Illness and the Workplace: A Study of Physicians and Employers

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Seven million patients with work-related injuries are seen annually in the United States, the majority by primary care physicians. The number of such patients seen in a typical community practice may be significant but has never been studied. Most community-based physicians have little or no formal training in occupational health care. This study consisted of a survey of practicing physicians and major industrial employers in a city of 39,000 with a strong manufacturing base. The purpose was to assess physician skills, attitudes, and practices that might influence the optimal management of patients with work-related conditions, and to assess employer attitudes about this management. Eighty-three percent of physicians and 68% of employers responded to the written surveys. Low numbers of patients with work-related conditions were reported except by orthopedists and a neurologist. Few physicians communicated directly with employers, citing time and confidentiality as factors. Twenty-five percent were unaware of specific legal guidelines for such contact. Administrative and legal complexities were cited by 97% of the respondents as barriers to effective management of such cases. Eight percent of employers sought more contact with physicians, including site visits and more detailed work restriction guidelines. The education of primary care physicians may improve their understanding of work-related conditions and the optimal management and rehabilitation of these patients. **J Fam Pract 1990; 31:55-59.**

According to estimates by the Occupational Safety and Health Administration, 7 million workers acquire work-related injuries each year. Approximately one third of these injuries and illnesses are treated at emergency care centers; the remainder are treated by primary care physicians.[1] Because specialists and referral clinics in the field are few, private physicians manage the majority of work-related conditions in the outpatient setting. Many more patients have conditions that are not caused by work, but either are affected by work or have significant impact on the ability to do a job. The number of patients typically seen in community practice with work-affecting or work-related conditions may be significant but is unknown.

Occupational problems present unique issues for the primary care physician, including employer responsibility, determination of disability, atypical third-party insurance, public health concerns, and wage compensation. As workers' compensation laws often direct the treating physician to provide information directly to the employer and insurer, the usual privacy and confidentiality of the physician-patient relationship is altered.[2,3] Most physicians have had no formal training in this area and may have difficulty with these requirements.

A survey of physicians and employers in a typical industrial community was conducted to answer several basic questions regarding occupational health care delivery. It was intended to determine the number of patients who present with work-related or work-affecting conditions, to identify challenges and difficulties encountered in providing care for these patients, and to identify barriers to appropriate employer-physician communication. Based on prior experience, it was hypothesized that most physicians have received little training in this area.

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TABLE 1. BREAKDOWN OF RESPONDENTS BY SPECIALTY

Specialty	Number Eligible	Number Responding
Family practice	25	19
Internal medicine	13	11
Surgery	7	6
Orthopedic surgery	7	5
Obstetrics-gynecology	6	5
Total	66	55

METHODS

The study was conducted in a town with a population of 39,000, where one third of the workers are employed in manufacturing or other industries. A small number of companies, ranging in size from 35 to 500 employees, collectively employ 85% of the industrial work force.

Anonymous surveys were mailed to all physicians engaged full-time in the fields of family practice, internal medicine, surgery, orthopedics, pediatrics, and obstetrics-gynecology, with active staff privileges at the local hospital. This sample represented almost all of the physicians who routinely care for the industrial workers in this town. Questions included specialty, number of patients seen weekly with work-related or work-affecting conditions, methods of communication with employers, and difficulties with occupational issues. Physicians were also asked to report whether they had received any specific training in occupational health.

Each industrial firm in the city with 35 or more employees was identified, and a survey was sent to the person responsible for workers' compensation issues. Questions focused on the type, adequacy, and quality of communication received from physicians and problems with medical care of injured employees.

RESULTS

Eighty-three percent of all eligible physicians and 68% of all eligible employers responded after two mailings and follow-up telephone calls to nonrespondents. A breakdown of physician respondents by specialty is shown in Table 1.

On average, 8.3 (range 1 to 50) patients were seen per week with conditions that affected working ability (both work-related and non–work-related), as detailed in Table 2. On average, 3.5 patients (range 1 to 50) per week were identified as having work-related (caused by or exacerbated by work) conditions. On a Likert-type rating scale, physicians gave high ratings of their familiarity with patients' occupations (average response 3.4 on a scale of 1 to 4). Twelve of 55 physicians (21.8%) had a formal relationship with one or more companies in the area. Only five physicians, however, acknowledged having actually visited a patient's workplace.

TABLE 2. NUMBER OF PATIENTS SEEN PER WEEK WITH WORK-RELATED OR WORK-AFFECTING CONDITIONS

Specialty	Work-Affecting	Work-Related
Family physician	4.95	2.5
Internal medicine	8.36	2.5
Surgery	5.75	1.0
Orthopedic surgery	25	13.2
Obstetrics-gynecology	26*	<1
Neurology	30	16
Average	8.3	3.5

**Includes pregnancy*

Table 3 is a list of the methods of communication with employers about medical issues. More than one response was allowed. A brief note sent with the patient was most common. Few physicians ever spoke directly with employers.

Table 4 contains the reasons given by physicians for not communicating by telephone with employers or insurers regarding work-related conditions. The time required for telephone calls and not knowing whom to call were most often cited as obstacles to direct communication with employers. Apparently 25% of the respondents were unaware of the legal requirements for some communication with the employer or insurer in work-related conditions.

Difficulty with workers' compensation procedures became quite evident when physicians were asked to identify general problems in work-related cases, as summarized in Table 5. Frustration with the volume of associated paperwork, lack of occupational health knowledge, and reimbursement problems were most frequently cited. A

TABLE 3. METHODS PHYSICIANS USE TO COMMUNICATE WITH EMPLOYERS

Communication Style	Number Responding	Percent of all Respondents
Written note sent with patient	54	100.0
Sent letter to employer	11	20.0
Verbal report to employee	10	18.5
Spoke directly with employer	7	13.0
Sent information to insurance carrier only	3	5.6
Other	8	14.8

NOTE: More than one response per physician; total 55 respondents.

TABLE 4. COMMUNICATION PROBLEMS IDENTIFIED BY PHYSICIANS

Problem	Number Responding	Percent of all Respondents
Telephone call too time-consuming	22	40.7
Do not know whom to call	19	35.2
Breach of confidentiality	14	25.9
Against patient's wishes	4	7.4
No value in calling	1	1.9
Other	8	14.8

NOTE: More than one response per physician; total 55 respondents.

large part of the problem may be due to inadequate education; only 17% had medical school electives or postgraduate training in occupational health.

In the second part of the study, employers were questioned about the quality and relevance of the communications they received from physicians regarding work restrictions. Although physicians frequently responded to requests for information, employers often felt that the resulting communications were not useful. Over 80% of the employers sought clearer, more detailed restrictions. Physician unfamiliarity with job requirements or work alternatives such as light-duty programs were identified as significant problems. Many employers requested that physicians visit plants for a direct meeting and site inspection, and felt that this would improve communication. Satisfaction with the quality of physician communication was not correlated with the presence of an established relationship with an area physician for work-related injury care.

TABLE 5. PHYSICIAN CONCERNS WITH OCCUPATIONAL CASES

Concern	Number Responding	Percent of all Respondents
Administrative paperwork	28	51.9
Unfamiliar with Workers' Compensation Law	26	48.1
Poor reimbursement	13	24.1
Lack of occupational health knowledge	11	20.4
Patient-trust issues	11	20.4
Employer rarely sympathetic	10	18.5
Adversarial nature of cases	9	16.7
Lack knowledge of work options	9	16.7
Effort is not appreciated	3	5.6
Other	3	5.6

NOTE: More than one response per physician; total 55 respondents.

DISCUSSION

This US survey is the first to document the extent of primary care occupational practice or examine interactions with employers. The study location is 25 miles from the nearest established occupational health program, and the vast majority of injured employees are seen locally. The 29 employers surveyed collectively employ more than four fifths of the industrial workers in this city. As the survey included most physicians and larger employers in the same geographic area, these physicians and employers are likely to interact with each other regarding medical issues affecting employment.

Internists and family physicians reported infrequent contact with conditions associated with work. Orthopedists and a neurologist reported a much larger number of such patients, possibly because of the referral nature of their practices. This difference may also represent a reporting bias because musculoskeletal and nerve entrapment injuries are more easily recognized and related to employment compared with other occupational conditions, such as asthma, skin disorders, stress syndromes, and cancer. Furthermore, physicians may not uncover occupational factors if they do not have a high index of suspicion, if they are unfamiliar with causes of occupational conditions or workplace exposures, or if the condition is chronic.[4,5] Only 16% of respondents reported any formal training in occupational health, the lack of which may have affected their ability to recognize work-related illness.

Information about diagnosis, prognosis, work-relatedness, and ability to work is usually required to allow the employer to provide job accommodations for an injured worker, to release workers' compensation benefits, and to facilitate efforts to prevent other injuries. Physicians rarely communicated directly with employers for a variety of reasons; instead they sent brief notes. Few had ever visited a patient's workplace. Employers expressed concerns that physicians did not understand job duties, exposures, and available work alternatives, and encouraged more direct contact, including plant visits.

Closer contact with employers and more familiarity with the workplace may provide several benefits to patients. By giving employers feedback about an injured worker's chances for return to work, the physician may decrease the mistrust and misunderstanding between worker and employer arising in the wake of an industrial accident. Rehabilitation of recovering workers can be optimized by developing suitable light-duty or modified work. Developing a role for the physician as an informed "risk appraiser" can help both parties recognize and prevent hazardous conditions before injuries or illnesses develop. The trend toward increasing worker awareness of

possible hazards, through right-to-know laws, offers physicians an increasing role in educating workers and employers in this area.[6,7]

Despite the requirements of the workers' compensation system, there are limits to what a physician should divulge to a patient's employer, as privileged communication does exist between patient and physician, even regarding occupational conditions.[8,9] What a patient relates in confidence to a physician may result in real consequences for the patient, such as reprimand or loss of employment. Misinterpretation of indirect, limited communication from the physician and patient about the injury or illness, however, may lead the employer to act in ways that complicate the optimal process of returning the worker to his or her most productive status.

Several factors identified by respondents negatively influence their motivation to become more active in occupational issues. The potentially adversarial nature of these cases may place physicians between the employee-patient and the employer. Determining work-relatedness of an injury can be difficult when multiple causal factors contribute to the appearance of a work-related condition. Physicians may not realize that their role in documenting physical and functional impairment does not make them responsible for legal determination of causality or compensability; this determination occurs through a legal process, of which the physician's statement is only one part.[10] Physicians should clarify these issues for patients, emphasizing their role as providers of objective information. The education of primary care physicians regarding basic features of the workers' compensation system should improve their effectiveness in this area.

In summary, this survey of physicians and industrial employers demonstrated a wide range of issues that impair ideal medical management. The usual limited communication between physicians and employers may lead to suboptimal recovery and return to work of disabled workers. With better training in this area, physicians should be capable of resolving some of the difficulties identified in this study, improving the outcome for their patients with these conditions.

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Commentary

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Over 5 million injuries and 11,000 fatalities are recorded annually in the United States. But only 125,000 occupational illnesses were reported in 1986 by the US Bureau of Labor Statistics. This figure is commonly considered to be a gross underestimate of work-related health statistics. Since over 70% of US workers are employed in facilities having no medical care providers, it is possible that much of the data on occupationally related factors are lost as medical care of work-related illnesses shifts away from the work site toward practitioners' offices and community hospitals. Questionnaire results included in the above article by Merrill and his colleagues[1] indicate that family physicians in one locality evaluated an average of over seven work-related conditions weekly. Unfortunately, such practice-based studies are rare, and these physicians' experience cannot yet be extrapolated to regional and national rates.

There exists considerable diversity of occupational medicine experience among family physicians, and many report little or no experience with occupational conditions. Although occupational medicine is strongly endorsed as a component of family practice residency cur-

riculum, few programs provide adequate residency teaching in this area. As a result, frequent misdiagnosis can result from lack of consideration of occupational causes. For instance, a diagnosis of Raynaud's disease is a common error when vibrating hand tools are overlooked as the cause. Organic solvent exposure is also frequently overlooked in a diagnosis of early-onset dementia. Appropriate disease management requires accurate diagnosis. Management of work-related conditions, such as low-back strain and repetitive trauma disorders, often leads to considerably decreased recovery times. Patient education, which leads to decreased recurrence of work-related conditions, can be utilized if work-related causes are identified.

Physicians need to know whom to call for the difficult cases, which quick and current reference texts are available, whom to contact for assistance in streamlining billing procedures, and which systems are most appropriate to guard against leaks in patient confidentiality. State and local health departments may also provide occupational disease information, industrial hygiene, and epidemiological support. Busy physicians need to be aware that perceived barriers can be readily dealt with and overcome. They also need to know that in many states they are legally required to report work-related injuries and illnesses.

If the family physician chooses to incorporate occupational medicine as a significant endeavor, what benefits can be expected? Occupational referrals represent an opportunity of increasing patient care volume. Reimbursement for such services under workers' compensation guidelines are generally 100% of the amount billed. Work-related conditions, particularly illnesses, are often diagnostically challenging, and their diagnosis often results in the prevention of subsequent problems. The family physician may develop a notable expertise in dealing with occupational disease. Such a recognition often leads to offers of medical director positions for local businesses and hospital employee health services.

Practicing family physicians hold a key to the Pandora's box of occupational disease and injury occurrence. Data on the prevalence and incidence of occupational conditions are needed to instill an appreciation of their actual occurrence. Data provided by office practices, ideally linked to a national surveillance system, could lead to preventive strategies, with benefits seen in the improved health of the US working population.

A heightened awareness of occupational medicine is needed and must be promoted in the medical literature. The article by Merrill et al represents an example of the type of research that can fill the existing void. This study documents the family practice experience with occupational conditions in a community that mirrors that of family physicians throughout many parts of the United States.

Documentation of occupational disease and injury prevalence is rapidly becoming a national priority. The National Institute for Occupational Safety and Health SENSOR program is targeting several occupational diseases for identification and diagnosis in private physicians' offices. Several states, including New York, Connecticut, New Jersey, and California, provide direct funding to facilitate occupational disease and injury reporting. The US Department of Health and Human Services, in its Year 2000 Objectives for occupational health and safety, strives to increase to 75% the proportion of primary care providers who routinely elicit occupational histories. Widely endorsed by the Institute of Medicine, the American Medical Association, the American College of Occupational Medicine, and state and federal agencies, the objective of expanded practice and research addressing patients' occupational health needs must next be endorsed by practicing family physicians.

Reference

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