

Attitudes towards mixed martial arts sports medicine coverage

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1. Introduction

The attitudes of physicians towards sports medicine coverage of combat sports may vary. Some physicians may feel that, as in all sports, sports medicine coverage of combat sports may be needed. Some may feel more revulsion towards covering such sports which may be viewed as “barbaric” (Kalina & Barczyński, 2015). Mixed martial arts (MMA) may be viewed with such an attitude by physicians, just as how bare-knuckle boxing was viewed in general in the 19th century (Gorn, 2012).

MMA is a combat sport that involves submission grappling, boxing, wrestling, and kickboxing (Bishop, La Bounty, & Devlin, 2013). MMA techniques include kicking, strikes with the knees, elbows, punching, and takedowns. MMA is very similar to “pankration,” a sport that combined wrestling and boxing, created in 649 BC, first introduced in the original Grecian Olympic games (Kim, Greenwell, Andrew, Lee, & Mahony, 2008). The striking and grappling aspects create clearer competition rules for modern MMA, which also combines these moves with aspects of non-traditional martial arts (Bishop, La Bounty, & Devlin, 2013).

The popularity of modern MMA started with the increased popularity of Jeet Kune Do in the 1970s (Acevedo & Cheung, 2010). The first modern MMA competition was held in Denver, Colorado, under the auspices of its first major organization, the “Ultimate Fighting Championship” (UFC). In the 2000s, UFC started growing more and more in viewer popularity and MMA is now one of the fastest-growing sports in the United States (Bishop, La Bounty, & Devlin, 2013).

Issues of violence in the MMA have drawn the attention of the media in the past, and it is possible that this may have led to a generally negative image of MMA among viewers (Bishop, La Bounty, & Devlin, 2013), including, though not limited to, physicians. Research about the sport continues to grow even as MMA’s popularity increases (Andrew, Kim, O’Neal, Greenwell, & James, 2009); however, in total, there is a relative paucity (Bishop, La Bounty, & Devlin, 2013).

More studies are needed investigating what viewers find appealing in MMA in spite of the obvious level of violence (Kim, Greenwell, Andrew, Lee, & Mahony, 2008), with physicians opinion perhaps shaping their willingness to cover MMA events as ringside physicians. Certain personality traits or characteristics may be identifiable in individuals (Lim, Martin, & Kwak, 2010) and physicians who are more likely to be willing to take care of MMA practitioners in the arena.

It is largely unknown whether physicians in general feel that MMA is a valid sport to be covered, or if they feel that the damage they incur on one another is that which the athletes indirectly sought, by being involved in a clearly gladiatorial sport. If physicians feel that injuries sustained in the MMA arena are best treated in a non-arena setting, this may also change their attitude towards covering the sport in competition settings.

This study aims to find out how physicians feel about providing sports medicine coverage to MMA competitions, and delve into possible reasons behind their inclinations.

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2. Methodology

Three hundred fifty surveys or more will be collected, after more than 1,000 surveys are sent out electronically to various physicians and physician organizations in the United States and internationally.

The goal would be to have at least 175 respondents stating they have an interest in sports medicine and 175 stating that they have no interest.

The hypothesis is that interest in sports medicine is the main determinant of willingness or non-willingness to cover mixed martial arts.

Pearson chi-square tests will be used. Anything above 80 power will be considered good. At the size that we hope to survey, 81% power should be sufficient to detect an odds ratio of 1.86 or greater.

3. Results

Study is currently ongoing.

4. Discussion

It is very likely that, overall, the attitude of physicians towards MMA sports medicine coverage will be dim, at least in the United States. This is in view of the same attitude that many American sports physicians take towards boxing coverage (Porter & O'Brien, 1996).

We expect that the primary care, emergency room, and orthopedic specialties, owing to their greater exposure to individuals who get injured in such events (Pappas, 2007), will feel more inclined towards covering MMA events.

Our main hypothesis is that sports medicine subspecialty training is the main determinant of willingness and inclination towards covering MMA athletes and their events, and this may be due to increased comfort in the management of the injuries expected.

We suspect too that there will be a correlation between "liking" MMA as a sport to watch live or on the television, with a physician's willingness or positive attitude towards MMA sports coverage. However, we do not foresee that this will necessarily be the main factor, in the same way that many physicians like to watch fast, collision-prone sports, but would perhaps feel ill-at-ease being the head team physician for a hockey or rugby team, especially without additional sports medicine training.

The main determinant, we feel, that physicians will not want to cover MMA will be the liability issue, a finding that will be most pronounced in the litigious country of the United States (Mohr, 2000). Knowing martial arts will also be a positive indicator of willingness to cover MMA, but we predict it will not be the main factor.

Other factors that we feel may be correlated with the willingness and positive attitude towards MMA sports medicine coverage will be:

- (1) male gender;
- (2) self-reported athleticism;
- (3) being Hispanic, Asian, and/or white; and
- (4) having a main language at home other than English, which, to our minds, may indicate residual influence from cultures perhaps less averse to extreme and bloody violence in life, and in sports (Flores, Abreu, & Tomany-Korman, 2005; Stewart & Simons, 2010).

This study is pertinent mostly in the context of MMA being one of the fastest growing sports in the world (La Bounty, Campbell, Galvan, Cooke, & Antonio, 2011). The underlying premise of the study



is that MMA athletes, are, unlike in any other sport, almost certain of being moderately to severely hurt while participating (Bledsoe, Hsu, Grabowski, Brill, & Li 2006; Rainey, 2009).

There will be care provided to them along the way, and we predict this care will become more and more proximal to their bouts as time goes on; emergency rooms being the primary medical coverage for most MMA events will someday perhaps no longer be acceptable.

To encourage more physicians, and even auxiliary workers, to cover MMA events on-site, this study may show that extra training on the kinds of injuries sustained on MMA and their immediate management may make the physicians and medical workers more willing to volunteer their time and effort to cover MMA events.

Trainers and coaches too, in their efforts to find continuing, longitudinal, care for their athletes, may well keep in mind the characteristics of physicians found by our study to be have a more positive attitude towards the sport in general, being that this may result with superior, if not, at least more caring, management of their fighters.

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