

Athletic Trainers Have an Important Role in Preventing and Treating Osteoarthritis

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Guest Editors

Athletic trainers (ATs) play a critical role in preventing injury and illness and promoting good health and well-being in our patients. Recently, our profession has made notable advancements in educating patients and improving awareness of strategies to prevent long-term health-related impairments in athletes suffering from sport-related head injuries.¹ In this special issue, we turn our focus to another health concern with long-term, permanent consequences leading to chronic pain and disability: osteoarthritis. Contrary to what many believe, osteoarthritis is not just a normal wear-and-tear process that affects the body's joints only in the elderly. This special issue highlights research by ATs that demonstrates osteoarthritis-related changes much earlier in life than was once thought possible. Even more alarming is that some permanent changes can begin while a patient is still under our care.

Although most people can safely participate in sports or physical activity without concerns about their long-term joint health, it is important to appreciate that not all our patients are so fortunate. For example, an individual with a history of a knee injury is 3 to 6 times more likely to develop knee osteoarthritis than an uninjured peer.² Furthermore, 1 in 3 patients with an anterior cruciate ligament injury will have radiographic knee osteoarthritis within 10 years of injury, regardless of the initial treatment strategy.^{3,4} Because anterior cruciate ligament injuries are most common in youths (especially girls), a 17-year-old athlete who tears her anterior cruciate ligament could develop osteoarthritis before she turns 30, potentially leading to chronic pain and disability, which could prevent her from remaining physically active and limit her ability to work or perform other daily activities. Furthermore, if the condition is unresolved, she may experience pain and disability for more than half her life. Now is an excellent time to improve our understanding of the early indicators of osteoarthritis in our young active patients. We must expand the discussion about health and wellbeing across the life span for our young and injured patients.

This special issue takes a head-to-toe approach to highlighting the work of contemporary athletic training scholars who are studying osteoarthritis from the time of injury to total joint replacement. The issue opens with an article on the epidemiology of posttraumatic osteoarthritis (PTOA) and closes with a consensus statement from the recently formed Athletic Trainers' Osteoarthritis Consor-

tium (ATOAC).^a The issue contains a wealth of original research in the areas of PTOA knowledge among young professionals, osteoarthritis prevalence in athletes retired from different sports, and the role of concussion in the development of osteoarthritis as well as patient-reported outcomes and quality of life and the biologic response to knee injury among others.

Athletic trainers need to embrace the role of preventing illness and preserving a person's wellness by educating patients through a concerted effort of the sports medicine team. In this special issue, Pietrosimone and colleagues⁵ highlight the need for more education in early-career practitioners by describing the knowledge and perceptions of PTOA among certified ATs. The authors found that those with more experience had greater knowledge of PTOA, which may indicate that experienced practitioners may be helpful in educating younger ATs about the significance of long-term health concerns such as osteoarthritis.

Many ATs focus mainly on primary (injury) and secondary prevention, but we also need to recognize a growing population of older adults who are (or are being encouraged to be) physically active. Athletic trainers have the skill set and training to help older adults with osteoarthritis continue to be physically active. Almost every treatment guideline for osteoarthritis emphasizes education, self-management, exercise, and nonpharmacologic treatments that ATs can provide.^{6,7} Hence, we must recognize our role in treating as well as preventing osteoarthritis.

The research in this special issue demonstrates that some of the people under our care are at risk for osteoarthritis and that we treat them at critical times in their lives. We hope that after reviewing the articles presented here, ATs will feel empowered by their important role in preventing and treating joint injury. Athletic trainers serve as gatekeepers who have the knowledge to identify patients on a path toward osteoarthritis and the skill set to do something about it.

The National Athletic Trainers' Association (NATA) has recognized our responsibility to patients by joining the Chronic Osteoarthritis Management Initiative (COAMI;

^a The views expressed in the consensus statement by the ATOAC do not necessarily reflect the views of the National Athletic Trainers' Association.

<https://www.usbji.org/programs/coami>) and the Osteoarthritis Action Alliance (OAAA; <http://oaaction.unc.edu>). The NATA's initial commitment to COAMI is to "incorporate OA [osteoarthritis] into education components for early career practitioners and note the role of athletic trainers as gatekeepers."⁸ The NATA, ATOAC, and individual ATs also participate in the OAAA, which has released pamphlets on injury-prevention programs and a consensus statement on the best practices for preventing lower limb injuries. These documents are available in the OAAA's Online Resource Library (<http://oaaction.unc.edu/resource-library/for-community-partners/injury-prevention/>). The *Journal of Athletic Training* has also recognized the importance of osteoarthritis within the sports medicine community, as illustrated by this special issue. Finally, the ATOAC is an international consortium of ATs and other health care professionals committed to promoting collaboration in osteoarthritis-related research and education, elevating awareness about osteoarthritis within the sports medicine community, and improving clinical management strategies and patient education. In this issue, the ATOAC provides a review and series of recommendations regarding the role of ATs in preventing and managing osteoarthritis. We hope this special issue will encourage ATs to adopt a greater role in preventing and managing osteoarthritis in their clinics and through participation in the ATOAC and other activities hosted by the NATA, OAAA, and COAMI.

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