

Confidence of Graduating Family Practice Residents in Their Management of Musculoskeletal Conditions

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ABSTRACT

A study was undertaken to determine the confidence of graduating family practice residents in the management of musculoskeletal conditions and to determine the level of exposure of graduating family practice residents to fracture care. A 2-page questionnaire consisting of 50 items was sent to 680 graduating family practice residents at 100 randomly selected residency training programs throughout the United States. Family practice residents were questioned about their fracture care experience, including the number of fractures diagnosed, the number of fractures reduced, the number of fractures treated to healing, and the number of casts and splints applied. Residents were also asked about their training experience on an orthopedic surgery service. Residents were asked to rate their confidence on a scale of 1 (*least confident*) to 10 (*most confident*) in the physical examination, radiographic evaluation, diagnosis, and treatment of a variety of musculoskeletal conditions, including physical examination of the knee, lower back, ankle, wrist, cervical spine, shoulder, hand, and foot; radiographic evaluation of the lumbosacral spine, traumatic cervical spine, hand injuries, adult shoulder trauma, osteomyelitis, and pediatric elbow injuries; diagnosis of carpal tunnel syndrome, herniated lumbar disc, knee instability, rotator cuff tear, and shoulder instability; and treatment of ankle sprain, tennis elbow, olecranon bursitis, distal radius fracture (Colles), bimalleolar ankle fracture, hip avascular necrosis, knee disloca-

tion, and pediatric elbow fracture. These results were compared with graduating family practice residents' confidence in the physical examination, radiographic evaluation, diagnosis, and treatment of a variety of nonmusculoskeletal conditions. Completed questionnaires were returned by 351 graduating family practice residents. The overall fracture care experience of graduating family practice residents was minimal. Seventy-nine percent of graduating residents had reduced 5 or fewer fractures during their entire residency training program. Experience with cast and splint application was also relatively limited. Graduating family practice residents reported an average of 5.1 weeks (range, 0–10 wk) of training experience on an orthopedic surgery service during their residency. Graduating family practice residents were significantly more confident in the physical examination, radiographic evaluation, diagnosis, and treatment of nonmusculoskeletal conditions than in those of musculoskeletal conditions ($P = .0001$). Family practice residents who had rotated on an orthopedic service for 8 weeks or more during their training reported significantly higher confidence for all 4 skills—physical examination ($P = .003$), radiographic evaluation ($P = .003$), diagnosis ($P = .007$), and treatment ($P = .009$). In conclusion, family practice residents show relatively low confidence in the management of musculoskeletal conditions and receive minimal exposure to all aspects of fracture care. Confidence can be improved with greater exposure to the musculoskeletal sciences—such as a rotation of 8 weeks or more on an orthopedic surgery service.

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Musculoskeletal problems are encountered frequently by the family practitioner. Close to one quarter of all office visits in a family practice setting are due to a musculoskeletal condition,¹ and approximately 80% of primary care physicians are involved in the management of fractures.²

The demands on the family practice physician in the diagnosis and treatment of musculoskeletal con-