PROBLEMS IN OCCUPATIONAL HEALTH PROGRAMMING

The Role of Nursing in Occupational Medicine

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You all know the old cliche, "Jack of all trades, master of none." The occupational health nurse (OHN) must be a jack of all trades and, of necessity, a master of many. This specialty is perhaps one of the most diversified and varied within the nursing profession.

OHNs are concerned with the promotion and maintenance of health, with emphasis on the prevention of disease and injury rather than treatment. They are involved with the entire working community, meaning not only the workers, but also their families and their living and working environments.

The magnitude of the OHN's role is large, for they must be prepared to cope with a variety of situations and problems which arise on a daily basis: for example, the periodic occupational exam; traumatic injury; toxicological exposure; a family crisis; and implementing a worker health education program. This is only a selection of the OHN's responsibilities.

The OHN must be able to perform independently and also as a member of the multidisciplinary occupational health team, comprised of physician, nurse, bioenvironmental engineer, safety engineer, and certain technicians. Relating to people of various disciplines and at different levels of management requires a nurse skilled and educated not only in the basic sciences of nursing, but also in communications, the toxicological aspects of industry, OSHA's requirements, hearing conservation, disaster medicine, ergonomics -- the list continues ad infinitum.

You may consider this an idealistic rather than a realistic view of the OHN's true educational preparation. That thinking is partly correct, because in most basic nurse training programs,

little if any emphasis is given to occupational health nursing. Many OHNs have attained their skills and education through on job training, self study, or additional college level courses taken to enhance their knowledge of environmental health and occupational medicine.

However, there are some nurses who are well prepared to assume the occupational role, for example, graduates of the Air Force Environmental Health Nursing Residency program and graduates of MS programs in occupational health nursing like that at New York University.

Regardless of the level of preparation, the nurse's role becomes of even greater significance considering they are usually the primary medical people on site at any industrial complex. Hence, the member of the health team in most direct contact with, and most aware of, the overall health needs of the worker is the OHN. Overt or subtle changes in workers often can be observed more readily by the nurse than by any other team member.

To adequately describe the overall role of the OHN would require more time than I have today. Instead, let me take one segment, the periodic occupational physical examination program and demonstrate the responsibilities and contributions of the nurse and the interchange of knowledge and information that occurs with the other disciplines.

Basically, this program is established to examine for any untoward reaction all personnel exposed to hazardous materials in the working environment. Interrelationships among the disciplines begin with the development of this program. The type of examination to be done cannot be determined without input from the bioenvironmental and safety engineers, consisting of types of hazards; TLV's; the organs most affected by the hazard; the degree to which a given individual is exposed; the protective equipment used and so forth. The health team reviews this information and the physician then makes the final decision as to the appropriate exam and special laboratory, x-ray, or hearing tests.

The periodic examination does not always involve a full or partial physical by the OHN, who also can do special testing. But one of the nurse's primary responsibilities definitely will be an

updating of the occupational history. Although the worker may fill out a standard form, the nurse interviews to clarify statements made in the history and to gather information that may be pertinent to the worker's future health.

History-taking and interviewing of the worker is the culmination of the skills and educational preparation of the occupational health nurse. Total awareness of the worker as a person, the job performed, and the hazards involved, all are of extreme importance, and even casual statements can be of great significance.

While being interviewed, suppose Mr. Jones makes the statement, "By the way, since I'm here, do you happen to have any aspirin? I've had a headache off and on for seven days, and I just can't seem to get rid of it." This should trigger a warning signal in the nurse's mind. From this should evolve many questions, and follow-up with occupational health team members.

The nurse's immediate thoughts might be: Mr. Jones has a potential exposure to XYZ. Headache can be a symptom of XYZ exposure. Are other people in his area experiencing this symptom? Is there faulty equipment in the area: Is he using protective equipment? Is the headache unrelated to the job, and perhaps related to family problems or to eye problems? What other complaints have brought the worker to the medical facility since the last periodic exam?

Some questions to Mr. Jones might be: At what time of the day or night is your headache more intense? Does medication relieve it, and if so what do you take? Are you being seen by your personal physician for health problems? Are you on any medications? Have any of the other workers in your area complained of headaches? Do you have other symptoms?

Planned follow-up after completion of periodic exam might include total review of the medical record and contact with the bioenvironmental engineer (BEE) and safety team members, with discussion of pertinent facts and findings, perhaps with an equipment check initiated by safety, and a sampling of air in the work area by the BEE.

Since most industrial physicians have several industrial complexes under their care, they are not always on the premises. If this is

so in Mr. Jones' case, the nurse should provide the physician with an immediate and detailed telephone briefing about the facts of the problem, pertinent data from the medical record, and actions initiated with other team members.

Thereafter, the physician must be updated continually. Based on engineering or safety findings, the physician may do extensive testing on all people in the area, or perhaps more specific tests on Mr. Jones.

The OHN's responsibilities do not end with notification of the other team members. When the laboratory test results on Mr. Jones are returned, the nurse must decide, for example, if the tests are within normal range or elevated; how the results compare with previous tests; whether there is a progressive increase over several exams, and, is there possibility of chronic exposure? Eventually, if an adverse factor is found, the OHN and the physician must consider health education for the people who work in the area: do they know the acute and chronic symptoms to expect if exposed to the hazard, and are they fully oriented about the use of protective equipment?

No doubt I could relate other interchanges among the team members, but my intent here is to show the extensiveness of the role of the nurse in occupational medicine. From this brief description, I believe it is evident the OHN must be a highly qualified person who is oriented toward several disciplines.

In summary, it is true an occupational health nurse must be a jack of all trades and, of necessity, a master of many.

NIOSH

OCCUPATIONAL SAFETY AND HEALTH SYMPOSIA 1977

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Cincinnati, Ohio 45226

June 1978

For sale by the Superintendent of Documents, U.S. Government
Printing Office, Washington, D.C. 20402

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Contract #210-77-0088

DHEW (NIOSH) Publication No. 78-169