



ARTIST
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GLOBAL PERSPECTIVE

Conflicting Agendas In Care For Olympic Amateur Boxing

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INTRODUCTION

Amateur boxing, also known as Olympic-style boxing, is governed by the International Boxing Association. Although authority is decentralized to national boxing organizations such as Boxing Canada, rules and safety standards remain consistent globally for amateur boxing. Amateur boxers compete in bouts typically comprising three three-minute rounds with intermittent one-minute breaks. Officials score the competing athletes after each round based on predetermined criteria, including the number of quality blows landed, the domination of bout, and the infringement of rules.

Given that boxing is a contact sport, athlete health and safety are prioritized by all governing organizations.¹ Boxers face a wide variety of health risks: strenuous movements, harsh training regimens, rapid dehydration, and repeated blows to the head and body.² As such, the requirement of a ringside physician is mandated by all governing bodies. An interdisciplinary medical team may also be employed at larger boxing events.

As a member of the medical team for the boxing community, the purpose of this global perspective is to elaborate on my role, reflect on the barriers to care, and present future directions for improving care.

MY ROLE IN THE COMMUNITY

I had the privilege to be a member of the Boxing Ontario medical teams present at local and provincial tournaments throughout Ontario, the Boxing Canada medical teams present at the 2016 Rio Olympic Canadian Boxing Qualifiers, and the 2017 Canadian National Championships throughout Québec. In the latter two tournaments, my responsibilities included: contributing to clinical care for athletes; conducting an observational trial on the influence of headgear on risk for developing concussions; and informing athletes, coaches, and officials through presentations regarding weight-cutting, shoulder pain, and concussions.³

Medical teams have a responsibility to ensure that athletes are safe by providing care before, during, and after a bout. To determine if athletes are physically fit to compete, the pre-bout medical examination reviews the medical history of the athlete and performs a focused physical examination. These examinations place more emphasis on common problems including skin lesions; deformities of the head, neck, teeth, ribcage, and hands; and potential concussions. Medical teams are also responsible for monitoring the physical integrity of athletes during the bout by looking for cuts, nosebleeds, abrasions, fractures, dislocations, or harm to the eyes, ears and brain. It is important that these injuries are noted as they may be further addressed in the post-bout medical examination. Throughout the care process, physicians have the authority to disqualify athletes from competition. This creates an imbalance

in power greater than the typical physician-patient relationship, requiring thoughtful navigation in consideration of the agendas of the stakeholders involved.

CONFLICTING AGENDAS

Ethical dilemmas arise during the care process because of conflicting agendas between care providers and athletes. Medical teams operate in the best interest of the athlete's health. However, not all athletes share the same agenda, as some place priority on winning the bout over their own health. Many athletes train their entire lives to compete in a match at the national level. As such, one's judgement may begin to blur when weighing a potential gold medal against possible long-term health consequences and the regret of failing to achieve one's goals. This adds a layer of complexity to medical decisions, which determine the outcome of a bout. Should an athlete with a cut above his eye be disqualified from a local boxing bout? Would this judgement change for a gold medal bout? Medical decisions are always made considering the context of the event, giving rise to moral ambiguity.

MORAL AMBIGUITY IN PRACTICE

While generalizing athlete perspectives on care should be minimized, it is important to recognize that psychosocial factors, such as the desire to win, may influence an athlete's decision regarding their own health. The following are instances based on my experiences when conflicts between the athlete's autonomy and their personal safety arose.

Cutting Weight

Competitors are matched by weight classes to promote fairness. Unfortunately, athletes exploit the system by rapidly reducing their body weight before competitions through dehydration. As a result, they can compete in lower weight classes, gaining a competitive advantage over their opponent in terms of size, leverage, and strength.⁴ However, athletes endanger their health through severe and consistent dehydration.⁴

During the pre-bout medical examination, athletes typically present with low blood pressure due to reduced blood volume, as well as increased heart rate as a compensatory mechanism. I would confirm these findings by performing an orthostatic hypotension assessment, a highly specific test (94%) that would rule in hypovolemia.⁵ Judgements regarding disqualification can be difficult in pre-bout assessments if athletes are dehydrated. Dehydration presents with symptoms of, headache, muscle cramps, and/or dizziness, increasing the risks of injury.⁴ One study also reports an increased risk for brain damage after rapid dehydration.⁶

Musculoskeletal Injuries

The physical demand of boxing places athletes at risk for various chronic and acute musculoskeletal injuries. This

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includes pain and loss of function in the head, neck, jaw, shoulder, elbow, wrist, and knuckles. Yet, many athletes underreport their symptoms in hopes of being cleared to compete.

During the bout, medical staff must navigate through high-stress social pressures in addition to the already difficult task of distinguishing between low- and high-risk injuries. When the ringside physician is called by the officials to assess athletes during the bout, the physician has only seconds to decide whether to stop or continue the competition. Medical judgement can often be impaired by the atmosphere of the crowd and the boxer's desire to continue competing.

Concussion Assessments

Boxing Canada requires athletes to undergo pre- and post-bout medical assessment of concussions to detect measurable changes in neurocognitive status. I was responsible for conducting these assessments using the 3rd Edition of the Sport Concussion Assessment Tool (SCAT3).⁷ This role required me to navigate competing agendas. Specifically, my responsibility to gather accurate data during physicals was often at odds with the athlete's tendency to underreport symptoms to avoid disqualification. Several negative consequences may arise as a result of underreporting. First, athletes place themselves in greater danger during the bout. Second, if inconsistencies are revealed upon comparison between the pre- and post-bout SCAT3 due to underreported pre-bout SCAT3, the likelihood of future suspension is increased.

FUTURE DIRECTIONS

Differences in expectations and a lack of trust between athletes and their medical teams create barriers to care. However, trust can be

built through transparent communication and continuity of care. These strategies help medical teams and athletes develop a mutual understanding of their respective agendas by providing an opportunity to negotiate and explore amendments. As physician-athlete interactions are often limited by time, medical teams provide additional support by clarifying questions and concerns. Care from familiar providers also facilitates accurate reporting of symptoms due to established rapport. While Boxing Canada has a team physician who provides consistent care for national team athletes, local club tournaments often contract different physicians based on availability.

Recognizing barriers to athlete care and implementing changes in larger organizations is a logical step to provide essential information to athletes, coaches, and officials. As previously mentioned, my team and I worked with Boxing Canada to deliver presentations that provided information and management strategies on common health issues impacting athletes.¹ More recently, we are working on projects to contribute to the limited concussion prevention literature, with the intention of improving athlete care. Overall, our goal is to disseminate this information to provincial organizations, followed by local boxing clubs, and ultimately the individual athletes and coaches.

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