A Theoretical Model for Containment of MRSA Outbreaks in Collegiate Athletic Departments

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This poster presentation proposes a model to test administrator awareness and motivation to develop or maintain a risk management plan informed by Motivated Action Theory for the prevention and containment of CA-MRSA outbreaks within college athletic departments. Methicillin resistant Staphylococcus aureus, an antibiotic resistant version of the bacteria also known as MRSA, is a skin infection which has publicized public health concern. While MRSA outbreaks have been primarily associated with hospitals, community acquired methicillin resistant Staphylococcus aureus, or CA-MRSA, which is distinct on a genetic level from the hospital acquired strains, has become a problem outside the clinical setting (Stevens, Bearman, Rosato, & Edmond, 2008). Individuals in high school, college, and professional sports, and also at health/fitness facilities have experienced infections (Andrews, Howard-Shaughnessy, & Adams, 2007).

The most common cause of CA-MRSA outbreaks are contact sports involving direct person-to-person contact (Turbeville, Cowan, & Greenfield, 2006), i.e., wrestling, football, and rugby. The first “sports related outbreak” in the United States occurred in 1993, in Vermont, CA-MRSA abscesses were discovered on the skin of six Vermont wrestlers (Benjamin, Nikore, Takagishi, 2007, p. 393). MRSA has been responsible for many recent outbreaks in high school, collegiate, and professional athletes this decade. In addition, a survey conducted in 2006 found that 53% of 364 athletic trainers polled had worked with athletes with MRSA skin infections (Steven, Bearman, Rosato, & Edmond, 2008). A three year retrospective study looked at instances of MRSA found how awareness and effective hygienic practices can control the further threat of outbreaks in a collegiate football program during the 2002-2004 football seasons (Romano, Lu, Holtom, 2006). Thus it has been established that MRSA is acknowledged as health threat to collegiate athletic programs.

The model begins with information about the disease, creating awareness of it. Motivation based on goal orientation to prevent and control outbreaks depends on the level of awareness of the disease. An outbreak within the athletic department is included as information of the risk. The information creates awareness of the infection while also influencing the type of goal orientation to prevent and contain current and future outbreaks. Motivated Action Theory (MAT) explains the response to the infection as implementation strategies for CA-MRSA containment and prevention. MAT consists of four levels of goals in the hierarchy: self goals, principle goals, achievement goals, and action plan goals. Self goals are at the highest level of goals include “agency, esteem, and affiliation” are related to “physical and mental health” and determine the desired level of performance to reach an outcome (DeShon & Gillespie, 2005, p. 1108). All individuals possess these goals to different degrees. The motivation to act determines the intervention strategies implemented, ranging from doing nothing to taking every step possible to eradicate the infection in the organization. The intervention determines the extent to which the organization contains and subsequently prevents CA-MRSA. In turn, the prevention and containment of CA-MRSA becomes part of the information about the disease.

This model will be tested empirically in a later study by developing an instrument to survey athletic administrators as to their awareness, motivation, and goal orientation pertaining to the threat of a MRSA among athletic teams within a department. The purpose of the empirical study would be to determine whether awareness of the disease and different goal orientations affect an individual in a college athletic department’s response to contain and prevent the outbreak of CA-MRSA.