Dear Dr. Bennett:

I have just read with considerable interest your article, "Role of Environmental Medicine in Industry", which appeared in the November issue of MEDICAL ADVANCE. Your emphasis on the increasing importance of non-occupational illness, and consequently of the role of preventive medicine in industry is well taken. In our Rochester plants, for every day of lost time due to occupational injury or illness, there are 60 days of absence due to non-occupational illness and injury. For men, the figure is 1:40, and for women, 1:100. It is quite obvious where a program for the reduction of lost time due to illness will show "pay dirt".

While I do not disagree with the basic qualifications for industrial physicians which you have emphasized, I am wondering if, by certain omissions, you may not have left an erroneous impression. You did not mention that, for the full-time physician in industry, a considerable body of knowledge and skill is needed which cannot possibly be acquired during our present undergraduate medical training. In addition, I seriously doubt that your implication in the sentence, "We shall probably be able to depend on sanitary and safety engineers, the public health authorities, and the chemist to identify these hazards..." will be realized for many years. I would agree that not every industrial physician needs to become an expert toxicologist, but he does need to know considerably more about the specific hazards in his plant than the average physician practicing in that community.

I believe that the majority of the full-time industrial physicians now recognize the need for additional training at the postgraduate level for individuals entering Industrial Medicine on a full-time basis. The excellent article by Dr. Kammer on "Graduate Education in Industrial Medicine", appearing in the October 1953 issue of INDUSTRIAL MEDICINE AND SURGERY, summarizes the type of training which most of us who are actively engaged in Industrial Medical Education agree is essential. In the past two years, we have had two Fellows for in-plant training here in our plants, who came from such a postgraduate training program. One of these was from the University of Cincinnati, the other from the University of Pittsburgh. Their ability to handle the variety of problems encountered in Industrial Medicine compares favorably with that which would ordinarily not develop until five or ten years of ordinary on-the-job experience. In the case of an individual working alone in Industrial Medicine, this period of time for equivalent development may well be a much longer one. Your qualifications are prerequisite to being a good, well-rounded, preventive medicine oriented doctor, but the competent industrial physician needs considerably more.

Hygiene and Toxicology, Epidemiology of Occupational Disease, Applied Preventive Medicine, and other important subjects are treated in separate courses.

I recognize the difficulty in telling the whole story in a brief article, but am apprehensive that many of the non-medical people in industry to whom this information goes, may misinterpret the qualifications in this increasingly important area of practice. I am sure that many of the leaders in our Medical Schools are unaware of the active developments in this field of post-graduate medical education.

It seems to me that, at a later date, the story of the progress of postgraduate training in Industrial Medicine might be told in MEDICAL ADVANCE by someone such as Dr. Robert Kehoe or Dr. Adolph Kammer. This would clarify the picture which, I believe, is gaining increasing acceptance by active practitioners and educators in Industrial Medicine.

Very truly yours,

James H. Sterner, M.D.
Medical Director

JHS:AC
Enc.
cc: Dr. R. A. Kehoe ✓
Dr. A. G. Kammer

A nagging wife, a sick child, a mortgage coming due -- all cut into a worker's efficiency and cost the employer money. Dr. Bonnett, a leading authority on industrial health, suggests that industry and the medical schools, together, can help the physician of the future meet this problem.

ROLE OF ENVIRONMENTAL MEDICINE IN INDUSTRY

by Dr. Earl C. Bonnett
Medical Director, Metropolitan Life Insurance Company

No person is ever free from his environment. His medical problems in the final analysis are an expression of his relation to the environment. The general tendency now seems to be to regard the complete and total individual, rather than his symptoms, as the primary concern of the physician.

Certainly in industry the individual plus his surroundings is looming ever larger. Worries in the home — a sick wife or a sick child, or a sick husband — are, unfortunately, brought by the employee to his job. He may, in the course of a day, develop an acute appendicitis. But he is more likely to develop dizziness, an undiagnosed abdominal pain or diarrhea, or fight with his boss or a fellow worker.

The same thing can happen if he is in financial difficulties or if his mortgage is about to be foreclosed, or if he has a psychological pattern which makes him grumble because of his surroundings and gripe at every order given by his supervisor.

Of course, there are specific environmental hazards in industry. These will vary according to the type of industry and the products it manufactures. New methods will bring in new toxic materials, new accidental exposures, new forms of dermatitis

In the face of disruptive financial pressures, the medical schools are striving to meet the needs of America's families and communities -- of industry, the armed forces, research and public health -- for physicians and other health personnel.

To help them reach an understanding of these needs, the National Fund for Medical Education is bringing medical school officials together with industry and community leaders in a series of meetings throughout the country. This article, based on material presented by the author at one such meeting, discusses industry's most pressing medical needs, now and in the future.

Aim Now is Health Conservation;
Employer in Best Position to Help

In the main, they are satisfactory. An acutely ill person needing a hospital usually can be admitted. An injured person can receive first aid or hospitalization if necessary. Certainly, the doctor taking care of him should have enough diagnostic ability and surgical understanding to separate the serious from the minor conditions and advise proper care.

In the last 25 years, there has been a great change in industry's attitude concerning the health of employees. Life insurance, of course, needed doctors rather early in classifying risks for insurance. Manufacturers later needed doctors when Workmen's Compensation laws began to appear and there was need to reduce the cost of accidents and to identify and remove health hazards. Now, it is felt that there is increasing need for health conservation among employed persons and that the employer is in the best position to help the employed population in this effort.

This attitude has meant quite a change in the point of view of practitioners who have been trained to treat the individual's symptoms but now, entering the industrial field, have the opportunity not of treating but of conserving the health of the active employee. I suspect strongly that most of the annual or periodic examinations designed to pick up early evidence of disease are today made by the company doctor on company time.

Chronic Disease, Emotional Reactions are
Chief Problems of Industrial Medicine Today

In approaching employee health conservation, the first problem is what to do about chronic disease and how to prevent it. Actually, there is very little that can be done at the present time except to detect tuberculosis early, to advise on weight reduction, to guide and counsel employees concerning good health habits and nutrition, to encourage proper eating and rest habits and to be on the lookout for the potential diabetic and the hypertensive among overweight individuals. Some disorders detected early can be favorably influenced or controlled.

Perhaps some day we can find a method of utilizing social security numbers as a follow-up to learn, over the years, the natural history of the development of high blood pressure, coronary artery disease, or even cancer. This, of course, would require a fairly standard method of reporting the results of pre-employment examinations or periodic health appraisal examinations. A great mass of data could be

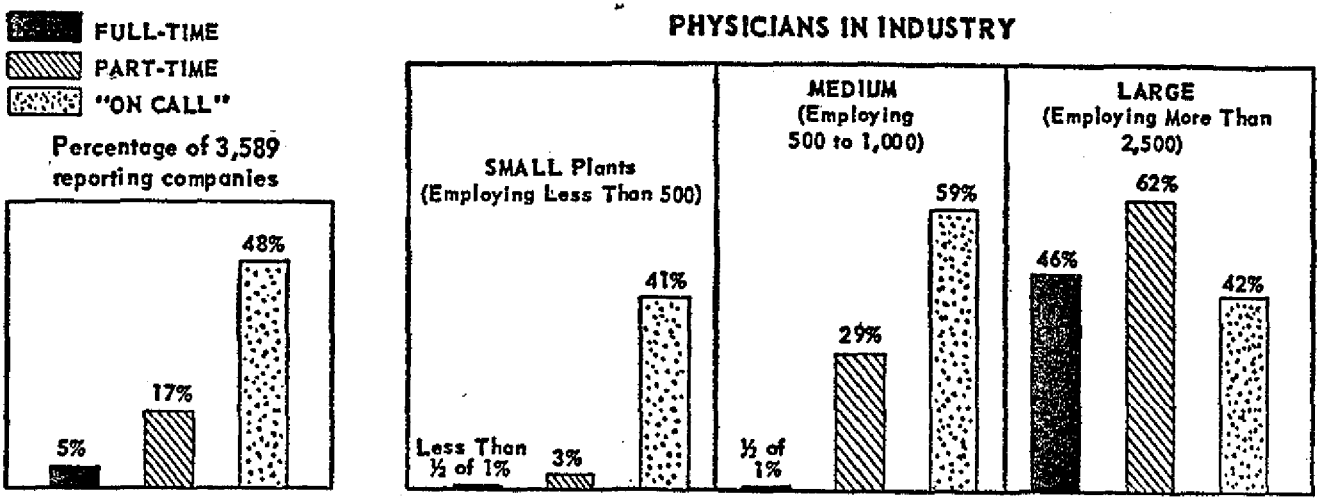
to an understanding and an insight into his behavior.

Plant Doctor of the Future Must Have Broad Understanding

For this purpose, I would select a doctor with a warm personality and understanding who can sit down with the individual, canvass the whole environmental situation and help the individual, in a friendly but firm way, to recognize the true situation. Unfortunately, there are not too many of this kind of doctor at the moment and those available seem to have this capacity by endowment rather than by education.

In environmental medicine we need to extend our activities and interests to the home. This may not always be feasible. It may even lead to widespread resentment because of the thought that the employer is getting too nosey. However, we must recognize that a lot of our problems are initiated and brought to full bloom in the family situation, although the employer bears the brunt of their manifestations.

We need to assure ourselves that the truly sick person is kept off the job. We need to recognize that a person with a sick family or other severe home worries is not a well person. It is not he, however, who is in need of treatment, but the



In a recent survey by the National Association of Manufacturers, more than half the 3,589 responding companies reported inplant medical services. In the chart above, the first section (left) shows the percentage of all responding companies employing full-time, part-time and/or "on call" physicians. (The percentage reporting no medical services is not shown.) The three sections to the right show the percentages for small, medium and large companies.

Now the question naturally arises, where are we going to get doctors who have the knowledge and ability which industry needs? And get them in larger numbers as the need increases? Certainly, they should receive somewhere in their training an awareness of those large areas in which they will be of genuine service and still be real practicing physicians.

This training, it seems to me, should really come in the undergraduate courses at the medical schools. The undergraduate should be made aware of opportunities in industry and of the psychological or emotional problems of individuals working or living in difficult circumstances. His future private patients will benefit too.

The student should know, too, something of the economics of private practice and of the tremendous strides which have been made in recent years in insurance coverage. Doctors in industry generally are not aware of the advantages of certain kinds of insurance — disability, medical and surgical care and hospitalization insurance — which, not infrequently, supplies part or all of the funds their patients pay for wider, more complete medical service than they have been able to afford in the past. They should make it a point to know and be able to explain to their patients the advantages of these insurance plans, the many benefits available and how properly to utilize them.

There is one final qualification for the physicians who practice environmental medicine: warmth and understanding. The personality — or at least some evaluation of the emotional and psychological adjustment of the student as a potential physician — needs careful study in the selection of medical students.

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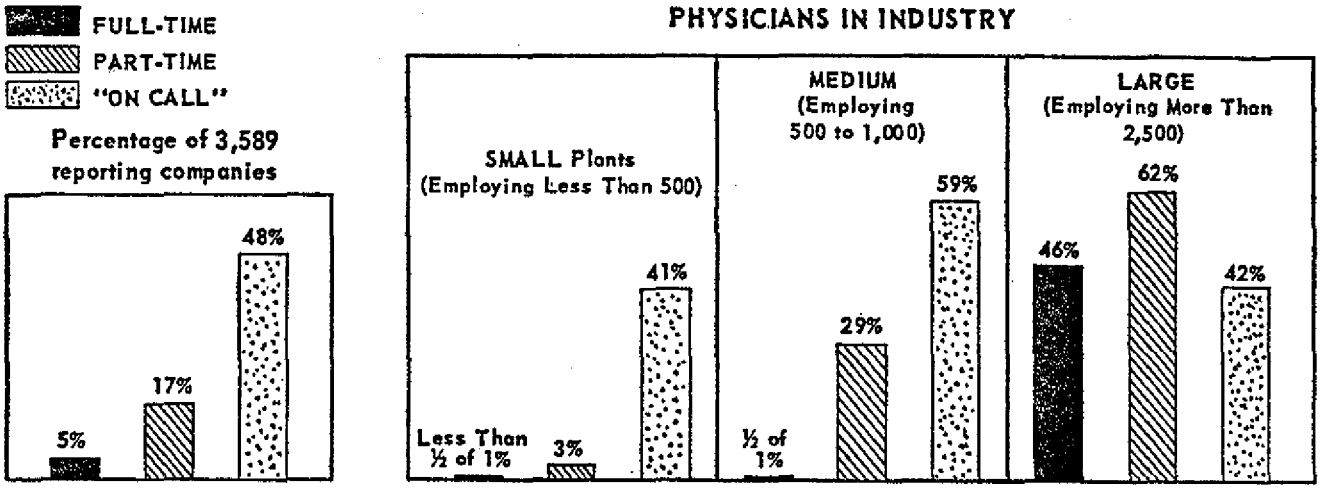

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