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Karin A. E. Volkwein West Chester University of Pennsylvania, kvolkwein@wcupa.edu

Gopal Sankaran West Chester University of Pennsylvania, gsankaran@wcupa.edu

Dale R. Bonsall West Chester University of Pennsylvania

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Developing Policy for HIV/AIDS in Sport: Separating Fact From Fiction

Karin A.E. Volkwein, Gopal Sankaran, and Dale R. Bonsall

In recent years, HIV-positive athletes have increasingly made the headlines, leading to questions and concerns regarding HIV transmission through sport. Based on limited understanding and irrational fear, athletes have been excluded from sport competitions or encouraged to retire prematurely. In other cases, they have been subjected to random, mandatory HIV testing prior to sport competition. Because HIV/AIDS is a medical and social problem, information from health-related sources is included in this analysis, including the modes of HIV transmission. This analysis focuses on further issues related to rights, obligations, risks, privacy, and policy. The growing dilemma for the sport professionals to weigh an athlete's right to privacy against their own duty to warn in the decision-making process is examined, with a discussion on mandatory HIV testing for athletes. Guidelines based on principles of medical ethics are offered to aid sport practitioners in providing all athletes with the best possible service.

In the United States . . . HIV is the second leading cause of death for Americans between the ages of 25 and 44. It is the leading cause of death for African-American men and women in this age group. Many of these young adults likely were infected as teenagers. (Centers for Disease Control and Prevention, 1998)

Although it is true that many professional athletes such as Earvin "Magic" Johnson, Arthur Ashe, Greg Louganis, and Tommy Morrison are known to have been infected with human immunodeficiency virus (HIV), so are many college students. About 1 in every 1,000 college students in the United States is infected with HIV (Calabrese, Haupt, Hartman, & Strauss, 1993). The exact number of college athletes infected with HIV, however, remains unknown.

Karin A.E. Volkwein and Dale R. Bonsall are with the Department of Kinesiology, and Gopal Sankaran is with the Department of Health, at West Chester University, West Chester, PA 19383.

In recent years, HIV-positive athletes have increasingly made the headlines, leading to questions and concerns regarding possible HIV transmission through sport. Based on limited information and irrational fear, athletes have been excluded from sport competitions or encouraged to retire prematurely. In other cases, athletes have been subjected to random, mandatory HIV testing before sport competition. Are these practices justified? What are the proper guidelines? And where do sporting professionals, such as coaches, athletic administrators, and physical educators, turn for assistance in the decision-making dilemmas? Questions and conflicts include rights, obligations, risks, privacy, and policy. Underlying fears and homophobic attitudes further compound the difficulties in the decision-making process.

Several health and sport organizations have responded by introducing policies and position statements related to participation of HIV-positive athletes. Those organizations favoring inclusion are the American Academy of Pediatrics (AAP), National Collegiate Athletic Association (NCAA), American Medical Society for Sports Medicine (AMSSM), American Academy of Family Physicians (AAFP), World Federation of Sports Medicine (FIMS), and World Health Organization (WHO). These organizations share a common focus on risk assessment on a case-by-case basis and advocate for proper precautions by all involved in sporting activities. However, for many sport professionals these policies remain abstract (Thomas, 1996).

Two recent situations illustrate the current dilemmas regarding participation of HIV-positive athletes.

Scenario 1: The banning of HIV-positive boxer Tommy Morrison by the Nevada Boxing Commission. This scenario reflects the mentality that infected athletes pose a health risk to other athletes, coaches, and trainers who may have direct physical contact with the HIV-positive individual. Consequently, sport professionals reason that HIV athletes must be banned from further competition.

Scenario 2: The conviction that the risk of spreading the infection through sport is so minimal that other athletes are not placed in danger when competing with an HIV-positive athlete. This position has resulted in the return of Earvin "Magic" Johnson to the National Basketball Association (NBA).

Which decision is fair and just to everyone involved in sport? Directly related to this issue is the question of whether athletes should undergo mandatory HIV testing. Before any policy is implemented, we must decide who is at potential risk and who is risk free.

Because HIV/AIDS is a medical and social problem, information from health-related sources is comprised in this analysis, including the modes of HIV transmission. However, the central focus of the paper is the philosophical perspective, which has been widely ignored in the literature about HIV/AIDS and sport. Issues related to rights, obligations, risks, privacy, and policy are analyzed, including a discussion on mandatory HIV testing for athletes. Furthermore, guidelines based on principles of medical ethics are approved to aid sport practitioners in providing all athletes with the best possible service.

Medical, Epidemiological, and Psychosocial Data

An estimated 16,000 new HIV infections occurred daily in 1997. If the current trends continue, more than 40 million people will be living with HIV in the year 2000.² In the United States, the first cases of AIDS, a terminal illness resulting from HIV infection, were reported in 1981. According to the Centers for Disease Control and Prevention (CDC), the cumulative number of AIDS cases reported in the United States from June 1981 to December 31, 1998, was 688,200; the cumulative AIDS-related deaths in the same period were 410,800 (CDC, 1999).

The absence of a vaccine or cure for HIV infection, myths associated with HIV transmission, stigmas, and discrimination against those infected with the virus are among the issues confronted by athletes, coaches, trainers, athletic administrators, physical educators, and others involved in sport. The absence of an effective cure is underscored by the high number of deaths (nearly 60%) among those diagnosed with AIDS (CDC, 1999). While AIDS manifests as the terminal stage of HIV infection, it does not indicate the magnitude of infection. The Centers for Disease Control and Prevention (CDC, 1996) estimated that 650,000–900,000 individuals in the United States are infected with HIV.

Research indicates great difficulty in determining the actual risk of HIV infection for any particular individual. Contraction is dependent on several factors: the individual's degree of susceptibility, the mode of transmission, duration of the person's direct contact with the virus, strength of the infecting dose, and virulence of the infective agent. Furthermore, lifestyle, such as sexual behaviors, and life circumstances, such as climate, hygiene, and types of insects, all affect the spread of the virus.

Modes of HIV Transmission

While HIV can be found in all bodily fluids (e.g., blood, semen, vaginal and cervical secretion, breast milk, saliva, tears, urine, feces, cerebrospinal fluid, and sweat), transmission is known to readily occur only through the exchange of blood, semen, and vaginal and cervical secretions. The following three modes of transmission account for most cases of HIV infection in the United States (National Institute of Allergy and Infectious Diseases, 1994):

- Sexual transmission: Unprotected sexual contact with an infected person is known to transmit the virus. The presence of a concomitant sexually transmissible infection (STI), such as herpes, syphilis, chlamydia, or gonorrhea, increases an individual's susceptibility to HIV infection.
- 2. Blood-to-blood transmission: Sharing of contaminated needles and syringes used for injecting drugs carries a high risk of HIV infection. Use of heat treatment techniques to destroy HIV in blood products and routine screening of blood supply before transfusion since 1985 have greatly reduced the risk of acquiring HIV through these means. Accidental transmission of HIV through contaminated needles and other medical equipment is uncommon.
- Perinatal transmission (mother-to-fetus/infant): An infected woman can transmit HIV to her unborn child during pregnancy or her newborn during delivery or after birth. The risk of transmission is estimated at 25%. Initiating treatment with AZT has been shown to decrease the risk of perinatal transmission from 25 to 8.3% (Legg and Minkoff, 1996).

Risk of HIV Infection Through Sport

Of the three modes, sexual transmission accounts for over 75% of all HIV infections worldwide (Quinn, 1996). The possibility of HIV transmission in sport settings is often raised, especially when the media focuses on a celebrity athlete with HIV infection. An analysis of available epidemiological data on HIV clearly indicates the absence of documented HIV transmission within the sport setting (American Academy of Pediatrics, 1992; Brown, Drotman, Chu, Brown, & Knowlan, 1995; World Health Organization, 1989). However, this issue has raised considerable concern among athletes, coaches, sport organizations, and the general public. Athletes who have been infected with HIV have contracted the virus outside the sport setting, mostly as a result of risky behaviors, such as frequent unprotected sexual intercourse with multiple partners.

In 1991, the U.S. Olympic Committee released a detailed report on the transmission of infectious agents during athletic competition. The report reiterated that no case of HIV transmission through sport has ever been documented. The riskiest sports for transmission of this virus and other blood-borne agents are clearly those that involve the most blood: boxing, wrestling, and tae-kwon-do (McGrew, Dick, Schneidwind, & Gikas, 1993). Collision sports, such as football and ice hockey, and contact sports, such as basketball and soccer, also provide opportunities for open bleeding wounds, creating the possibility of HIV transmission.

Nevertheless, several studies have addressed the potential risk posed by HIV-positive athletes, especially in high-contact sports. Brown et al. (1995) observed professional football players from 11 teams of the National Football League (NFL) during 155 regular season games from September through December 1992. They observed 575 injuries, 72 (12.5%) of them lacerations. They then calculated the frequencies of bleeding injuries in association with athletic and environmental factors. Using these data, information on HIV transmission in other circumstances, and HIV prevalence, the authors estimated the risk of HIV transmission during football games. They calculated the risk to be less than 1 infection per 85,647,821 game contacts.³ Based on their data, the authors extrapolated that the probability of a single HIV transmission during an NFL season would be estimated as 0.017; that is, a transmission may occur less than once in 58.6 seasons.

Brown et al. (1995) pointed out that the risk of transmission of HIV during competition is infinitesimally small, especially compared to the risk of transmission associated with unprotected sex or drug use and the risk of death analogous with other activities in which professional football players participate. For example, they cite Krantz (1992), who explained that the risk of death from air travel—integral to the career of any professional football player—for passengers or crew is 1 in 1.6 million flights. This risk is much higher than that of HIV transmission during football games for professional players. Hence, Brown et al. (1995) supported the current NFL policy that does not require bleeding football players to leave the field.

In a 1992 study of 860 National Collegiate Athletic Association institutions, data from the 548 who responded revealed that 35 (6%) had established policies on the participation of HIV-infected athletes, and 15 others restricted participation in some way. Six of the institutions banned HIV-infected athletes from all sport participation, while nine banned them only from selected sports, such as ice hockey or wrestling (McGrew, Dick, Schneidwind, & Gikas, 1993). These studies clearly

reflect the concerns and fears of the public and people in the sporting world about HIV transmission, particularly in contact sports.

The Americans with Disability Act (ADA) of 1990 states: "No individual shall be discriminated against on the basis of disability in full and enjoyment of goods, services, facilities, privileges, [and] advantages" (National Easter Seal Society, 1990). Wording and interpretations of who is covered by ADA are virtually identical to Section 504 of the Rehabilitation Act, which includes "individuals who have hidden disabilities such as cancer, diabetes, epilepsy, heart disease, and mental illness, including people with HIV" (Scott, 1990). Recreational activities comprise "sports and games, including both participant and spectator roles" (National Easter Seal Society, 1990). According to these laws, one can conclude that HIV-positive athletes are protected and have the right to participate in sport if they wish to do so.

In all situations, individuals with disabilities must have opportunities to be active program participants, as well as to be spectators. They must have places in audiences with able-bodied families and friends at all activities, including physical, recreational, sport, and related programs. (Stein, 1993, p. 3)

Specific safety requirements may be applied to recreational programs, but they must be based on actual risks and not on speculation, stereotypes, or generalizations about individual disabilities. The implications and interpretations of the 1990 Americans With Disabilities Act are discussed later as they pertain to the participation of HIV-positive athletes in sports.

Attitudes Toward HIV-Positive Individuals

It is vital to objectively assess the actual risk of HIV infection through sport rather than letting emotions or fear dictate philosophy and policy. To date, the public continues to have many misconceptions about HIV and AIDS. Consequently, HIV-positive individuals are suffering discrimination and elimination from jobs and sports and are being ostracized by friends.

The knowledge disseminated about HIV and AIDS has changed dramatically over the past 15 years, but has the perception among the general public changed as well? When the developed world was first informed about HIV at the beginning of the 1980s, the disease was referred to as the disease of gays and drug users. Today we know that no one is excluded from HIV infection if proper precautions are not taken. Currently, the fastest-growing infected groups of individuals are women and children. HIV spreads across gender lines and ethnic and racial backgrounds, as well as social class and age categories.

A 1991 study reported that college students' perception about people with AIDS is linked to their attitudes toward homosexuality. The study, conducted by psychology professor Michael Stevenson at Ball State University, indicated that most students are accepting of people with AIDS, but tolerance levels vary. Females are more tolerant of this population than males. Even though most students are tolerant, they are more accepting of individuals who contracted the disease through a blood transfusion than through a sexual encounter and are more likely to avoid social contact with such people. Moreover, students are more tolerant of heterosexuals with AIDS than homosexuals with AIDS. Stevenson reported that

the results indicated antigay prejudice and the perception of AIDS as a primarily gay problem (United Press International, 1991).

Findings of the study are significant and perhaps still reflect the current attitudes toward people with AIDS. Attitudes are hard to change. They can be influenced through education, but the youngsters who were interviewed reflected the views of people who formed their perceptions at an educational institution and most likely carried these attitudes with them into the workforce. Thus, it is unlikely that attitudes toward HIV-infected individuals have changed drastically over the last 5 years. These attitudes about HIV-infected people are based on emotions rather than objective reasoning.

On the other end of the attitude scale are people living with HIV who seem to have become careless. Although Tommy Morrison's positive attitude about living with HIV may be reassuring to those infected with HIV, medical experts are concerned that he might be promoting carelessness regarding attitude, health care, and lifestyle. Morrison was quoted as having said that he was not taking prescribed medications because the infection "doesn't seem like that big of a deal" ("Morrison's cavalier attitudes," 1996). Experts warn that despite progress with respect to treatment, HIV is still lethal for most people. Education is the key to preventing HIV infection, and for those who are infected, educational programs can help in altering lifestyles (e.g., practicing good nutrition and exercise) and offer support to prevent exclusion from important social interactions.

Framework for Ethical Decision Making

Even though HIV should be treated as any other medical and social problem, people infected with the virus have been treated with scorn, skepticism, discrimination, and stigma. Because HIV is acquired predominantly through unprotected sexual intercourse, our society's disdain for such unacceptable behavior has consequently shaped its view toward those who are HIV positive.

Moral reasoning involves reflection about what is the right thing to do and why it is correct. It can be defined as a "systematic process of evaluating personal values and developing a consistent and impartial set of moral principles to live by" (Lumpkin, Stoll, & Beller, 1995, p. 1). Furthermore, social and organizational matters should be considered in moral reasoning about HIV and sport participation. This problem-solving activity involves offering reasons for and against moral beliefs.

While *morals* refers to people's motives, intentions, and actions in dealing with one another, *ethics* is the study of morality. The study of ethics involves analyzing underlying issues and questioning people's values. Moral values are based on universal principles, not on monetary rewards, such as fame, fortune, power, and winning. While most values are often culture and nation specific, it is necessary to adopt a set of ethical principles that are universally recognizable. Such principles are readily found in the domain of medical ethics. Medical ethics bases decision making on four basic principles (Last, 1992): (a) respect for autonomy (concern about human dignity and freedom, the fundamental rights of the individual), (b) nonmaleficence (not harming), (c) beneficence (doing good), and (d) justice (natural justice, distributive justice—fairness, equality, and impartiality).

These ethical principles will be applied in the moral reasoning about HIV serostatus and sport participation. Four lines of reasoning are presented:

(a) mandatory testing leading to banning of HIV-positive athletes, (b) mandatory testing leading to special treatment of HIV-positive athletes to protect noninfected athletes, (c) no testing, but education for all athletes, and (d) no testing, with implementation of universal precautions for all athletes.

Mandatory Testing Leading to Banning of HIV-Positive Athletes

One way to combat the spread of HIV in sport is mandatory testing. Due to the availability of highly reliable and accurate methods for HIV testing (e.g., ELISA and Western Blot tests; CDC, 1994) all athletes can be tested in order to identify those who are infected and ban them from sport participation. Let us consider this position from the perspective of HIV-positive and noninfected athletes. Being identified as HIV-positive has two important consequences.

- The infected athlete, because of testing (and thus diagnosis), can enter treatment programs early (compared to those who are not diagnosed), which can subsequently curb the progress of the disease and possibly afford the opportunity for a cure, as and when one becomes available. From the perspective of the HIV-positive athlete, this supports the principle of beneficence.
- Identification of the HIV-positive athlete may also lead to banning from sport
 participation. This, along with stigmatization on and off the court, creates a
 great burden for those who are HIV-positive. Unless they are cured of the
 infection, such athletes may never be allowed to participate in their favorite
 sports. This definitely violates the nonmaleficence principle.

Practitioners, such as coaches and physical educators, are responsible for protecting and warning their athletes about possible dangers, including HIV/AIDS. Where a direct threat is convincing, there is growing consensus that the third party must be warned and protected. This argument conflicts with the individual's right to privacy. However, by disclosing the status of an HIV athlete, coaches or administrators may not be certain if they are preventing, removing, or causing harm. Thus, Thomas (1996) questioned: "What becomes the greater good: maintaining confidence, or protecting those who feel they have a right to know all the risks associated with a particular competitive event?" (p. 21). Pressure from various people and organizations to disclose the HIV status of athletes will continue to support the duty-to-warn principle, "but autonomy and informed consent are equally strong legal and moral deterrents to disclosure" (Thomas, 1996, p. 22).

Disclosing the HIV status of athletes and subsequently removing those who are infected with the virus will allow noninfected athletes to be comfortable, knowing that they are not exposed to the virus. In this sense, banning HIV-positive athletes from games allows the practice of beneficence for the noninfected participants. Moreover, noninfected athletes will not be in a psychological quandary about whether they are playing with HIV-positive athletes and fear infection via contact during the sporting event.

While this aspect of reasoning appears simple, the situation is more complex. In the absence of any reported HIV transmission in sport, an important question is raised: Does the mere fear of HIV transmission during sport warrant banning HIV-positive athletes? Additionally, not all HIV infection is detected by the screening tests that are currently used. Despite high accuracy and reliability, some false negatives are inevitable. One such instance is when the HIV-infected athlete

is in the "window period"—a period lasting 1–3 months or even longer. During this time, the HIV-infected athlete may test negative on the HIV antibody tests, thus the negative result actually provides false assurance to noninfected athletes. This false sense of security and relief will be perpetuated by mandatory testing.

A Joint Position Statement by the American Medical Society for Sports Medicine and the American Academy of Sports Medicine (1995) clearly objects to mandatory HIV testing:

Massive screening in low-prevalence populations leads to a higher rate of false-positive tests resulting in undue duress, counseling, and complex follow-up evaluation. Most importantly, any testing program, no matter how widespread, is not justifiable precisely because it fails to further diminish the "too low to qualify" risk of blood-borne pathogen transmission in sport. Other factors, including overwhelming costs, as well as legal and ethical considerations of mandatory testing for populations that may include minors, further suggest that there is no rational basis for supporting blood-borne pathogen test in sports [italics added]. (p. 514)

When the risk of infection is too small and the expenses of HIV testing too great, one cannot logically promote the mandatory testing of all athletes. Thus, this is not a reasonable action, and subsequent banning from sport (following a positive test result) will cause more harm than good. Several studies have shown that people infected with HIV benefit from exercise and sport involvement at physical and psychological levels (Florijn, Voelker, & Valley, 1995; LaPerriere et al., 1990; Pedersen, 1999). One could counterargue that although HIV-positive people benefit from exercise, this does not mean that they have to continue their involvement in contact sports. However, if the risk of infection is very remote when proper precautions are taken, there is no reason to exclude HIV-positive athletes from any sport. They would benefit more by continuing their participation in sport and not being eliminated due to a positive HIV test result. Hence, educating people about the actual risk of HIV infection as well as following proper guidelines to prevent spreading of the virus should be emphasized over mandatory testing (Sankaran, Volkwein, & Bonsall, 1996). Although HIV transmission through sport might be documented in the future, mandatory testing of athletes creates an irrational fear about the false danger of transmitting this virus through sport.

Also, publicizing the infection status of athletes infringes on the right to privacy of HIV-positive individuals. Currently, not all athletes are tested for tuberculosis and other contagious diseases. Singling out HIV infection is problematic. Individual medical conditions and the related details are private matters; infected individuals deserve confidentiality. There is little justification in making this confidential data available to everyone, as the HIV-positive individual's rights to confidentiality and privacy are frequently violated.

Mandatory Testing Leading to Special Treatment of HIV-Positive Athletes to Protect Noninfected Athletes

A 1990 study of 18-24-year-old athletes indicated a 0.08% prevalence of the infection (McGrew et al., 1993). That is, 0.8 of every 1,000 athletes tested were HIV positive. The number extrapolated via mandatory testing of athletes

may be even lower, as those known to be infected may not choose to play sports. However, although dealing with a false-positive reading on an HIV test may be traumatic for the tested athlete, it is certainly beneficial if another person can be prevented from contracting the virus during athletic competition. This is certainly a valid justification if there is legitimate reason to believe that HIV is spread through contact sport.

Those who promote the testing of all athletes who compete in bloody sports would argue from the beneficence point of view for noninfected athletes. Namely, by identifying the infected athletes, human welfare is promoted and further harm is prevented to those who may become infected during the athletic contest and practice sessions. If there is legitimate reason to believe that the HIV-positive athlete poses a threat to the noninfected athlete's health and welfare, under the nonmaleficence and beneficence principles the HIV-positive athlete must be banned from the sport. However, there are no documented cases of HIV transmission through sport. "Given the actual nature of contact and blood exposure in sport, the risk of HIV transmission in the athletic setting seems to be infinitely small and below any threshold that we can actually quantify" (McGrew et al., 1993). If the potential for transmission cannot be quantified, how are mandatory testing and subsequent banning of HIV-positive athletes justified? However, the possibility of HIV transmission does exist in sport. No authority has said that it cannot or never will occur.

One solution that would presumably be fair to HIV-positive and noninfected athletes alike would be mandatory testing followed by special treatment for individuals who are diagnosed with the infection. This might include HIV testing, counseling and treatment for all HIV-positive athletes, allowing sport participation for these individuals, and making information about HIV-infection status available to all athletes.

This, in contrast to the previous scenario, seems to preserve the nonmaleficence principle. The HIV-positive athlete is permitted to participate in sport and thus continues to enjoy the privilege of competing. However, the nonmaleficence principle is violated in another arena. Social discrimination, ostracism, and hatred, coupled with longstanding homophobic attitudes, are all too common in our society. We live in an imperfect world, where hate and bigotry are not uncommon. This poses special threats to HIV-positive individuals, where ignorance about the disease and its risks often dictates interaction with the infected individual. Such interactions in the social arena, including sport settings, are often unfavorable to the HIV-positive athlete. Taunts and epithets are relatively common and are directed toward the infected person. These can be devastating—damaging morale and preventing participation, thus harming the targeted athletes and violating the nonmaleficence principle.

No Testing, But Education for All Athletes

Rather than undergoing mandatory testing, athletes might receive educational training regarding the likelihood of HIV transmission through sport. This option provides for the confidentiality of the HIV-positive athletes and preserves each individual's right to privacy. There is no harm inflicted on the HIV-infected athletes. Education about the known modes of HIV transmission, the risk of

contracting it through sport, and the best means of protection during competition are extremely valuable to all athletes.

Not knowing the HIV infection status of athletes will prevent discrimination. Thus, the principle of beneficence holds true for infected and noninfected athletes; thus, this scenario promotes fairness for all. Knowledge is power, and education empowers all individuals, whether HIV infected or not. However, there is a greater concern for contact sports, such as wrestling, ice hockey, and football, than noncontact sports due to the increased occurrence of blood spills and subsequent increased probability of contact with an opponent's blood. While no HIV transmission has been confirmed during a sporting event, the possibility exists. Thus, athletes and others who would be coming in contact with body fluids (e.g., blood) during sporting events (e.g., athletic trainers or coaches) further minimize their chances of infection with HIV and other blood-borne pathogens through the use of universal precautions.

While education alone without testing is sufficient for infected athletes, additional measures are necessary for those who are not infected. The nonmaleficence principle, when applied to noninfected athletes, requires additional actions to prevent HIV infection, such as the practice of universal precautions (Volkwein, Sankaran, & Bonsall, 1996).

No Testing, With Implementation of Universal Precautions for All Athletes

As indicated with earlier scenarios, the HIV-positive athlete's rights are protected when mandatory testing is not implemented. However, noninfected athletes' rights should be protected with equal vigor. Universal precautions, when applied consistently in sport, offer undisputed protection against HIV and other blood-borne organisms. The risk of HIV transmission in sport is extremely low if proper education is provided and the universal precautions and cleanup procedures are followed. McGrew et al. (1993) surveyed NCAA institutions and found considerable laxity in the practice of universal precautions by sport personnel. Lack of regular education programs and posted infection control policy were also cited as ongoing problems. Thus, there is a great need for more education about universal precautions, training in their use, and resources necessary for their implementation. While this increases the cost of sporting events, the practice of universal precautions enables adherence to the principle of nonmaleficence as applied to noninfected athletes.

However, the practice of universal precautions alone is not sufficient. Thus far, all of the infections among athletes have resulted through risky behavior outside the sporting arena. While universal precautions will protect noninfected athletes from HIV infection through sport, these individuals are still vulnerable to contracting this virus and other sexually transmissible infections (STIs, e.g., chlamydia, gonorrhea, human papilloma virus) in nonsport settings. To uphold beneficence for both HIV-infected and noninfected athletes, education on HIV and STIs transmission and prevention should be offered. This will supplement the practice of universal precautions in sport.

While these four scenarios offer varying options for HIV-infected and non-infected athletes, any one option is inadequate. While mandatory testing may be

intuitively appealing to noninfected athletes, it is fraught with infringement of ethical principles for the HIV-positive individual. Universal precautions protect athletes in the sport arena but not outside of it. Hence, education about the risk of HIV transmission in- and outside of the sport arena is essential, as is following proper precautions.

In summary, a combination of strategies is necessary in order to judiciously apply the ethical principles to HIV-positive and noninfected athletes. Confidentiality of medical information, right to privacy, doing good, and not doing harm can be maintained if education is combined with voluntary testing and consistent practice of universal precautions. If every sport competitor is considered a potential HIV carrier, then those who are infected with the virus are not singled out. Allowing HIV-positive individuals to participate permits them to continue with their ambitions and dreams. Education about HIV protects both infected and noninfected athletes in- and outside the sport arena. Practice of universal precautions protects everyone involved in sport.

Conclusion and Recommendation

Based on the absence of a documented HIV transmission and its very low probability in sport settings, the WHO and World Federation of Sports Medicine have recommended that HIV-positive athletes should not be excluded from sport participation (World Health Organization, 1989). This position has also been adopted by other sport organizations, such as the NCAA (1993) and NFL (Brown et al., 1995). However, due to fear and misconceptions about HIV transmission in sport, especially those with high contact, many HIV-infected athletes have been banned from their sports. This raises the question, What is a fair and just policy for both HIV-positive and non-infected athletes?

If all athletes are allowed to participate, regardless of HIV status, the policy pertaining to mandatory testing is irrelevant. However, if HIV-positive athletes are denied sport participation, as with competitive boxing in several states, this raises a whole set of questions regarding mandatory testing and potential problems with HIV tests, including accuracy and costs. Adapting universal precautions for handling body fluids greatly minimizes the risk of HIV transmission. Based on these reasons, the need for mandatory HIV testing of all athletes is unfounded and not recommended.

The Joint Position Statement by the American Medical Society for Sports Medicine and the American Academy of Sports Medicine (1995) reaffirms that HIV infection alone is insufficient grounds for denying participation of the HIV-positive athlete. The National Athletic Trainers Association policies and Code of Ethics (1995) explicitly state that discrimination based on medical conditions, including HIV infection, is unethical. Hence, when health and sport professionals are asked to develop policies to protect athletes from HIV contraction through sport, they should base their decision on moral reasoning and facts rather than myths and fiction.

While the risk of HIV transmission in sport is minimal, all athletes—professional and amateur—should be educated about risk reduction and elimination in nonsport settings, where all of the infections currently occur. This calls for a focused,

well-coordinated, sustained action on behalf of athletes, policy makers, athletic organizations, institutions of higher learning, coaches, athletic trainers, physical educators, and others associated with sport.

References

- American Academy of Pediatrics. (1992). American Academy of Pediatrics policy statement: Human immunodeficiency virus acquired immunodeficiency syndrome (AIDS) in the athletic setting. *The Physician and Sports Medicine*, **20**(5), 189-191.
- American Medical Society for Sports Medicine and American Academy of Sports Medicine. (1995). Human immunodeficiency virus (HIV) and other blood-borne pathogens in sports. Joint Position Statement by the American Medical Society for Sports Medicine (AMSSM) and the American Academy of Sports Medicine (AASM). The American Journal of Sports Medicine, 23, 510-514.
- Brown, L.S., Drotman, P.D., Chu, A., Brown, C.L., & Knowlan, D. (1995). Bleeding injuries in professional football: Estimating the risk for HIV transmission. *Annals of Internal Medicine*, 122(4), 271-274.
- Calabrese, L.H., Haupt, H., Hartman, L., & Strauss, R. (1993). HIV and sports—What is the risk? The Physician and Sports Medicine, 21(6), 173-180.
- Centers for Disease Control and Prevention. (1994). HIV counseling, testing and referral: Standards and guidelines. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.
- Centers for Disease Control and Prevention. (1996). CDC revises HIV infection estimates. HIV/AIDS Prevention. Atlanta, GA: U.S. Department of Health and Human Service.
- Centers for Disease Control and Prevention. (June 1998). Young people at risk—Epidemic shifts further toward young women and minorities. Atlanta, GA: National Center for HIV, STD, & TB Prevention, p. 1.
- Centers for Disease Control and Prevention. (1999). Basic statistics—Cumulative cases. Atlanta: Author. Available at http://www.cdc.gov/nchstp/HIV_AIDS/stats/cumlulat.htm.
- Florijn, Y., Voelker, K., & Valley, E. (1995). Sport und HIV infektion [Sport and HIV infection]. In Bundesministerium fuer Gesundheit, Sport und HIV- Infektion Handbuch (pp. 123-175). Baden-Baden, Germany: Nomos.
- Krantz, L. (1992). What the odds are. New York: Harper Collins.
- LaPerriere, A., Antoni, M., Schneidermann, N., Ironson, G., Klimas, N., Caralis, P., & Fletcher, M.A. (1990). Exercise intervention attenuates emotional distress and natural killer cell decrements following notification of positive serologic status for HIV-1. Biofeedback and Self-Regulation, 15, 3.
- Last, J. (1992). Ethics and public health policy. In J. Last & R. Wallace (Eds.), Public health and preventive medicine (pp. 1187-1196). Norwalk, CT: Appleton & Lange.
- Legg, J.J., & Minkoff, H.S. (1996). Vertical transmission: Now preventable. Patient Care, 30(9), 160-163.
- Lumpkin, A., Stoll, S.K., & Beller, J.M. (1995). Sport ethics: Applications for fair play. St. Louis: Mosby.
- McGrew, C., Dick, R., Schneidwind, K., & Gikas, P. (1993). Survey of NCAA institutions concerning HIV/AIDS policies and universal precaution. *Medicine and Science in Sports and Exercise*, 25, 917-921.

- Morrison's cavalier attitude worries doctors. (1996, August 26). USA Today, p. 16C.
- National Athletic Trainers Association. (1995). Blood-borne pathogens: Guidelines for athletic trainers. *Journal of Athletic Training*, 30, 203-204.
- National Collegiate Athletic Association. (1993). NCAA sports medicine handbook. Overland, KS: Author.
- National Easter Seal Society. (1990). The Americans With Disabilities Act: An easy checklist. Chicago: Author.
- National Easter Seal Society. (1990). Awareness is the first step [Brochure]. Chicago: Author.
 National Institute of Allergy and Infectious Diseases. (1994). HIV infection and AIDS.
 Bethesda, MD: United States Department of Health and Human Services, Public Health Service, December 2.
- Pedersen, B.K. (1999). HIV, exercise, and immune function. In G. Sankaran, K. Volkwein, & D. Bonsall (Eds.), HIV/AIDS in sport: Impact, issues, and challenges. Champaign, IL: Human Kinetics.
- Quinn, T. (1996, July 13). Global burden of the HIV pandemic. Lancet, 348, 99-106.
- Sankaran, G., Volkwein, K., & Bonsall, D. (1996). HIV infection: Risk, right to know, and requirement to divulge—Moral reasoning for the athletic trainer. Athletic Therapy Today, 1(3), 49-51.
- Sankaran, G., Volkwein, K., & Bonsall, D. (1999). HIV/AIDS in sports: Impact, issues, and challenges. Champaign, IL: Human Kinetics.
- Scott, K. (Ed.). (1990). The American with Disabilities Act: An analysis. Silver Springs, MD: Business.
- Stein, J. (1993). The Americans with Disabilities Act: Implications for recreation and leisure. In S. Grosse & D. Thompson (Eds.), Leisure opportunities for individuals with disabilities: Legal issues (pp. 1-11). Reston, VA: American Alliance for Health, Physical Education, Recreation and Dance.
- Thomas, C. (1996). The HIV athlete: Policy, obligations, and attitudes. Sport Science Review, 5(2), 12-29.
- UNAIDS. (1998). Report on the global HIV/AIDS epidemic and UNAIDS global HIV/AIDS and STD surveillance. Available at http://www.who.int/emc-HIV/global_report/data/globrep_e.pdf.
- United Press International. (1991, August 27). Attitude towards AIDS victims depends on sexual preference. Author.
- Valenti, W.M. (1992). Early intervention in the management of HIV: A handbook for managed health care professionals. Durham, NC: Burroughs Wellcome Fund.
- Volkwein, K., Sankaran, G., & Bonsall, D. (1996). Bleeding wounds and the threat of HIV: The role of athletic trainers. Athletic Therapy Today, 1(1), 38-41.
- World Health Organization and International Federation of Sports Medicine. (1989). Consensus statement from consultation on AIDS and sports. Geneva, Switzerland: Authors.

Notes

Only a few scholars have discussed the problem of HIV and sport from a philosophical perspective (see Thomas, 1996; Sankaran, Volkwein, & Bonsall, 1996; Volkwein, Sankaran, & Bonsall, 1996). Sankaran, Volkwein, and Bonsall's (1999) book *HIV/AIDS in Sport* also sheds more light on the dilemma from a multidisciplinary perspective.

²An estimated 2.3 million people died of AIDS in 1997 worldwide. An estimated 11.7 million AIDS deaths have occurred since the beginning of the epidemic in the late 1970s (UNAIDS, 1998).

 3 The potential risk of HIV transmission in football was estimated using the following equation: 1 infected player/200 players \times 1 HIV transmission/300 exposures \times 0.41 lacerated players per game/45 players per game \times 3.46 bleeding players per game/45 players per game (Brown et al., 1995).

⁴We acknowledge that the so-called universal principles and even medical ethics are culture specific and never totally free of emotional bias. However, since we are mainly addressing readers in the Western world, we are referring to the values currently held in these societies.

⁵Because an individual infected with HIV in early stages of the disease may be asymptomatic, the diagnosis is made primarily by testing the individual's blood for the presence of antibodies (proteins produced by the body specific to each infectious agent) to the virus. The HIV antibodies in blood reach detectable levels in about 1–3 months postinfection, possibly up to 6 months. The period from time of contact with HIV to the detection of HIV antibodies in the blood is known as the *window period*. During this time, although the HIV antibody test results will be negative, an infected individual can still transmit the virus to others. The window period accounts for one of the most common causes of a negative HIV-antibody test result (National Institute of Allergy and Infectious Diseases, 1994; Valenti, 1992).

⁶Thomas (1996) provided a detailed discussion of the universal precautions, including stopping the bleeding, covering open wounds, changing into clean uniforms, the need for athletic trainers to wear gloves, cleaning all surfaces and equipment contaminated with blood, proper disposal procedures, making mouth pieces available for use, properly disinfecting and disposing of contaminated towels, and acceptable guidelines in the immediate control of bleeding.