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REVIEW ARTICLE

The Importance Of The Occupational History In Ambulatory Care

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Summary

The occupational history is indispensable for the diagnosis and management of patients with work related health problems. However, because of the many pitfalls associated with it, many busy physicians do not appreciate its value in clinical practice. These pitfalls are elucidated here and practical suggestions are provided on how busy practitioners can make full use of the occupational history in the diagnosis and management of work related problems in their patients.

Key words: job title, description of work, occupational exposures, work hazards, notification.

Introduction

Occupational disease is under-reported in Hong Kong[1]. Out of a total of 2.5 million persons engaged in full time work only about 200 cases of occupational disease have been reported and confirmed annually over the past 20 years. In contrast, serious occupational injuries (that require rest for three or more days) for the same period have been reported to be between 60 – 10,000 cases annually.

One of the main reasons for the under-reporting is likely to be the lack of specific awareness of and priority given to, occupational disease and illness related to work by medical personnel in primary care in general. Before completing an assessment of a patient, the physician should first consider the possible relationship between a particular symptom or problem and occupational exposure. Unless there is awareness, there is unlikely to be further investigation or reporting. Information from an occupational history provides the first and possibly the best indication of work relatedness and occupational exposure to account for a symptom. For example:

> *A middle aged woman was told by her doctor some months ago that the numbness and weakness in some of her fingers were due to her rheumatoid arthritis. Direct inquiry about her work revealed that she was a packer in a battery manufacturing factory performing strenuous repetitive movements with her hands and wrists hundreds of times per hour. She was found to have carpal tunnel syndrome possibly caused by a combination of her rheumatoid arthritis and her work.*

Information about possible links between work and symptoms of disease is best acquired by making a routine inquiry of a patient's occupation in the medical history.

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Pitfalls in the Occupational History

In practice many clinicians do not consider the occupational history particularly useful for diagnosis, and when pressed for time they may choose to ignore it or quickly skim over it. If properly taken, the occupational history may provide information which is essential for diagnosis and management. However it may be associated with many pitfalls.

Presentation of Occupational Disease

First of all, occupational *diseases* usually have no specific symptomatology. They may present just like any medical, surgical or even gynaecological problem such as breathlessness, insomnia, abdominal colic and dysmenorrhoea. The key to diagnosis is through a careful inquiry about the occupational history. Essential information[2,3] obtained in an occupational history should include the patient's present job, his previous occupations and the relationship between his present symptom and his work. Another potentially helpful question is whether similar symptoms or problems are present among his workmates. Many occupational diseases were first diagnosed by such a line of inquiry e.g. nasal cancer in wood workers[4], angiosarcoma in the manufacture of vinyl chloride[5].

The Job Title

The job title volunteered by the patient may not always be helpful to the physician who often cannot see any relationship between it and the symptom e.g. increasing breathlessness in a watchmaker. However, in this example further inquiry may reveal that the patient is engaged in polishing watch casings in a way which continually generates fine silica dust in the environment. The association between fine silica dust and increasing breathlessness becomes more apparent once the worker's specific tasks are better understood. It is important therefore to go beyond the job title to understand the nature of a patient's job by asking him to describe exactly what tasks he is carrying out in the course of his work.

It is also important to know what he is handling in terms of raw material and by-products and what physical, chemical or biological agents he is exposed to in his job. For example, in a recent student project, dermatitis of the fingers in hairdressers was found to be strongly associated with the use of hair dye in their work. In Hong Kong however, it is common to come across workers who do not know what materials they handle or come in contact with at their place of work. Some may be able to name the materials they are exposed to, but are unaware of the chemical components in it; for instance very few local workers know what chemical ingredients are in the paint thinner which they use daily. Unless the physician is knowledgeable about the hazards of the patient's job, he may find such interviews rather unproductive.

At times it is not the patient's job *per se* but the work process near to the worker that causes the ill effects. For example, a line worker assembling radio parts may develop occupational asthma from inhaling the soldering fumes from an adjacent work station. It is important to recognise that the worker and the physician may have totally different perspectives and understanding of the work environment associated with a job title. Increased understanding of the job environment would increase specific awareness of occupation-related problems.

Other Exposures

The present job of a patient may be relatively free of occupational hazards and yet the patient may still be suffering from a serious occupational disease, such as a lift attendant suffering from advanced silicosis. The present job did not cause the disease, the patient had worked on other jobs in the past but because of a deteriorating health

condition, he can now only cope with a relatively less demanding job. He belongs to a category of workers who are in the twilight of their working life and are now involved in so-called "end occupations". In the occupational health inquiry, past occupations and exposures need to be thoroughly examined.

When the present and past occupational histories do not seem to be a likely cause of the patient's symptoms, it is sometimes helpful to inquire if he has a second or an unofficial job. A job at home[3] or a hobby could also be the source of his ill health. These tend to be overlooked by both patients and physicians. It is useful to actively inquire if there are possible sources of health hazards in these activities.

Another source of occupational disease could be the dust or chemicals brought home by a member of the family. For example, spouses of asbestos workers contracted mesothelioma[6] because they came into contact with the dust that contaminated their husbands' clothes, and family members of workers contaminated by a pesticide, chlordecone, were found to have the toxin in their blood[7].

What Other Purpose Does the Occupational History Serve?

Besides helping the physician arrive at a diagnosis, the occupational history also helps to establish the relationship between work, exposures in the work environment, and the health problem in the patient. It is the basis for prescribing an effective therapeutic regimen and in preventing recurrence of disease. A good understanding of the job nature and the job process is also the basis for equitable compensation of occupational diseases.

Most doctors in practice, including occupational physicians, encounter more workers with work related health problems than specific occupational diseases arising from their occupations. For example not many physicians see patients with lead poisoning or silicosis, but they encounter many others with problems such as low backache and chronic obstructive respiratory disease. These problems are often aggravated by work and other socioeconomic factors, and their management requires a thorough understanding of the patient's present occupational history.

To ensure that the rehabilitation of patients is effective after an acute episode of illness e.g. myocardial infarction, a detailed occupational history is essential. The social, economic and emotional impact of the job on the patient needs to be taken into consideration and it is important to recognise that the occupation of a person means much more than a source of income to him. It can be his source of social contact, boredom, and mental stress, self respect and fulfilment. Detailed insight into the relationship between the patient's illness and his job is crucial for proper placement and good prognosis.

Detection of Occupational Problems in Busy Clinics

To confirm a diagnosis of occupational disease it is necessary for the physician to identify the agent that the patient is exposed to, inspect the work environment, interview other workers, identify the mode of entry, and work closely with other professionals including industrial hygienists and epidemiologists as a team. These tasks would be too demanding for most physicians in ambulatory care settings. However it is possible for physicians, even in busy outpatient clinics, to identify work-related illness and occupational diseases if a systematic approach is adopted in taking the occupational history.

First, all patients should be screened by a standard set of occupational health questions. A detailed occupational history is not necessary on

the first encounter with patients. A useful set of screening questions for all patients in an outpatient setting comprises the following:

Present Occupation : What is your job? Can you please describe what you actually do in your work?

Past Occupation : What are the two main jobs that you have held in the past?

Work Hazards : Do you think your symptom could be related to your work?

Responses to this set of screening questions would provide clues to the possible association between work and symptoms.

Management of Occupational Health Problems in Hong Kong

Referral

Once an occupational cause is suspected, the primary care physician can investigate the problem further, or refer the patient to an occupational health unit with services for diagnosing and managing occupational health problems. It is only at this stage that a complete occupational history needs to be taken. At present only the Occupational Health Division of the Labour Department provides laboratory support for the investigation of suspected occupational diseases. The Department of Community Medicine of The University of Hong Kong and the Department of Community and Family Medicine at The Chinese University of Hong Kong also provide consultative services to physicians and business organisations with suspected occupational health problems.

A busy physician can easily take a few minutes to refer the patient with suspected occupational causes to any of these agencies or units for further investigation and confirmation.

Notification

The Director of Health provides a form – L.D. III(S) – designed for the notification of suspected occupational diseases by medical practitioners in Hong Kong. A nominal fee will be given to the notifying practitioner and after the investigation is completed, a brief report of the result will also be provided.

A New Approach

In a recent review of occupational health services in Hong Kong, the Expert Working Group on Occupational Health Services[1], recommended the need for a new co-ordinated approach to the delivery of occupational health services. With respect to the current situation in Hong Kong, they recommended the primary health care approach be adopted as the main system for the delivery of services, and that training in occupational medicine should be provided for all interested physicians and those responsible for the care of workers. They also recommended that in due course all statutory medical examinations of workers in some specified occupations be conducted by practitioners with recognised training in occupational medicine and who had been accorded the Appointed Medical Practitioner (AMP) status. As a goal for the future they recommended "both primary and secondary care physicians who possess appropriate training and practice in the field of occupational medicine be organised, and a formal referral system be established to ensure better interface and continuity of care".

For the physician who would like to personally investigate his patient further, some useful resource materials are listed below in the Appendix. For those with a special and growing interest in occupational medicine there is also the Hong Kong Society of Occupational Medicine organized locally by physicians in occupational health to promote knowledge and training in this field. ■

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Appendix

Agencies and Organisations Concerned with Occupational Health in Hong Kong

1. **Occupational Health Division, Labour Department,** 15/F, Harbour Building, 38 Pier Road, Central, Hong Kong. Tel: 852 4041, Fax: 544 3271

2. **Department of Community Medicine, The University of Hong Kong,** 4/F, Li Shu Fan Building, 5 Sassoon Road, Hong Kong. Tel: 819 9280, Fax: 855 9528

3. **Department of Community & Family Medicine, Chinese University of Hong Kong,** Lek Yuen Health Centre, Shatin, New Territories. Tel: 697 3211, Fax: 606 3500

4. **The Occupational Safety and Health Council,** 14/F, L & D House, Cameron Road, Tsim Sha Tsui. Tel: 739 9377, Fax: 739 9779

5. **The Hong Kong Society of Occupational Medicine,** Department of Community & Family Medicine, Chinese University of Hong Kong, Lek Yuen Health Centre, Shatin, New Territories. Tel: 697 3211, Fax: 606 3500.

Sources of Information on Occupational Health

Some recommended reference materials for physicians interested in occupational and environmental health:

Books

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Journals

American Journal of Epidemiology. Society for Epidemiologic Research, 624 N. Broadway, Room 225, Baltimore, MD 21205. Monthly.

American Journal of Public Health. Journal of the American Public Health Association, 1015 Fifteenth Street, NW, Washington, DC 20005. Monthly.

British Journal of Industrial Medicine. British Medical Association, Tavistock Square, London WC1 H9JR, England. Quarterly.

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Scandinavian Journal of Work, Environment & Health. Topeliuksenkatu 41aA, SF-00250 Helsinki, Finland. Monthly.