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Physical Medicine and Medical Education

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EDITORIAL

PHYSICAL MEDICINE AND MEDICAL EDUCATION

FRANK H. KRUSEN, M.D.*

Physical medicine includes the employment of the physical and other effective diagnostic and therapeutic properties of light, heat, cold, water, electricity, massage, manipulation, exercise, and mechanical devices for diagnosis and for physical and occupational therapy and physical rehabilitation. Occupational therapy has been defined as "medically prescribed activity (other than gymnastic) with a remedial objective." Physical reconditioning is the procedure followed in the prevention of physiologic retrogression during convalescence, and it is directed toward the restoration of full strength and stamina to convalescent patients. Rehabilitation includes the employment of all forms of physical medicine in conjunction with psychosocial adjustment and vocational retraining in an attempt to achieve the maximal function and adjustment of the patient and to prepare him physically, mentally, socially, and vocationally for the fullest possible life compatible with his abilities and disabilities.

It is gratifying to note that medical educators finally are beginning to give serious attention to the development of teaching and research in the field of physical medicine. Dr. D. Baily Calvin, dean of the University of Texas School of Medicine, wrote recently: "In the field of physics as related to physical medicine

and physiological chemistry, great advancements have been made. . . . If health is to be construed as normal equilibrium, with proper function in all organs doing their job in proper manner, then disease must be considered as a departure from dynamic equilibrium. The need, therefore, is for the physician to serve as a health engineer, an analyst whose function is to re-adjust the equilibria of the body and bring them back into normal homeostatic balance." This is exactly the approach of the physician specializing in physical medicine who devotes great attention to dynamic physical reconditioning, to the employment of physical procedures for analysis of disorders of function and to the application of physical agents for restoration or maintenance of a normal or nearly normal physiologic state.

In an article entitled "Transition in medical education," Dr. Alan Gregg, director of the Medical Sciences Division of the Rockefeller Foundation, observed that "during the past seventy-five or eighty years, one of the most significant efforts of medicine has directed itself to finding the cause of disease." He pointed out that this "preoccupation with the cause of disease has greatly influenced medical education." He added that "etiology became, as it were, the husband of diagnosis and the father of treatment." This led Gregg to the conclusion that "preoccupation with the causation or etiology of disease all too often

(Continued on page 51)

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are capable of producing definite changes in body chemistry, accompanied by disturbing symptoms. The idea that the changes must always be transient seems to be implied in many reports bearing on the subject. This is not reasonable, and it is likely that as our knowledge of clinical correlations accumulates, it will be evident that disturbances of respiratory rhythm continued over a long time result in certain irreversible alterations in the nervous system, both focal and diffuse.

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PHYSICAL MEDICINE AND MEDICAL EDUCATION

(Continued from page 34)

eclipses the light that might come from a study of the dynamics of the disease process." He added, "We take such a primary concern for the cause as perfectly natural. I wonder if we don't exclude thereby some other very important aspects of disease? . . . Witness the singular freshness of Howard Rusk's ideas upon the possibilities of intelligent convalescent care. . . . If we had cared as much for therapy as for etiology, we should have little to learn from Rusk, instead of much."

To the physician who is interested in physical medicine, it is pleasing to observe that medical educators having the broad vision of Calvin and Gregg foresee advances and transitions in medical education which indicate a diversion of interest of medical educators from

their preoccupation with etiology and an advancement into a stage in which therapy begins to assume its rightful place in medical education. It is reassuring, moreover, to perceive that proper attention to the treatment of the patient as a person and as a whole is beginning to receive serious consideration. Certainly, the importance of the maintenance of dynamic equilibrium will become more and more apparent as this new trend develops, and just as certainly, physical medicine will continue to forge to the front as this trend becomes more evident.

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