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“Put Me In Coach!”: How Pharmacists Can Contribute to Elite Sports

Mel Sturgill

Abstract: Professional and amateur athletes alike often have teams of healthcare professionals that oversee the care of injuries. Among these healthcare professionals, pharmacists have not been included as a member of the care team. Pharmacists are medication experts that can help mitigate medication mistakes and adverse reactions. Additionally, the pharmacist can provide medication information and doping awareness to help athletes reach and maintain their top performance levels in a healthy and safe manner.

In the past, pharmacists have been sidelined from sports medicine. Because of vast pharmaceutical and medical advances, pharmacists have found a new niche working with medical staff alongside elite athletes. Paul Moloney is a lead pharmacist at VirginCare and former pharmacist at a premiership football club. During his time, he would provide medication management support, anti-doping advice and player care. Moloney believes that “a pharmacy degree, with the level of physiology/biology and biochemistry involved, could and should be more transferable to areas such as sports science.” It has become common for a pharmacist to be ‘pigeon holed’ in their career.¹ As of July 30th, 2019, it is estimated that 58% of all pharmacists nationwide work in a retail setting, and 31% work in a hospital setting.² Sports pharmacy is an emerging career available for pharmacists who wish to utilize their knowledge of drugs, mechanisms, and interactions, and combine it with a passion for sports. By providing guidance on medication and anti-doping, sports pharmacists can become integral contributors to athletic healthcare.

It is important for every patient to understand why medication is prescribed, what it is being used to treat, and how to take the medication properly. In the field of sports medicine, pharmacists may collaborate with doctors, athletic trainers, physical therapists, and other health care professionals to optimize athletic wellness.

According to a survey in 2019, about 46% of Americans use or have used 1 or more prescription drugs in the past 30 days.³ Professional athletes, who are in great physical shape, are commonly prescribed NSAIDs (non-steroidal anti-inflammatory drugs), antibiotics and chronic medications for the treatment of high blood pressure, depression, and asthma.⁴ These medications may be used to “treat injuries, cure illnesses, and obtain a competitive edge” while also staying within the doping guidelines of their league. For example, endurance athletes such as cyclists, cross country runners, and swimmers have a higher prevalence of asthma than the general population. There were three studies evaluating collegiate athletes and their use of nonprescription over-the-counter medications to treat pain. These studies found that up to 73% of athletes used them regularly; but most importantly, found “that athletes lacked awareness about adverse effects, had significant external influence to use pain medications, and frequently misused pain medications”.⁵ Pharmacists are highly equipped to provide athletes the guidance they require on all medications.

high as 92% in all Americans. Up to 50% of this non-compliance is by the choice of the patient, while the remainder is the patient unknowingly missing doses or taking the medication incorrectly.⁶

There is a high prevalence of athletes that use medications to enhance their athletic performance; this is called doping. Doping, or administering drugs in order to inhibit or enhance athletic ability, is illegal in all professional sports. Doping regulations apply for use of Schedule I drugs, such as heroin and cocaine, blood doping, and other medications that are listed by the league or competition. Blood doping, the act of boosting red blood cells in order to increase the amount of circulating oxygen in the body, was popular among cyclists before it was banned in 1985.

Other medications commonly used by the general public may not be allowed for athletes. For example, in 2000, Romanian gymnast Andreea Raducan was stripped of her gold medal in the women’s all-around due to a positive test for a substance that was, at the time, banned in the Olympic Games. The gymnast was experiencing some cold symptoms and her team doctor gave her pseudoephedrine, a common “behind-the-counter” nasal decongestant.⁷ This was an oversight by the medical staff. However, in a huge setting like the Olympics, healthcare professionals may feel overwhelmed by more urgent medical demands. A pharmacist’s knowledge of prescription drugs, over the counter medications and drug-drug interactions can be vital in treating the athlete and still maintaining compliance.

Sports pharmacists made their debuts in the 2002 Olympics, helping “11,200 athletes of 26 Olympic sports across 34 competition venues and also the medicine needs of the Paralympic Games, which included 4,200 athletes of 20 Paralympic sports across 21 competition venues.”⁸ Sports pharmacists track and dispense medications for participants, as well as monitor anti-doping policies. With each set of Olympic Games being held in different countries, pharmacists should be familiar with laws and regulations of the host country. The host country’s regulations of medications must be followed by visiting pharmacists who serve as healthcare providers on the Olympic team.⁹

Pharmacists who work with athletes help to keep them from taking banned substances, even by accident. As part of an

interdisciplinary care team, pharmacists can provide the extra knowledge needed to cultivate exceptional health practices. With their knowledge of medications and anti-doping, pharmacists are ready to enter the realm of athletic healthcare. Pharmacists have an abundance of knowledge to offer the world of sports. All they need is an opportunity to prove it.

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