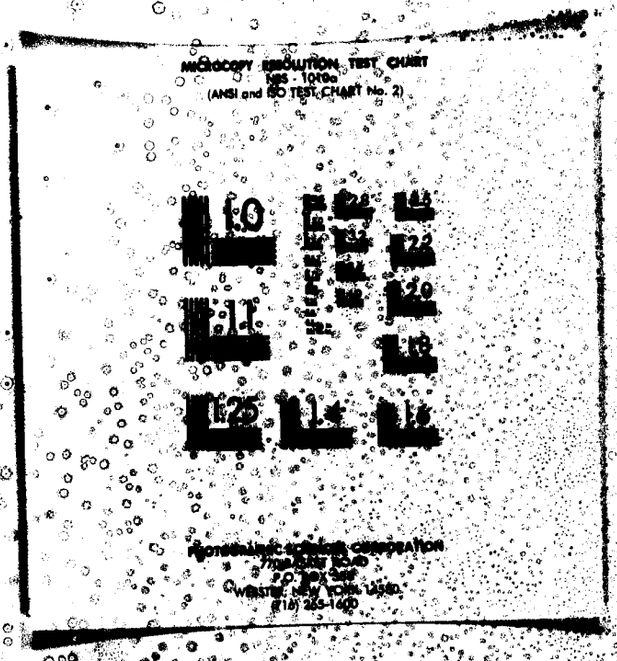

# WORKSHOP: ROLE OF THE CLINIC NURSE IN THE PROVISION OF OCCUPATIONAL HEALTH SERVICES FOR SMALL BUSINESSES

Barbara A. Kingsley, R.N., N.P.

We are concerned with man's health. The hazards of his occupations and environment must be recognized, because without health, life loses its savor, productivity declines, and there can be no future. Health is everybody's business. It is the most valuable of all our national resources. To conserve health, we must identify the accidents and disease hazards to which individual workers are exposed.

Hazards of work date back many years. Most of our problems began with the dawn of the machine age, an age of steam. The invention of the steam engine by James Watt greatly aided England's textile industry and unleashed innumerable new menaces to the health of the worker. Man's ingenuity often outruns his foresight. He is aware of the advantages of new discoveries, but he does not always realize their full impact on the established order.

As far back as the 15th century we have descriptions of miners' disease resulting from inhalation of metallic fumes. Bernardine Ramazzini, the father of occupational medicine, recognized the importance of occupations in the etiology of disease. In his master work, De Morbis Artificum, he described in detail diseases of 40 types of tradesmen. In 1802, England passed the Factory Health and Morals Act, which was the first law regulating labor in factories. In the United States in 1892, Andrew Harvey became the first American physician to deal with modern industrial medicine.

For many years, hazards were rampant. New machinery and automobiles were exposing the work forces into unknown hazards. Little was known about long-term exposures to hazardous materials. If new developments are to bear fruit, social, political, and medical planning must advance hand in hand with the progress of industry and production. Massachusetts Institute of Technology offered the first course in Industrial Hygiene in 1905. And, interestingly, in 1910, Cornell's outpatient department studied and treated occupational diseases but closed its doors in 1916. But no legislation was to come until the early 20th century. In 1913, the U.S. Department of Labor was founded to "foster, promote, and develop the welfare of wage earners."

The birthdate of Industrial Nursing was 1895, when the first industrial nurse, Mr. Procter, was employed to make home visits to sick employees at the Vermont Marble Company. Catherine Dempsey of Cambridge Massachusetts, fought for

---

Ms. Kingsley is the Associate Director of Clinical Services at the Industrial and Occupational Health Clinic Services, Peter Bent Brigham Hospital, Boston, Massachusetts.

recognition of industrial nurses as the first president of the American Association of Industrial Nurses.

Occupational medicine concerns itself with all aspects of health in relation to occupation. Occupational health programs strive to promote the healthful well-being of employed persons through services provided at the place of employment or at another convenient facility or location. Its goals are:

1. The prevention of disease and injury through medical supervision of workers, workplaces, materials, and processes.

2. Constructive measures such as pre-employment physicals, careful placement, counseling and health education, and insurance of a better working environment.

3. Medical/surgical care to restore health and productive capacity as promptly as possible after occupational illness or injury.

According to the Department of Labor, 90% of our small businesses have 25 or fewer employees, most of which are without a nurse or physician.

The Peter Bent Brigham Hospital's Industrial and Occupational Health Clinic provides a type of ambulatory health care to greater Boston employers and employees that is not available in any other area hospital. Originally known as the Industrial Accident Clinic, it was established in 1959 to provide prompt medical services and follow-up care for any person with a work-related injury or disease. The name was changed a few years ago, when the building was renovated, in recognition of the need for identification and prevention of hazards that may lead to occupational disabilities. Most industrial and business firms have been increasingly concerned with procuring the best medical services for their employees and are cognizant of the Federal regulations with regard to occupational health and safety. There is presently no formal agreement between our clinic and the companies that utilize our services. Patients are seen when they have reported their occupational accident or illness to their employers. The Clinic serves 5,000 to 6,000 patients per year. It is open Monday through Friday, 8:00 a.m. to 4:30 p.m., and the emergency ward provides all medical care when the clinic is closed, thereby affording 24-hour coverage. Medical charts of those patients seen in the emergency ward are sent to the clinic daily, and pertinent information from these medical charts are recorded in our logs by the Industrial Clinic's secretaries. As the nurse practitioner in the Clinic, I obtain pertinent nursing and medical information, provide nursing and medical attention, and offer continuity of care. A physician is available at all times and is called when needed to provide back-up support for me or to render definitive care himself.

We also have scheduled follow-up clinics. The orthopedic sessions, staffed by orthopedic surgeons, meet three mornings per week, and a surgical session, with a staff surgeon present, meets two afternoons per week. If another specialist is needed, he or she is called to the clinic to see the patient. If hospitalization is necessary, the patient is admitted to the Peter Bent Brigham Hospital by a staff physician. If a nonindustrial problem arises, the patient can be referred to one of our many specialty clinics. These

clinics meet at various hours, usually enabling patients to obtain medical care without interfering with their work schedules. Our staff consists of a medical director, a nurse practitioner, an administrative secretary, and a receptionist. All paramedical services of the Brigham Hospital are available to our patients. We also see patients as necessary--not just on a fixed schedule. As the nurse practitioner in the clinic, I see patients when they first arrive and am available to provide continuity of care on subsequent visits. Good rapport can thus be maintained. Clinic patients are referred by their employers or through our emergency service.

A phone call to the employer is made if there is any doubt as to whether the claim is work-related. Presently we are asking our patients to have a verification form filled out by their employers. Medical reports are sent to both the employer and the employer's insurance carrier after each visit. This procedure expedites workmen's compensation benefits when a patient may be disabled. An administrative secretary is available to assist in processing insurance claims and to inform the patients of the benefits for which they may be eligible.

A few years ago, we proposed a program that would change the function of the clinic to provide occupational health consultation and services to neighboring industry. By utilizing the combined resources of the Harvard School of Public Health and the Industrial and Occupational Health Clinic, we hoped to provide services to help employers meet the criteria established by the newly set OSHA regulations. During this bureaucratic process, time passed, and funding did not materialize. We are once again exploring the possibilities of an outreach service and hope to obtain Federal monies soon.

When we renovated the clinic and changed its name in 1973, I was participating in the Peter Bent Brigham Hospital's Nurse Practitioner Program, I was quite interested and enthusiastic about using my new skills in an occupational health setting, where I was beginning to feel comfortable. Because of the tremendous support from the nursing and medical staff, I was able to develop a nurse practitioner role in occupational health. With the assistance of our lawyers, the legal implications were assessed, and the new role was accepted and supported by the Hospital administration. Payment was made for professional services rendered through the insurance carrier for workman's compensation.

Since we were unable to obtain our outreach program, we felt it would be wise to look at our safety program within the hospital staff. Hospitals have not been considered part of industry, and, surprisingly enough, there was not much literature available on the subject.

The Peter Bent Brigham Hospital is a teaching hospital, and we were able to utilize the resources of our neighbor, the Harvard School of Public Health, as well as the Massachusetts Department of Labor, Division of Occupational Hygiene. As a member of the Safety Committee, I felt we could esteblish a sound occupational health program right here in our own workplace. For years we have been treating our own employees with industrial and occupational diseases, as well as "outsiders." We decided to institute inspection tours of all our departments for occupational hazards. The hospital was divided into major areas--laboratories, engineering, housekeeping, etc.

When our monthly inspection tours began, we were skeptical. We felt that most likely our tours would uncover hazards that would be costly to correct, and our budgets were limited. But our Director had insight and trusted our judgment, so we had full approval to do our inspecting. The hospital's safety engineer, the workman's compensation safety engineer, the appropriate department head, and I conduct the inspections. A letter containing our findings and suggestions is sent to the hospital director and the appropriate department head by the insurance company's safety engineer.

I feel that our monthly inspection tours are necessary because we not only keep an eye on the hazards, but the employees realize that someone is concerned about maintaining a healthy and safe environment.

The role of the occupational health nurse is a very exciting one. Nursing is a dynamic profession that is responding to changing societal needs. Nursing evolves from a deep commitment to the traditional philosophy of nursing, which views man in his total environmental setting and aids him in coping with his physiological, psychological, social, and spiritual experiences to maintain his equilibrium and well-being. The nurse practitioner exercises both independent and interdependent functions, working in a team relationship with the physician and other health care providers. This new role responds to the concept that comprehensive health care is the right of every citizen. The new focus is the need for health information, illness prevention, and health maintenance. There is a gap between the public desire for health care and what is available.

The occupational health nurse attempts to establish a professional nurse/client relationship, thereby encouraging employees to confide in the nurse.

One of the most important facets of nursing is the interview, which uses interpersonal relationship skills, to lay a basis for future communication. Often an interview uncovers potential hazards that the employee may be reticent to mention to his employer.

Because of time pressures, I frequently do not spend enough time listening to the patient. The nurse must know the why, where, when, and how. Ideally, during the pre-placement examination, an occupational health history is obtained and fully evaluated. To provide an occupational health program, the nurse must familiarize herself with both the employees and their actual working processes and environments. In our situation, we are offering health services to many small businesses, often on an episodical basis; but a good percentage of patients are given follow-up appointments. Our future program, with the help of HEW grants, will fully encompass the needs of small businesses in relation to their safety and health programs.

Every encounter begins with history taking, documented in a patient chart using Weed's POMR. Continuity of care is valued, and my daily presence at the clinic allows me to know our patients better. I want to stress again the importance of knowing what the employee actually does in his job so that there can be an understanding and detection of possible hazards. If a painter comes to the clinic for evalution of back pain after heavy lifting, it is important to question him regarding possible lead exposure.

Knowledge of available resources is beneficial for coordinating hazard investigations. There are many Federal and state agencies that are willing to share their expertise. The effects of the worker's environment reflects his health with implications for his physiological, psychological, and social well-being. Reassurance is very important and helpful. For example, when a worker has a back injury and is incapacitated by muscle spasm, fear only accentuates the pain. We must remember that we are dealing with usually health individuals who are self-sufficient and productive.

An occupational accident or illness may jeopardize a life, a career, and family status. Understanding of trauma, be it emotional or physical, is a necessary part of treatment.

How do you know if progress is made? Record-keeping is very important. At the Brigham Hospital, we use two forms. The first is an accident investigation form that helps evaluate safety problems. These are examined and reviewed by the safety engineer. The second is a report of accident or illness describing the type of treatment and work disability, if any. This is sent to the patient's supervisor and a copy to our compensation manager in Personnel. We analyzed our occupational accidents by departments and discovered where corrections could be made, thereby decreasing our accident rate. For example, in the Dietary Department, burns were a frequent occurrence. By correcting a problem with the hot coffee container on the food trucks, we eliminated the problem. Needle punctures, a continual problem, prompted us to circulate a new memo on correct needle disposal. A hepatitis brochure was also written and given to all employees.

A system for analyzing accidents is essential. Each accident needs to be looked at in depth and viewed as more than just another statistic. Accidents can often be prevented with the three E's of the National Safety Council--education, engineering, and enthusiasm.

Through our inspections we are cognizant of the actual exposures and we can see how the workers function in the daily routine. For example, lab hoods are effective only when the switch is on. Encouragement is necessary for the staff to utilize the available means of decreasing their potential exposure. The occupational health nurse may be the employee's primary source of health information. Problems--either physical, mental, familial, or job-related--may be identified, and help can be provided.

The clinic nurse can provide the resources for establishing educational teaching files and informing workers of potential hazards and how they can be avoided. Through cooperation of management and employees, workplaces can be made safe and pleasant.

Small business cannot afford the know-how of specialists or the higher per-capita cost of a good medical department. These establishments must often operate with the risk of two or three serious occupational accidents that could cause bankruptcy. A limited budget does not allow for a good preventive health program. Occupational health services that reach out to industry may be the answer to this recognizable problem. We hope to provide periodic physical examinations and curative services. As part of a teaching hospital, we have all the paramedical services available to us. When hazards are found,

appropriate health and environmental tests are obtained, and suggestions are given. I have been able to accompany the state chemists in analyzing lead exposures in the workplace. There is great satisfaction in identifying the problem exposures and correcting the hazards.

We have sponsored seminars for small business people to attend, providing current information regarding OSHA standards, first aid, safety awareness, and health maintenance. The hospital sponsors many educational programs. One is the Emergency Medical Technician's course, which is geared to enabling outside workers to become qualified as first aid providers at their job sites.

Safety is a team effort. Each member of the team contributes to its success or failure by his own personal conduct. In-service education of the worker can be one of the best means of promoting a safe environment. To obtain compliance, employees should feel they can be important contributors to the safety program.

In summary, I feel that occupational health services, whether they are based in an HMO or a hospital, are the answer to the search of small business for some means of complying with government regulations concerning health and safety in the workplace. These programs are not necessarily expensive or time-consuming. By starting out on a small scale, utilizing available personnel and resources, and sharing enthusiasm and interest, we were able to implement a safety program at <u>our</u> workplace.

DISCUSSION SUMMARY

Ms. Barbara Kingsley discussed the role of the nurse in occupational health services for small businesses. Calling on her own experience in this position in a Boston clinic, she described it as a profession that is responding to changing societal needs. The occupational health nurse must view man in his total environmental setting, aiding him to cope with not only his physiological needs but with his psychological, social, and spiritual health as well.

The successful occupational health nurse must be a nurse practitioner, not just a physician's assistant. The nurse practitioner is necessary to provide comprehensive health care to every citizen, especially since there are not enough physicians available. Patients must often wait in clinics 2 or 3 hours before seeing a doctor. But nurses are discovering that they can do some of the initial examinations and have the doctors check their conclusions, thus saving both the doctor's and the patient's time. To insure that the nurse practitioner is doing a good job, monthly chart reviews, peer reviews, and auditing are also performed. Workers should be able to return to their jobs quickly and efficiently and to have the proper care.

The occupational health nurse must attempt to establish a professional nurse-client relationship. She must encourage employees to confide in her, and they will if they realize that the nurse sees the interview as a confidential, professional relationship. She must make the employee feel secure enough to describe hazards or other employment problems that he would be afraid to mention to his employer. The confidential interview can help the occupational health nurse control industrial accidents and illnesses.

A useful way of obtaining information is through a pre-placement exam. A nationalized, standardized health questionnaire would be especially useful. The nurse should not simply record the facts of the pre-placement interview as a computer would; she should analyze and use them in conjunction with the physical exam to help the patient return to good health and to alleviate the on-the-job health hazard that caused the illness or accident.

Health services that are being offered to small businesses are basically curative with follow-up appointments. The records that are kept on these patients help to identify recurring illnesses or injuries so that the source of the problem can be dealt with at the place of employment. To investigate the place of employment for health hazards, the occupational health nurse should be aware of the available resources for hazard investigations such as Federal and state agencies.

The occupational health nurse must be concerned with the patient's psychological and physiological well-being. It is important for the nurse to reassure the patient when he is frightened and worried about his health. She must realize just how medical problems can interfere with a person's lifestyle.

The occupational health nurse should also be ready to report an industrial situation that caused an unnecessary injury. She should call the company and inform either personnel or the first aid department that a hazard exists and should be dealt with immediately. Some companies want only pre-employment physicals for their employees. But providing this minimal service does not constitute an occupational health program; rather it reflects the attitude of a company that wants to do as little as possible and still say that they protect their employees' health. The occupational health clinic should demand that the business use all their services. Small businesses should be especially willing to cooperate, since they would be unable to afford the services of a full-time nurse of their own.

Ms. Kingsley's clinic has developed an occupational health program for Peter Bent Brigham Hospital, where the clinic is located. Every department in the hospital was studied to discover the major injury that occurred in each. The hazards were soon identified and corrected. In many instances, educating employees as to safer procedures reduced the rate of injuries. A list of chemicals used in the hospital was made so that quick action could be taken in case of accidental ingestion or exposure. Accidents can often be prevented by using the National Safety Council's three E's: education, engineering, and enthusiasm. The employees must be <u>educated</u> to use safe methods and procedures. New and safer ways of doing things must be <u>engineered</u>. And all concerned must be <u>enthusiastic</u> about a safe working environment. Spot-checks are made in the different departments to help identify other hazards the employees may be exposed to.

The occupational health nurse has several other important roles. She is the employee's primary source of information for physical, family, or job-related problems. She can help identify problems and then provide help. The nurse should establish an educational teaching file to make available to workers so that they can be informed of potential hazards and how they can be avoided.

It is the responsibility of the occupational health service to reach out to

industry, especially small businesses where money is scarce. The occupational health service should provide periodical physical examinations and curative services. Paramedical services, pulmonary function tests, allergy testing, and x-rays would be made available to all employees. All of this care would be paid for by workmen's compensation so that neither the worker not the company would see a bill. To inform small businesses of the services offered by the clinic, seminars are held for the business people. Dinner is provided, and basic first aid instruction is given. The businessman is made aware of ways to make his factory more productive.

Ms. Kingsley definitely feels that an occupational health service based in a hospital or clinic is the best way to provide care for small businesses at extremely low cost. Four or five such hospital clinics are already established in the United States, but there is no reason why others cannot begin by working out of the emergency room at first and expanding from there.

The American Nursing Association is providing guidelines for certification of nurse practitioners in public health. Clinic patients should be able to expect those treating them to be expertly trained to meet their needs. Conventions held by the American Nursing Association and the Industrial Nursing Association offer programs to help increase a nurse's working knowledge. Some community health nursing concepts are being offered in the basic nursing programs in colleges. But some university people do not have a clear picture of the role of an occupational health nurse and therefore cannot instruct their students. It has been suggested that occupational health nursing be offered as a specialization in postgraduate work since the undergraduate program is already so full of necessary material. An undergraduate program could also be offered for those who do not want a master's degree but want to do a better job as an occupational health nurse. In-service education that includes visits to other clinics would also be an excellent way for occupational health nurses to gain new insights and keep up to date.

In summary, the best opportunity for an occupational health nurse to successfully help small businesses and their employees is to work out of a hospital-based clinic where she can use her talents as a nurse practitioner to alleviate some of the doctor's burden and work to eliminate industrial hazards.

---

Complete tapes of the workshop proceedings are on file at the Division of Technical Services, National Institute for Occupational Safety and Health, Cincinnati, Ohio 45226.

BIBLIOGRAPHY

1. Jamison, Sewall, and Suhrie. 1966. Trends in nursing history. W.B. Saunders Company, Philadelphia, Pennsylvania.

2. Hayes, M.R. 1969. Occupational health hazards of the work environment. The Williams and Wilkins Company, Baltimore, Maryland.

3. National Safety Council. Nov.-Dec., 1976. Safety newsletter. Chicago, Illinois.

Page, R.C. 1963. Occupational health and man-talent development. Physicians' Record Company, Berwyn, Illinois.

U.S. Department of Health, Education, and Welfare. 1973. Industrial environment - its evaluation and control. Public Health Service, Center for Disease Control, National Institute for Occupational Safety and Health. Washington, D.C.