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THE HEALTH CARE CRISIS.

What Is It And What Can We Do About It. Senator Jacob K. Javits U.S. Senate Washington D.C.

As we aspire to bring the full potential of modern medicine -- with its discoveries of skills and techniques necessary to combat crippling injury and disease - to every American, we face a crisis in our Nation's health services. We must overcome the disturbing grave deficiencies in health manpower. Lack of adequate professional and para-professional health manpower threatens to nullify the tremendous gains in medical science and limit the capacity of our Nation's health-care services to deliver the benefits of these discoveries to every American -- regardless of economic and social status.

Today's medical professionals are overworked and far too few in number. Hospitals are crowded to the bursting point, and their ability to provide quality medical care is severely hampered by such conditions. Our excellent medical and dental schools cannot train quickly enough the number of doctors and dentists our expanding population desperately needs. And the very survival of these institutions is threatened by rising costs in every phase of their operations.

It is not hard to realize that most Americans will at one time or another bear the consequences of this growing problem in the field of medical care. The very affluent and the very lucky may still be able to obtain the best care and individual attention when they are ill, but what of the less welloff and more importantly, what of the poor trapped in rural poverty pockets and urban ghettos? These Americans bear the burden and pay the greatest price in terms of disease, suffering, and sorrow. The gap between rich and poor which exists in so many aspects of our society is also widening in terms of the ablility to purchase the services of qualified medical professionals.

There are more than 23 million poor people according to the Office of Economic Opportunity, and an additional 13 million who are medically needy residing in the United States. These people have a high rate of death and disability, yet the health care available to them is frequently inadequate, inaccesible, impersonal, and fragmented. In the inner cities and rural areas, there is an appalling lack of resources. There is no appreciable number of doctors in the

big cities, and rural clinics close down when their faithful "country doctors" die or move away. There are not enough new personnel willing to replace them.

Similarly, the number of paraprofessionals in the health field and adequacy of their training have not kept pace with the sharply increasing demands for their services. In 1967, for example, there was a deficit of 110,000 allied medical personnel in terms of demands made on these professions according to the National Advisory Health Council of the Department of Health, Education, and Welfare, The situation has improved little, if any, in the past three years.

The Congress is very much aware of this problem, and we shall do as much as possible to help alleviate it. We realize that the solution to this formidible crisis lies in overcoming the acute shortage in health manpower -- especially in the allied health professions. Toward that end, on July 13, 1970, the Health Training Improvement Act of 1970 (S. 3586) passed the Senate. This act incorporates many features of this Administration's Allied Health Professions Training Amendments of 1970 (S. 3718) which I introduced and the Veterans in Allied Health Professions and Occupations Act of 1969 (S. 2753) which I authored and introduced with Senator Prouty over a year ago.

As the first initiative in the effort to end our health professions crisis, this legislation: seeks to increase the supply of manpower in the allied health fields by utilizing in our civilian-health industry the more than 30,000 medical corpsmen who leave the military each year; bring veterans and others with backgrounds and interest into the civilian medical service where they are desperately needed; and to explore the possibility of finding new sources of manpower capable of performing many of the functions now carried out by highly skilled and scarce professionals -- as provided for by my Veterans in Allied Health Professions and Occupations Act.

This Nation needs to make the best use of every available skill in the health field. And what better way could be found to help many of the thousands of returning Vietnam veterans find meaningful employment? Surely a medical corpsman qualified to treat wounded on the battlefield should be quickly qualified to assist in the treatment of patients in our hospitals' wards and emergency rooms.

In reviewing the pending legislation, it should be recognized that one of our greatest concerns - in helping overcome the health manpower shortage -- is the need for

conducting a comprehensive study of existing laws, traditions, licensing practices, and certification, and any other means by which individuals are determined to be qualified to practice in the allied health professions. Every effort must be made to prevent artificial and unnecessary restrictions on the entry and advancement of skilled personnel and I authored the amendment in the Senate-passed bill to accomplish this objective.

Finally, I think some other features of the Health Training Improvement Act of 1970 deserve to be noted for they serve to underscore the fact that something must be done as a first step in our efforts to provide complete quality health care to all Americans.

The bill would authorize special projects to --

Plan, develop, or establish new programs for the training or retraining of allied health personnel. Effect significant improvements in the curriculums of programs of training of allied health personnel.

Expand training capacity in programs for the training or retraining of allied health personnel, and

Establish special curriculums designed to meet the needs of, and encourage and facilitate the participation in, such programs by individuals who are --

- -economically or culturally deprived
- -returning veterans with training or experience in the allied health fields, or
- -reentering or interested in reentering the allied health fields.

This improved renewal of the allied health professions at makes it explicit that the sense of the Senate is that we have to try new methods if we are to meet the health needs of our people.

New Program

THE MEDICAL SERVICES ASSOCIATE

The Medical Service Associate Program is a cooperative effort of Long Island University and the Brooklyn Cumberland Medical Center, Brooklyn, New York. It became operational under the direction of Dr. Arnold Lewis in February of 1970.

The program consists of two years of instruction which are "similar to that of the course offered at Duke University Medical Center." The first year is devoted to didactic studies ranging from English to the basic concepts of anatomy, physiology, pharmacology, and psychology. The second year is spent in the clinical area where students learn the arts of taking histories, performing physical exams, assisting the physician with various procedures, and assisting in surgery.

This tuition-free program trains ex-military corpsmen as physicians' assistants to work in hospitals and rural areas. Although ex-corpsmen are favored, there are apparently no stringent admission standards as of this time. One of the main purposes of this program is to graduate associates from the "minority groups" who will return to work in their own communities. This is evident in the initial class which out of 24 students. 22 are either Negro or Puerto Rican.

Upon completion of the Medical Services Associate Program, the graduate receives a joint certificate from Long Island University and the Brooklyn Cumberland Medical Center. The graduate is granted one year of college credits which is an important factor in "assuring educational and vocational mobility."

"The Medical Service Associate will be a professional who will work closely with the physician and be under his direct supervision and responsibility." As Doctor Lewis has stated, "The Physician's Associate will be expected to develop the philosophy and approach of the physician, functioning at all times as a professional with the highest moral and ethical standards."

EMPLOYMENT OFFERS

As usual, the following list of job offers have been randomly selected for publication and are but a few of the many offers received by the programs. The student or graduate Physician's Assistant is urged to contact his or her program director for specific counseling and job placement. A few offers are:

Solo in Internal Medicine Fred T. Darvill, Jr., M. D. P.O. Box 636 Mount Vernon, Washington 98273

Solo in General Practice Lawrence P. Hyde, M. D. 506 North Jefferson Avenue Pulaski, Virginia 24301

Industrial Medicine Group W. L. Murphy, M. D. Medical Division Chambers Works E. I. DuPont de Namours & Co. Deepwater, New Jersey

Harry M. Carpenter, M. D. Bealart County Hospital Washington, North Carolina

Partnership in Orthopedic Surgery Peter V. Teal, M. D. 1230 North 30th Street Billings, Montana 59101

MEDI-QUIZ

- A positive tourniquet test (Rumpel Leede) is found in all of the following except:
 - A. Hemophilia
 - Nonthrombocytopenic purpura
 - C. Thrombocytopenic purpura
 - D. Thrombocytopathic states
 - E. Scurvy

- 2. A 60 year old male presents with a chief complaint of sudden onset of left pleuritic chest pain, sudden dyspnea, and cough blood tinged sputum. The history reveals that the patient became syncopal after a 48 hour bus ride. On physical exam he was found to be tachypneic, which was out of proportion to the mild tachycardia, and had a temperature of 100.5 degrees F. The most likely diagnosis is:
 - A. Myocardial infarction
 - B. Pulmonary infarction
 - C. Pneumococcal pneamonia
 - D. Pneumothorax
 - E. Acute atelectasis

EDUCATIONAL ARTICLES

ACUTE IMMERSION SYNDROME

Death by drowning differs from most other forms of asphyxial death in that the anoxia, hypercapnia, and acidosis are complicated by physical and chemical changes that result from the introduction of water into the gastrointestinal tract and circulatory system by way of the respiratory tract.

Much of the present knowledge comes from autopsy material and animal studies. In experimental animals, the physical and chemical alterations vary with the kind and volume of drowning fluid. Dogs immersed in fresh water, a hypotonic solution, show hyperrolemia, hyponatremia, hypochloremia, hyperkalemia, significant hemolysis, and death by ventricular fibrillation. Dogs immersed in sea water, a hypertonic solution, show hypovolemia, an increase in all the changes is related to the volume of fluid aspirated. To produce the above mentioned changes and ventricular fibrillation, a man weighing 70 kg. would have to aspirate at least 3,080 cc. of fresh water.

Additional complications include pulmonary edema (very serious and often insidious), gastric dilatation with gas and water (prompts vomiting under water), pneumonitis of rapid onset, and vomiting with further aspiration.

Management includes mouth-to-mouth resuscitation started in the water if possible; external cardiac massage if necessary; mandatory hospitalization; antibiotic therapy to combat pneumonitis; nastrogastric suction to prevent further vomiting; electrolyte therapy following adequate ventilation and oxygenation; exchange transfusion if hemolysis occurs; and drug therapy to prevent shivering.

In summary, death by drowning is marked by an exchange of water and electrolytes between the alveoli and the blood and by escape of plasma into the lungs. An important feature in managing the rescued and resuscitated patient is the frequent aspiration of material containing mineral debris, acquatic flora and fauna, and romitus. The acute pulmonary edema of the resuscitated victim is accompanied by pneumonitis of rapid onset which usually resolves but can progress to lung abscess or empyema. Anoxic cerebral necrosis rarely occurs. In the revivable immersion victim, fluid volume and electrolyte changes are not a great problem. Hemoconcentration rarely requires therapy; if necessary, plasma expanders may be given. Hemoglobinuria is seen in victims of salt water or fresh water immersion. Finally, possible drug abuse by the victim must also be considered.²

BONE MARROW EXAMINATION -

Examination of the bone marrow has become increasingly important since the first practical technics of obtaining samples from various osseous sites were introduced. The study of cells aspirated from bone marrow may be of great value in diagnosing hematologic disease and in understanding the pathologic physiology of hematopoietic tissues.

In infants up to 16 months old, the tibial tubersity is a convenient site for aspiration. Many physicians prefer the posterior ilium of iliac crest in all other age groups. Some, however, still prefer the sternal body as the site for routine aspiration in the adult, but this site is hazardous in the younger patient. In 6 to 20 per cent of cases aspiration is impossible or the aspirate is deficient in hematopoietic elements. When iliac puncture cannot be done or when samples from multiple sites are required, the sternum, spinous process of a lumbar vertebra, or rarely one of the ribs may be selected.

The only absolute contraindications to bone marrow examination are hemophilia and related (nonthrombocytopenic) hemorrhagic disorders. Although marrow aspiration potentially may cause infection or serious hemorrhage, these two complications rarely occur when proper technique is used. excessive bleeding that sometimes occurs in patients with thrombocytopenia can usually be controlled by pressure over the puncture site. The only serious complication of marrow aspiration is cardiac puncture after perforation of the inner plate of the sternum.

Although the bone marrow examination is of questionable value of yielding definitive diagnostic information in patients with post-hemorrhagic anemia, hemolytic anemia, and non-thrombocytopenic hemorrhage disorders, it has proven a tool of inestimable diagnostic value in selected patients. It is particularly indicated in pancytopenia to establish or exclude leukemia or conditions in which characteristic evidence of disease is likely to be found in the marrow but is rarely or never discovered in the blood. Furthermore, a properly performed and evaluated bone marrow examination can be helpful in some of the above mentioned cases when they are atypical. 3

MEDI-QUIZ ANSWERS

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- 2 B5

IN MEMORIAL

It is with deep regret that this Newsletter notifies its membership of the death of Mr. Richard John Scheele. Mr. Scheele died suddenly at the age of 30 in Durham, North Carolina. He graduated from the Duke P. A. Program in 1967 and was employed by the program at the time of his death. As one of the very first P. A. 's, he was dedicated to promoting the P. A. concept and was an active member in the A. A. P. A.. He is survived by his wife, Arlene, and one child.

EDITORIAL

THE P.A., A.A.P.A. AND THE FUTURE

As one of the first Physician's Assistants (P. A. 's) and a charter member in the American Association of Assistants (A. A. P. A.), I have seen much change. From one program many have multiplied and now there are P. A. 's in nearly every state in the country. The P. A. has gone from a relatively unknown existence to being the most talked about person in medicine today. But what lies in the future and what may we expect?

There are and will continue to be many types of "physician's assistants" graduating from programs varying in scope, length, and caliber of training. All of these assistants are valuable, but they must be classified and certified in order to guarantee a good product. To this end, the American Association of Medical Colleges has established guidelines to encourage the training of Physician's Assistants; and in May of 1970, the American Registry of Physicians' Associates, Inc. was established by several programs to determine the competency of the different Assistants and offer them certification. The A. A. P. A. (incorporated in 1968) has and must continue to: (1) promote the "physician's assistant" concept; (2) provide continuing education, among other benefits, to its membership; and (3) assist "organized medicine" in efforts to classify and certify the various assistants.

The P. A. and the concept that he (or she!) represents will be the topic of great debate in the near future and the criticism which evolves must be tactfully handled or in some cases be ignored.

Legal problems, while much talked about, have not crystallized and the M. D. will remain legally responsible for his assistants' actions. Medical Practice Acts are being revised where necessary to accommodate the P. A., although he will eventually become legally bona fide by "common practice and usage."

I believe is can be said with authority that the "physician's assistant" has a promising future and one which will have great and positive impact on the delivery of health services.

NOTES

The National Academy of Sciences' Board of Medicine has urged the Nixon Administration and the American Medical Association to promote the training of thousands of Physician's Assistants. The Board recommended more college level programs and a national board to certify their graduates. --Of importance is the upcoming conference on Physician's Assistants being held in conjunction with the annual A. A. P. A. meeting on November 12 and 13 at the Durham Hotel Durham, North Carolina. See you all there!-- A Richard J. Scheele Memorial Award has been established for outstanding Duke P. A. students.--Not only is it time for P. A. 's to "stand up and be counted" but it's about time they started contributing to the literature; and that includes all of the students and graduates from all of the programs at: Yale University, University of Oklahoma, University of Alabama at

Birmingham, and Ştanford in California.—I am retiring as Editor of this Newsletter as of November 13. I can only say that the future of the A. A. P. A. and its Newsletter is bright. This Newsletter will someday be a journal and subscriptions this past year have been phenomenal! I hope to continue, however, to serve you, the membership, and the A. A. P. A. in another way. A thank-you to Mr. Carl Fasser and Mr. Ernest Eason for their help in producing this Newsletter.

Thomas R. Godkins Editor

LETTERS TO THE EDITOR

Dear Physician's Assistants,

Thank you very much for all of your expressions of sympathy to me and my family.

The Physician's Assistants' Program and its future was very much part of Dick and each of you meant something to him.

I appreciate all of your kindness.

Sincerely,

Arlene Scheele

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