

NEWSLETTER of the American Association of Physicians' Assistants

AAPA

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PHYSICIAN'S ASSISTANT PROGRAMS 1970

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The rapid development of programs for the education of physician's assistants in the past five years amounts almost to an educational phenomenon. First there was one program; now there are more than forty, and about thirty more are in the formative stage. The reasons for the development of this movement are many but mostly it was the marked increase in demand for medical care. No method to provide the additional medical services within a reasonable time was forthcoming with the exception of the proposal to train new professionals to assist doctors.

The idea to educate assistants who could become available in about one third the time that it takes to produce physicians attracted medical corpsmen, young people, the public and a large segment of the medical profession. Many educators and educational institutions responded by seeking as much information as possible and making plans for using a variety of new ideas to experiment with and inaugurate innovative programs.

The results of their efforts in general have been good, and sound educational programs which will fill the void in the delivery of advanced medical care to more people seem to be in the making. However, the rapidity of the movement has brought problems which must be identified and solved else progression is likely to be slowed, come to a halt, or to go backward. The probability of complete failure is remote indeed.

Those of us who have worked with the physician's assistant concept are convinced that the idea is sound. We know, however, that acceptance by others comes slowly and must be earned. The government can grant the right to practice, and organized medicine can certify as to quality, but the public must give its approval by its patronage for final success. This success now is largely in the hands of three groups -- those who are promoting the various programs, the students, and the graduates of these programs.

It is obvious that the groups who are working with all of the programs thus far remain too small to make demands on the government, on organized medicine, or on the public, therefore, we must work cooperatively to achieve our major objective -- to help the physician deliver better medical care to more people and demonstrate that we can do it to prove this point.

I feel certain that each director whom I have met is doing all that he can to choose good students, uphold high educational standards and teach students to become knowledgeable, ethical, and understanding of their unique role in the practice of medicine. I believe that they are choosing faculty who, likewise, will try to instill the idealism of medicine into the students who come under their tutelage. However, it is the graduate physician's assistants themselves who largely hold in their hands the success or failure of the movement. They are the ones who have been chosen to demonstrate to the profession and to the public that the concept of the physician's assistant as a necessary part of the health care team is basically correct.

As students they were chosen for intelligence, integrity, and certain intangible qualities which would point toward sincerity and devotion to duty. They were grounded in the history, philosophy and ethics of medicine. Their instructors attempted to motivate them to achieve excellence in their chosen profession. They were given many tests of intelligence, competence, and character. Such tests followed the general evaluations which are regularly given to medical students. These were intended to screen out those with deficiencies and thus produce only graduates who would have a desire to continue their education throughout life, to carry the highest moral and ethical standards into their work, and devote their lives to service as is required of any professional person. How well this has been done, and whether these qualities will remain with them will most certainly determine what physicians and the public will think of them, and whether they will be accepted as professional people in the years to come.

The physician's assistant graduates of the past few years are pioneers, and because of this they have a larger responsibility than those graduates who will follow; although future graduates will also be scrutinized carefully.

The eyes of the public, of the government, of organized medicine and of the other allied health teams are upon the physician's assistant programs and their graduates now as never before. We welcome this critical examination. We think that it will help motivate us to develop higher standards and to delineate the vital role which the physician's assistant is to play in aiding the doctor to make quality health care readily available to everyone.

New Program

THE CHILD HEALTH ASSOCIATE PROGRAM

The Child Health Associate Program became operational in the summer of 1969 at the University of Colorado Medical

Center in Denver, Colorado. The Program Director is Dr. Henry K. Silver. The program consists of two years of instruction at the University and of a one year internship. The aim of the program is to provide a new health specialist in child care able to practice ambulatory and preventive medicine under the supervision of a physician.

Prerequisites to the program are that the candidate must have completed a minimum of 60 semester or 90 quarter hours of college liberal arts and science courses. These courses must include 8 semester hours of general chemistry, biology, and psychiatry along with a year of English Literature.

The first year of the program will consist mainly of a "basic science curriculum" (classwork) and the second year of a "clinical curriculum" (on the job work). Some of the first year courses include: 1) Gross and Microscopic Anatomy, 2) History of Medicine, 3) Genetics, 4) Fetal and Newborn Growth and Development, 5) Microbiology and Infectious Disease, and 6) Interviewing and Examination. The second year courses include: 1) Outpatient Practice (I, II, III), 2) Community Child Health Practice, 3) Pediatric Pharmacology and Toxicology, and 4) the "Art of Pediatrics."

The third year, the internship, is comprised of "field experience." This includes working at Health Centers, Outpatient Facilities, Doctors' Offices, Newborn Nurseries, etc.

Upon completion the student will be eligible for a Bachelor of Arts degree from the University of Colorado. The graduate will then be examined and licensed by the Colorado State Board of Medical Examiners. Legislation defining the role of the C.H.A. was passed by the Colorado State Legislature and signed into law in July of 1969.

Students enrolled in the program will pay the undergraduate tuition fee at the University of Colorado. There are only nine students in the present class and their starting salaries are expected to range from \$10,000 to \$12,000.

The Child Health Associate will be employed and supervised by a physician. "Graduates of this program will have problem-solving and decision-making capabilities in certain areas of child care which will closely approximate those of physicians. They will be qualified to diagnose, prevent, and treat most of the common medical problems of childhood."¹

EMPLOYMENT OFFERS

The A.A.P.A. has the following job offers available for its membership. It should be noted that one should contact his or her program director or employment counselor for specific job placement.

Here are but a few of the many job offers available at the present time:

1. Internal Medicine-Group:
Dr. Jonas Brachfeld
Rancocas Valley Hospital
Willingboro, New Jersey
2. Gastroenterology-Academic Hospital:
Dr. William O. Dobbings, III
V.A. Hospital
50 Irving Street, N.W.
Washington, D. C.

3. General Practice and Surgery-Group:

Dr. George I. Green
325 East Broad Street
Sparta, Georgia 31087

4. Urology-Solo:

Dr. Howard E. Strawcutter
101 West 27th Street
Lumberton, North Carolina 28358

5. General Practice and Surgery-Corporation:

Dr. George K. Hughes
9 Buttles Avenue
Columbus, Ohio 43215

MEDI - QUIZ

A 23 year old graduate student developed "food poisoning" on the Thursday after a weekend picnic and barbecue. Over the next several days, she noted increasing weakness, aching muscles and a temperature elevation to 39.4 c. Did not improve following ingestion of several penicillin tablets from old prescription and sought medical attention five days after onset of illness.

Physical examination showed facial edema, pain on motion of arms and legs but no arthralgia or signs of arthritis. A Grade I soft systolic murmur was heard at the apex. There were splinter hemorrhages of the nails and conjunctiva. The lungs were clear; absent adenopathy; the spleen and liver were not palpable. The leukocyte count was 14,000 mm³ with 8% eosinophilia. Hematocrit was 40%

The most likely diagnosis is:

- (A) Infectious mononucleosis
- (B) Bacterial Endocarditis
- (C) Toxoplasmosis
- (D) Penicillin Reaction
- (E) Trichinosis

Which of the following would be most helpful in distinguishing cerebral infarction from cerebral neoplasm?

- (A) History of headache
- (B) Hemiplegia
- (C) Chronology of development
- (D) Cervical bruit
- (E) Focal abnormality on electroencephalogram

EDUCATIONAL ARTICLES

AMYLASE LEVEL AIDS DIAGNOSIS OF ABDOMINAL PAIN

The level of serum amylase elevation in patients with abdominal pain can determine the type of management. A markedly elevated level in a patient with a doubtful diagnosis who is not responding to conservative measures should prompt early surgery, while moderate elevation suggests conservative management unless clinical considerations obviously dictate otherwise.

Serum amylase determination probably represents the single most important laboratory aid in the diagnosis of acute pancreatic disease. The value of the test is limited, however,

because elevations occur with other acute intra-abdominal disorders, including acute cholecystitis, perforated duodenal ulcer, strangulated intestinal obstruction, mesenteric thrombosis, and ruptured aortic aneurysm. Differential diagnosis is important, since only pancreatitis and possible acute cholecystitis can be treated conservatively, while surgery is necessary in the others. The test cannot exclude diagnosis of other primary disease processes, and blind reliance on an elevated amylase as diagnostic of pancreatitis alone can be fatal.

An inverse relationship generally exists between the amylase level and the severity of pancreatic disease. The degree of pancreatitis, even when associated with considerable elevation of serum amylase, may be slight. Most patients with pancreatitis, regardless of the amylase level, can be expected to recover from the acute illness without surgery. An early operation is indicated, however, if the amylase is extremely high, since a surgically correctable lesion will likely be found, while the pancreatitis, if any, will be mild to moderate. With a mild or moderate elevation, conservative measures should be applied for a longer period of time. Most patients will have isolated pancreatic disease; in some cases it will be severe and extensive and present a greater operative risk.

Of 154 patients with raised serum amylase levels, nearly 75% had associated or isolated disease of the pancreas. However, those with amylase levels over 1,000 Somogyi units had surgically correctable lesions, most frequently acute calculous disease of the biliary tract. When the pancreas was examined early in these patients, one-third had no apparent pancreatic disease, while the others had varying degrees of pancreatic edema or induration. Significantly, none had extensive hemorrhage or necrosis.

On the other hand, 63% of patients with serum amylase values between 200 and 500 Somogyi units had idiopathic or "alcoholic" pancreatitis, which most observers feel responds best to nonoperative measures. Moreover, all the cases of proved hemorrhagic or necrotizing pancreatitis demonstrated this level of amylase elevation. ²

REVIVAL OF THE PERSON "KILLED" BY LIGHTNING

If a group of persons is struck by lightning, an attempt should first be made to resuscitate the dead, because those persons showing signs of life will usually recover even though burned or suffering other injury.

When a person is struck by lightning, heart action, respiration, and all metabolism stop instantly. The heart may start again in sinus rhythm, but respiratory narcosis may be so prolonged that the victim dies of anoxemia. However, the cessation of all metabolism in all cells, including the brain cells, is so instantaneous that the onset of degenerative processes is apparently delayed. Successful resuscitation may be possible, therefore, at far longer intervals after death than under almost any other known circumstances.

On-the-spot treatment of anyone killed by lightning is attempted restoration of heart action and respiration. If heart action starts, artificial respiration is continued until the patient reaches the hospital. A respirator then may be required for days or weeks, and hypothermia may help. Treatment for severe burns may be necessary, and the possibility of fractures resulting from being thrown to the ground should be consid-

ered, particularly skull fractures in an unconscious patient. The two most serious complications are to the eye and ear. Deafness may be caused by the blast of an unheard thunder-clap, or eye injury may result from light intensity or electrical energy. Except for these complications, recovery, if it occurs, is usually complete.

A person who is stunned by lightning, but still breathing, usually will recover spontaneously. He may at first be mute and unable to move. His extremities are either white or cyanotic and pulseless. Gradually sensation returns to the limbs, but the ability to speak, see, or hear may take a longer period of time. Transient headache and hypertension are common. The victim also may suffer from burns of various degrees and types, but skin grafting is seldom required and the burns usually heal well. ³

ADVANTAGES OF RADIOIODINE IN HYPERTHYROIDISM

Radioiodine is the best treatment for hyperthyroidism, although thyroidectomy remains the treatment of choice for patients with hyperfunctioning nodular goiters. Hypothyroidism, the only complication of radioiodine treatment of Graves' disease, is prevented by prophylactic administration of desiccated thyroid.

Belief in the therapeutic superiority of thyroidectomy stems from a number of misunderstandings and misinterpretations. One is that repeated doses of ¹³¹I are required by many patients. While hyperthyroidism associated with large nodular goiters is often resistant to radioiodine control, the type accompanying Graves' disease is usually controlled with a single dose of 5 to 14 mc. Second, the seriousness of hypothyroidism after ¹³¹I therapy has been exaggerated. Hypothyroidism results as much from the Graves' disease as from the ¹³¹I treatment and it also occurs after thyroidectomy. In preference to periodic examinations, patients are warned of the risk of hypothyroidism before therapy and instructed to take 2 gr. of desiccated thyroid or 0.2 mg. of l-thyroxine daily for the rest of their lives after control of hyperthyroidism. A written confirmation of the diagnosis of Graves' disease and the radioiodine therapy furnished to the patient prevents future inadvertent withdrawal of thyroid hormone by a physician. The procedure is also advisable after thyroidectomy for Graves' disease.

Third, the implication that radioiodine causes benign and malignant thyroid tumors in children is unsubstantiated. Enough ¹³¹I is given to induce hypothyroidism, which is then corrected by exogenous thyroid hormone. Large doses of ¹³¹I and life-long suppression of thyroid-stimulating hormone by administration of thyroid hormone inhibit thyroid cell division and therefore the development of mutant cancer cells.

Finally, while mortality and morbidity from thyroidectomy are low, anesthesia and operation, particularly in high-risk patients, are more hazardous than radioiodine treatment. Extensive use of radioiodine has been accompanied by a significant decrease in the national death rate from hyperthyroidism. ⁴

MEDI-QUIZ ANSWERS

1. E⁵
2. C⁶

EDITORIAL

STAND UP AND BE COUNTED

The time has come for the promotion of the Physicians' Assistant and the concept that he represents. Three years have passed since the graduation of the first Physicians' Assistant (P.A.) from the Duke University Program and much has been written about this new allied health profession, yet many people remain uninformed and misled. I am referring not only to the general public but to physicians in both medicine and surgery. I am referring not only to medical journals and newsletters but to daily newspapers also. Obviously something must be done to stop this overflow of misguided and incorrect information, but what?

I suggest it is time for all of us to write those responsible for the incorrect statements. Correct those who call their programs P.A. Programs when they are not! Offer information to those who are misinformed and need to be corrected. Write those who are pessimistic out of tradition and show them how wrong they are. Write your State Medical Association and make your existence known. Write your Congressman and urge him to support your cause!

NOTES

For those who are interested here is a list of operational Physicians' Assistant Programs:

- 1.) Duke University Medical Center,
Durham, N.C.
- 2.) Alderson-Broaddus College,
Philippi, W. Va.
- 3.) Bowman Gray School of Medicine,
Wake Forest University
Winston-Salem, N.C.
- 4.) Federal Health Programs Service,
Bureau of Prisons,
Washington, D.C.

Three dynamic "Physicians' Assistant" Programs which go by other names are as follows:

- 1.) Child Health Associate Program,
University of Colorado Medical Center,
Denver, Colorado.
- 2.) Clinical Associate Program,
University of Texas,
School of Medicine,
Galveston, Texas.
- 3.) Medical Services Associate Program,
Brooklyn-Cumberland Medical Center,
(and Long Island University),
Brooklyn, New York.

Some of the above programs by innovation and determination will be more superior than others - some indeed may not produce Physicians' Assistants as we know them today and will probably fail.

There are other "assistant" programs not mentioned above but then they do not fit into my definition of a "Physicians' Assistant Program" (as coined by Duke University). That is not to say, however, that they do not have their place for there is a great need and they will serve their purpose.

In the next issue an article by Senator Jacob K. Javits and word on the annual meeting November 6th, Also in the future - a "special legal symposium Newsletter" and the word on an upcoming national conference on Physicians' Assistants.

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