles. As a teacher the nurse offers guidance and support to first aiders in their role in industry. A recent amendment to legislation in N.S.W. requires every factory with 50 or more persons, on the one site, at the one time to have one person trained in first aid. This amendment has been used to good effect by the service, as the teaching of first aid is appreciated by management and the local medical practitioners.

# Health monitoring role

Monitoring of the physical effects of an occupational hazard is also part of the role played by the nurse. Owners of small farms, market gardens and orchards in nearby rural districts are tested annually for cholinesterase activity as part of the pesticide programme conducted jointly by the service and the State Division of Occupational Health. An educational session is always a component of the programme and this is usually carried out with the assistance of the State Government Department of Agriculture.

The State Division of Occupational Health is commencing a state wide campaign to eradicate brucellosis, after the monitoring of the blood levels of abbatoir workers by the service in local abbatoirs.

The good surfing beaches, have made board riding a popular sport in Sydney. Many people are engaged in making surfboards, which includes using isocyanites for the polyurethane interiors of the boards. Lung function tests are regularly carried out on these workers, to monitor the harmful effects of these chemicals.

#### General health role

The nurse also acts as a stimulator of interest in general health and provides information and material on mental and physical health. Working with other community health programmes the services have been able to offer heart disease

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prevention programmes and relaxation classes to the small industries. The emphasis on this type of liaison will increase in the future, as a demand is created for more programmes. The occupational health services provided to industry are part of the overall health care plan, and are based in community health centres. The nurse is able to refer persons engaged in industry to any of the different streams of health care offered by the community health centre.

Occupational health has been promoted by subtle infiltration into the industrial community at gatherings held for employers and employees. In this way, the nurse becomes known as a source of reference for occupational health advice, and becomes an accepted part of the industrial community.

#### CONCLUSION

It is a well recognised problem that management and the workforce expect a treatment component, and it is difficult to produce tangible results by preventive work methods. However, with a ratio e.g. of 9 000 employees engaged in manufacturing<sup>3</sup> and 14 000 people engaged in retail trade<sup>4</sup> to one nurse, we feel that the emphasis should be on prevention, particularly when there exist adequate facilities for treatment.

The preventive occupational health service, being an unusual venture in the delivery of occupational health care to small industry, in Australia, has created a lot of interest and it is hoped that the experience which has been gained, will be a guide for any similar ventures in the future.

# **ACKNOWLEDGEMENTS**

I wish to thank Dr J. S. Lawson, Regional Director, Health Commission of N.S.W., Northern Metropolitan Region, for permission to present the paper, and Dr R. Simson, Co-ordinator of the Occupational Health Advisory Nursing Services to Small Industries, members of the team and other Health Commission Occupational Health personnel, for their valuable assistance.

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