

EDUCATION GOALS AND OBJECTIVES IN PHYSICAL MEDICINE AND REHABILITATION FOR THE MEDICAL SCHOOL GRADUATE

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Medical student education in Physical Medicine and Rehabilitation has been a favored topic for over 30 years. Early manuscripts often presented descriptions of their educational programs.¹⁻⁸ Another common topic was the recruitment of medical students into PM&R.⁹⁻¹⁶ A few studies investigated the changes observed in medical students after participating in PM&R education.^{17,18} Recognition that medical student education has different goals and objectives than resident education was recognized promptly.^{19,20} In 1985, the Joint Committee on Undergraduate Medical Education of the American Academy of PM&R and the Association of Academic Physiatrists, chaired by R. Lee Kirby, MD, published a statement on the education of medical students in the approach and provision of care to individuals with disabilities.²¹

After evaluating the 1985 manuscript, as well as subsequent reviews and recommendations,^{22,23} the current Undergraduate Education Committee of the Association of Academic Physiatrists has revised the document in the light of the changes occurring throughout the medical profession.

INTRODUCTION

Undergraduate medical education has traditionally focused on curative approaches to acute illnesses and injuries. This has led to two problems. First, with the increased success of the acute care approach, there is an increasing number of individuals in the population who have survived these processes but have been left with chronic pain or disability as sequelae. With the aging of the population this issue will continue to be an increasingly significant problem. Secondly, the acute care approach has led to a fragmentation of medical care into focused interventions by specialists with little attention to the impact of the illness or injury on the function of the individual as a whole. The current emphasis on primary care and outcome studies makes exposure of all medical students to the approach to care embodied by PM&R particularly important. The emphasis on the individual as a whole and maximizing functional independence typical of rehabilitation approach should help to shift attitudes of medical trainees away from the current fragmentation.

With the recent adoption of the Americans with Disabilities Act, and move toward managed care coordinated by a primary care physician, the need for training medical students in the care of individuals with disabilities has become more critical. The ADA will force greater access of disabled individuals into society in general, including the offices of primary care physicians. Managed care will place responsibility for medical care of these individuals on physicians with little training on how to address these issues. With better education, the primary care physician can more effectively manage basic problems, and have a better knowledge of when to refer care to a specialist in the area of medical rehabilitation. This should improve patient care as well as assist in reducing overall cost of care, as has been shown in care of individuals with spinal cord injuries and traumatic brain injuries.

MINIMAL CURRICULUM

Many medical students have only a minimal exposure to Physical Medicine and Rehabilitation (one week or less of formal teaching). The most basic goals and objectives for this curriculum should include:

Goals

1. Provide a comfort level in the medical practitioner to the assessment and care of individuals with disabilities that present for evaluation, and a framework on where to look to obtain further information.
2. Provide an awareness of the psycho-social issues faced by the individual with disability or

chronic illness.

3. Provide an appreciation of the need for a functional, or outcomes-based, approach to the continuum of medical care.

Objectives

A. KNOWLEDGE – the graduate should be able to:

1. Define and distinguish among the terms "impairment," "disability," and "handicap."
2. Discuss the functional implications of illnesses and injuries within the routine and practice of medicine.
3. Discuss the impact of chronic illnesses, pain and disability on an individual, the family and community.
4. Describe the concepts of continuum of care, including appropriate locations and facilities for different stages in the course of recovery and rehabilitation, and the strengths and weaknesses of each.
5. Discuss the cost-benefit relationship in the provision of psychiatric care.

B: SKILLS – the graduate should be able to:

1. Obtain a history from patients with a particular emphasis on functional limitations residual abilities and psychosocial status.
2. Determine whether disability is present and make an appropriate referral for continued care and/or evaluation.
3. Demonstrate communication techniques with patients, family members, other health care professionals, and/or representatives of third-party payers and managed care.
4. Keep medical records with sufficient information to monitor a patient's functional progress and document need for care.

C: ATTITUDES – the graduate should exhibit behaviors consistent with:

1. A patient-centered, rather than disease-oriented medical ethic.
2. Concern for the social, cultural and economic implications of a patient's disorder.
3. The willingness to seek long-term solutions for chronic problems.
4. Empathy and compassion for patients with chronic illnesses and disabilities.
5. Respect for and willingness to work in harmony with other members of the rehabilitation team.

STANDARD CURRICULUM

For medical students given a longer formal exposure to Physical Medicine and rehabilitation (approximately two weeks), in addition to the minimal curriculum above, the following goals and objectives should be included:

Additional Goals

1. Provide an exposure to a formal interdisciplinary team approach for providing medical care.
2. Provide a fundamental core of knowledge in the physical diagnosis and treatment of disabling diseases and injuries, encountered in the routine practice of medicine.
3. Provide a fundamental core of knowledge to address the prevention of conditions or complications which lead to impairment, disability, or handicap.

Additional Objectives

A. KNOWLEDGE – the graduate should be able to:

1. Describe the collective attributes of a well-coordinated rehabilitation team, the member disciplines, and the special abilities of each.
2. Demonstrate fundamental proficiency in the basic sciences underlying the normal and altered structure and function of the neuromusculoskeletal and closely related systems.
3. State the epidemiology, pathophysiology, clinical features, diagnostic criteria, and natural history of selected specific neurological and musculoskeletal diseases.
4. Describe the therapeutic options available for patients with selected disorders of the neuromusculoskeletal system, including the mode of action, indications, contradictions, complications and special considerations.

B. SKILLS – the graduate should be able to:

1. Perform a physical examination, particularly a basic examination of the neurological and musculoskeletal systems, *and* recognize functional problems.
2. Formulate a problem list including medical, functional, and psychosocial problems.
3. Choose appropriate investigations for diagnosing and monitoring patients with selected neurological and musculoskeletal disorders, interpret their results, and briefly describe their limitations and methodology.
4. Prescribe or arrange with appropriate consultation, modalities and interventions for the remediation of acute or chronic neuromusculoskeletal pain and disability.

C. ATTITUDES – the graduate should exhibit behaviors consistent with:

A problem-solving inquisitiveness regarding a patient's chronic disabilities, including an eagerness to seek methods of optimizing residual abilities and prevent secondary complications.

SUMMARY

Disability is the number one public health issue. Increased exposure of medical students to medical rehabilitation will enhance the quality and efficiency of medical care to individuals with disabilities specifically, as well as providing possible benefits to medicine in general. This will be accomplished through educational experiences that provide knowledge and the opportunity to practice skills not addressed in other venues. With this improvement in knowledge and skills, a change in attitudes towards disability and chronic illness is expected. This improvement in attitudes will become increasingly important with our aging population.

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