

Normative Ethics in Sports Medicine

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Abstract: The relationship between a team physician and an athlete differs significantly from the traditional doctor-patient relationship. To better define the ethical norms and ideals in sports medicine, we surveyed the views of practicing team physicians in the Ivy, National Football, and National Hockey Leagues and compared them with responses offered by professional ethicists. Six hypothetical cases were presented, each representing a distinct area of ethical conflict: advertising, conflicting healthcare goals, confidentiality, innovative treatments, enabling dangerous behavior, and treating children. Thirty-one ethicists and 131 team physicians responded to the surveys. Subjects were asked to rate agreement or disagreement with statements that followed the case description. Responses were converted to scores ranging from 0 to 100. A priori, a difference greater than 20 points was set to represent significant disagreement. By that standard, there was agreement between the physicians and ethicists for 18 of 23 statements. We concluded that team physicians and ethicists share many of the same ethical views on common ethical issues in sports medicine. The high degree of variance in the responses in both groups, however, suggests that many unresolved areas remain in the field of ethics in sports medicine.

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The medical problems seen in sports medicine usually are removed far from life and death issues often associated with medical ethics. Stem cell research and cloning are topics that may require a presidential committee of ethicists; sprains and contusions do not. Nevertheless, the field of sports medicine is not exempt from moral challenges: the unique characteristics of the athlete-as-patient can make it difficult for the well-intentioned doctor to do the right thing.

In most medical encounters, several assumptions hold true. The first is that the physician works exclusively on behalf

of the patient. Second, the patient and doctor are assumed to share the common goal of improving the patient's health. Third, the doctor-patient relationship is private. These three assumptions may not apply in sports medicine. For example, sports medicine physicians often do not work exclusively on behalf of the patient, but rather report to the team or organization that hires them. The implicit common goal of improved health (which should shape the normal doctor-patient relationship) is likewise subject to skewing factors when the patient is an athlete: in some situations, athletes and team officials may favor enhanced short-term performance over long-term well-being. Finally, there are several external threats to the privacy of the relationship between the sports medicine physician and athlete. Coaches, agents, and members of the media all may assert claims for information usually limited to the private communication between doctors and patients.

These examples suggest that there may be several unique ethical issues in sports medicine. Several of these have been identified¹: limits of doctor and patient confidentiality; use of medical means for enhancing athletic performance; impediments to obtaining informed consent; the application of medical arts to enable dangerous behavior; medical advertising; fair resource allocation; pressures to use unproven treatments; and special concerns for the pediatric athlete. In that study, an analysis and suggested course of action was offered. That analysis, however, is only one viewpoint.

To more rigorously analyze the ethical norms of sports medicine practice, we solicited the opinions of professional ethicists and team physicians regarding the previously identified ethical issues. The ethicists were queried to define an ideal standard. To study the current practice of team physicians, the same survey sent to ethicists also was sent to team physicians of the National Football League, National Hockey League, and Ivy League. The opinion of these team physicians was designated as the practicing norm. The results were analyzed within and between groups.

MATERIALS AND METHODS

The study protocol was reviewed by the institutional review board at our institution. Six case scenarios were selected for this survey. Each case was followed by three to six statements. Respondents were asked to indicate the extent to which they agreed or disagreed with the given statement, using a visual analog scale. For each response offered, the visual analog

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score was converted to a number ranging from 0 (disagree) to 100 (agree). There were 23 statements.

The survey was sent to a convenience sample of academic ethicists identified from faculty lists of prominent centers of bioethics in the United States. The survey also was sent to all members of the physician groups of the National Football League, National Hockey League, and Ivy League. Respondents were asked to accept the assumptions given in the case scenarios for the purpose of determining their agreement with the statements.

The surveys contained a marking on the cover indicating to which group the respondent belonged. Surveys mailed to the ethicists also contained a separate index card with the respondent's name. These cards were separated from the survey when it was received. The name cards had been included to facilitate followup mailings to nonresponders if necessary. A followup mailing did not prove necessary. The team physician mailings contained no such identifying card or other means of linking the doctor to the mailing (as it was assumed that it would not be difficult to obtain 120 responses from one mailing).

We stipulated a priori that a difference in response score of 20 points would represent a meaningful (clinically significant) difference. Statistical significance was set at $p = 0.05$. Sample size calculation using these values for alpha and delta indicated that 90% power could be obtained with 30 ethicists and 120 team physicians.

RESULTS

Of the 50 ethicists contacted, 35 replied. Four of these 35 declined to participate, citing a lack of relevant expertise. The ethicist response rate was 31 of 50 (62%). Two hundred sixty-four team physicians were mailed surveys. Eleven mailings were returned unopened because of incorrect addresses. Of the 253 successfully mailed surveys, 133 were returned. Two individuals declined to participate and returned incomplete surveys. The team physician response rate therefore was 131 of 253 (52%).

Twenty-three statements were offered for six hypothetical cases. There was agreement among the groups of the pro-

fessional ethicists and the team physicians in 18 of the statements. The mean agreement score and standard deviation for each statement in each case appears below. The p value of a two-tailed t test likewise is listed for all statements for which there was a difference greater than 20 points.

DISCUSSION

This project attempted to characterize ethical norms for sports medicine. Team physicians and ethicists completed surveys reflecting their opinions about several ethical challenges in sports medicine. Each of the six cases represented a distinct area of ethical conflict: advertising, conflicting healthcare goals, confidentiality, innovative treatments, enabling dangerous behavior, and treating children. Although each case was designed to focus on one topic, the cases often touched on other tangential ethical issues. This overlap, we think, is the norm in practice.

The ethical themes were analyzed in each case and possible reasons for discordance among team physicians and ethicists are suggested, when seen.

Case Scenario 1: Pediatric Athletes

Patient 1 was a 15-year-old star basketball player who injured her arm during a water-skiing accident. A physical examination suggested shoulder instability. An MRI arthrogram revealed a Bankart lesion amenable to operative intervention. The doctor presented the treatment options: surgical repair or intensive physical therapy. Repair offered hope of returning Patient 1 to top form and also reduced the risk of repeat dislocations. Alternatively, physical therapy avoided surgery and should allow good use of the arm. If Patient 1 were to decline surgery, however, the doctor would recommend that she retire from competitive play. Patient 1, who is an excellent student and captain of the debate team, viewed this accident to be a sign that she should give up her basketball career. Her father objected. He insisted that Patient 1 have the surgery hoping that she would be able to compete in college basketball and possibly beyond (Table 1).

TABLE 1. Pediatric Athletes Survey

Statement	Ethicists Mean Response (standard deviation)	Physicians Mean Response (standard deviation)
1. The doctor should operate on the patient's shoulder because she is a minor and her father demands she should have surgery.	7.6 (13.2)	14.2 (23.7)
2. The doctor should consult a psychiatrist, social worker, ethics committee, or others to help decide the best treatment for Patient 1.	31.3 (33.7)	35.2 (33.1)
3. Patient 1 should be allowed to choose the best treatment option for herself because she appears competent to understand the risks and benefits of her decision.	87.6 (21.3)	70.5 (31.3)

Analysis

Caring for children raises ethical concerns about patient autonomy. The child's ongoing development and the competitive nature of pediatric athletics can complicate decisions about appropriate treatment. Children have parallel processes of psychologic and physical development, of which progress is not synchronized necessarily. Also, the psychologic maturation often is not as well-defined as the physical one. Together, these factors make children especially vulnerable to injury and exploitation.²

A competent adult may refuse even life-saving treatment, such as a blood transfusion for a Jehovah's Witness, and that decision is respected. However, incompetent adults, whose incompetence is articulated explicitly and legally, have decisions made for them by others. Adolescent patients, however, often are in less defined territory. The compromise ethical position, one might think, is to acknowledge children's concerns but defer to the decision made with their parents' consent. As this case illustrates, this approach is not uniformly satisfying.

Parents of competitive athletes may not always best represent their children's health interests. Interests in a child's athletic success may interfere with a parent's ability to consider the child's other concerns,^{12,16} and vice versa. The sporting environment exerts significant pressures which make it difficult to serve as a child advocate and a medical decision maker.¹¹

Physician and ethicist responses to Statement 1 are uniformly low. Both groups agree that operating on Patient 1 because she is a minor and her father demands surgery is inappropriate. The patient's preferences about her body clearly carry significant weight even if she lacks the legal rights and responsibilities acquired at the age of majority (18 years in the United States). The strong disagreement to Statement 1 likely reflects the sentiment that is reprehensible to do an elective operation on a thoughtful 15-year-old against her wishes. It is not clear from the responses to this statement, however, whether the crucial factor is the patient's age, her apparent sensibility, or the fact that she requested nonoperative care. A lower threshold for acceding to the wishes of the parent may be used for a patient a few years younger, or one less articulate, or if the parents were the ones who favored the nonoperative approach. It would be legally (if not ethically) difficult to operate on a 15-year-old who wished to have surgery without the consent of her guardian.

Statement 2 assesses the propriety of obtaining outside input: "The doctor should consult a psychiatrist, social worker, ethics committee, or others to help decide the best treatment for Patient 1." Although not disagreeing with this statement as strongly as they did to the previous one, physicians and ethicists disagreed with this statement as well. Perhaps it was deemed unnecessary to solicit participation from outsiders to help resolve the disagreement between Patient 1 and her father.

The rationale for consulting a social worker in these situations is that an expert in family dynamics, communication, or even similar ethical issues may be able to offer insights.¹³ Additionally, one may say that this disagreement between parent and child suggested other significant areas of family conflict, problems for which mediation could be valuable. However, it is possible to identify several possible reasons why physicians and ethicists would prefer to limit the involvement of other individuals in the decision making process. In the first place, involving others could increase the number of views, complexity, and therefore difficulty in reaching an appropriate decision. The second reason is the sense that the surgeon should not defer this important decision to others. An ethics consultation, according to one orthopaedic surgeon commentator, may represent the abdication of the doctor's duty to wrestle with such a question; the physician and patient should be responsible for deciding on the most appropriate patient care.³ Finally, it also is possible that the ethicists and physicians would not recommend consulting other individuals to solve this disagreement, not because they derogate the role of such consultants in general, but because in this particular case, they think the ethical question is easy. As seen in the response to Statement 1, the right course of action is obvious to this group.

The answer to Statement 3 indicates both groups supported the patient in making her own healthcare decision. Ethicists and doctors agreed "the patient should be allowed to choose the best treatment option for herself because she appears competent to understand the risks and benefits of her decision." The patient's competency appeared key to respecting her decisions about her body. Competency is difficult to define abstractly. An understanding of her medical condition, risks, and benefits of treatment, and the degree of her decision's accordance with her other life goals all seem to be important conditions of a competent decision. Doctors and ethicists seem to agree on the importance of respecting a competent pediatric athlete's medical decisions without the involvement of social workers, ethics consultants, or others, provided that decision makes sense to them, and follows a path of least resistance. The issues become complicated if the youngster insists on surgical treatments the parents forbid. They become more complicated still if the physician does not think that surgery is appropriate as is the case of Patient 5.

Case Scenario 2: Medical Advertising

A middle-aged executive, Patient 2, visited the doctor for a knee arthroscopy. Patient 2 told the doctor that his MRI revealed a torn meniscus and another orthopaedic surgeon wanted to operate. The patient stated, "I am coming to you, though, because I know you are the best. After all, you take care of the local professional basketball team. I saw your ad during the game last night." In fact, the doctor is a general orthopaedist who was designated team physician because his

practice purchases tickets and advertising. Furthermore, the doctor refers all of the surgical cases from the team to other doctors (Table 2).

Analysis

Medical advertising is legal, prevalent, and not inherently unethical. In sports medicine, becoming the team physician has become an especially effective method of advertising. Recognizing the value of such a position to sports physicians, two National Football League teams recently put the jobs of team physicians out for bid.⁴ Advertising in sports medicine, especially when done indirectly, that is, through media exposure as a team physician, raises several ethical concerns about deception and honesty.

The first survey statement was that the doctor was obliged to tell Patient 2 that the team physician designation was purchased. Although ethicists overall agreed with the statement, doctors were ambivalent. Ethicists also agreed that: The purchase of the title team physician is ethically dubious and potentially misleading. Professional rules should not allow it. Therefore, it would seem that ethicists assert that physicians should disclose the purchased nature of the title of team physician (Statement 1), because the title is misleading (Statement 2). The physician's reasoning is less clear. Although physicians were ambivalent about the first statement, they agreed with the second statement. Accordingly, the awkward situation exists in which the physicians indicate the purchase of the title of team physician is ethically dubious and misleading, yet do not think that physicians must disclose to patients that the title was purchased. One resolution to this apparent conflict is that the physicians may think that such disclosure is futile; that it either would fail to clarify the title, prove impractical, or otherwise not resolve any of the ethical issues related to that title.

The shared disagreement with Statement 2 probably reflects the view that the job of team physician carries an implicit stamp of excellence that should not be bought. Most lay people would think that a professional sports team would search out

the best physicians available for its players. It is when the title of team physician is sold to the highest bidder rather than awarded to the most competent physician, that the title becomes misleading and ethically dubious. The additional agreement that professional rules should disallow purchasing the title also suggests the matter is weighty enough to merit a coordinated response.

Sports medicine physicians and ethicists agreed with Statement 3 that the doctor has an obligation to tell Patient 2 that most players actually receive their orthopaedic care from other doctors. In this case, the patient explicitly stated his belief that the doctor personally cares for athletes and that this is his reason for seeing the doctor. Failing to correct the patient and provide him with information necessary to make an autonomous decision based on accurate assumptions would be lying.¹⁶ Ethicists and doctors agreed that allowing Patient 2 to maintain this inaccurate assumption, especially when it is the basis for his medical decisions, is inappropriate.

Physicians should be allowed to advertise just like any other business as long as the claims are factually true, is the fourth statement. Doctors and ethicists offered tepid agreement with this statement. There are several reasons why their agreement may have been guarded. The first problem some may have with medical advertising is that it may stimulate demand, rather than simply promote brand loyalty among those who already have chosen to enter the market. Stimulating demand for most products is fair. An advertisement for a car manufacturer, for example, attempts to plant two ideas: first, that it is preferable to its competitors, but also the general notion that people would be happier with a new car regardless of the need. By contrast, stimulating the desire for medical care may be less justified. First, healthcare typically is not paid for directly for consumers and therefore lacks the natural constraints on consumption. In addition, physicians are assumed to know more than the patient, and therefore are to be trusted, at least more than a car dealer, when saying that a procedure is indicated.

TABLE 2. Medical Advertising Survey

Statement	Ethicists Mean Response (standard deviation)	Physicians Mean Response (standard deviation)
1. The doctor is obliged to tell Patient 2 that the team physician designation was purchased.	73.5 (35.0)*	49.5 (39.6)
2. The purchase of the title team physician is ethically dubious and potentially misleading. Professional rules should not allow it.	82.4 (27.1)	72.1 (33.7)
3. The doctor has an obligation to tell Patient 2 that most players actually receive their orthopaedic care from other doctors.	91.6 (17.3)	79.7 (27.9)
4. Physicians should be allowed to advertise just like any other business as long as the claims are factually true.	65.1 (33.5)	73.6 (31.2)

*p = 0.003.

A second problem with medical advertising is that differences among practitioners are often subtle and difficult to quantify. So although it is easy to cite the acceleration power or desirable fuel economy of a car, it is more difficult to accurately identify what makes one doctor better than another. Finally, the ethicists' and doctors' responses to the first three statements reveal how readily physician advertising intentionally or inadvertently may mislead. This potential for deception in advertising, especially with respect to the title of team physician, proved to be a significant concern for doctors and ethicists.

Case Scenario 3: Innovative Therapies

Patient 3 was a professional basketball player who partially dislocated his shoulder while playing during the last game of the season. After an unsuccessful trial of physical therapy, the team doctor recommended surgical repair (capsular shift). Members of the media asked why the doctor did not want to do the newer, less invasive capsular shrinkage operation. According to a national news magazine article they cited, this shrinkage operation accomplishes the same goals as repair with none of the complications associated with cutting and sewing. The team doctor was reluctant because there have been few published, peer-reviewed, long-term studies documenting the efficacy of the new approach (Table 3).

Analysis

Medicine in general, and sports medicine in particular is evolving constantly. New treatments arise continually. At times, a new treatment is offered as part of a clinical research study, that is, as part of an explicit program to collect information, and in those instances, the rules a physician must follow clearly are articulated. Conversely, when innovative and evolving treatments are offered not for research, but simply to address the patient's disorder, the rules are less clear. There is a gray zone in which physicians may offer innovative (unproven) therapies, yet it would be wrong to label these therapies experimental because no experiment is being done.

In the field of sports medicine, variations on accepted surgical procedures frequently are in this gray zone. However, it may be that the established approach is unproven. As Miller

stated, many sports medicine practices lack strong scientific support.⁸ Therefore, although it may be wrong to try a new approach when the accepted approach is proven to work, wider latitude must be given to new methods when the old methods have not passed scientific muster.

Additional subtlety is injected when the historically accepted treatment is shown to work only moderately well; and the patient is not satisfied with the prognosis associated with such a method. This latter scenario is common to sports medicine, where competitive athletes always are trying to push the envelope. This attitude provokes a set of ethical challenges facing the sports medicine practitioner.

The case of Patient 3 and the statements which follow highlight these challenges. Statement 1, that only treatments which have proven their effectiveness in peer-reviewed trials should be used in nonemergency settings garnered limited disagreement from the ethicists and the doctors. Both groups apparently recognize that despite recent interest in evidence-based medicine, much of modern practice lacks such support, and even when there are evidence-based guidelines, these are subject to rapid change.¹⁵ If one were to offer only proven therapies, the palette from which one chooses would be sparse. Also, the respondents may acknowledge that advances in medicine routinely have depended on informal observations, and that attempts at innovation have provided direction for organized clinical trials.

At the same time, the lack of strong disagreement to the statement suggests doctors and ethicists recognize that innovation cannot move forward haphazardly. One is allowed to try the new, this argument goes, but one also is obliged to make sure that the old is inadequate. (We think there is an additional obligation imposed on innovators to collect data, such that some of the question of treatment choice will be answered for the next generation of physicians.)

Ethicists and sports medicine physicians supported the statement that it is appropriate to use innovative treatments so long as the patient is informed of the known risks and benefits of the procedure. Both groups apparently ascribe great power to the informed consent process. An autonomous patient, if he or she is informed fully, is allowed to decide to try something

TABLE 3. Innovative Therapies Survey

Statement	Ethicists Mean Response (standard deviation)	Physicians Mean Response (standard deviation)
1. Only treatments which have proven their effectiveness in peer-reviewed trials should be used in nonemergency settings.	33.6 (32.8)	43.8 (35.5)
2. It is appropriate to use innovative treatments so long as the patient is informed of the known risks and benefits of the procedure.	81.5 (18.7)	86.2 (20.3)
3. The evaluation of innovative treatments must be done by physicians who do not have any financial interest in the treatment.	77.3 (31.4)	80.2 (28.1)

unproven. There is no canon which states how much risk a patient is permitted to accept. Patients who comprehend the information about their medical conditions and treatment options, and decide that the likely results from conventional methods are unsatisfying, are free to choose methods which have greater risks and presumably greater potential benefits.

Doctors and ethicists also agreed with the third statement that the evaluation of innovative treatments must be done by physicians who do not have any financial interest in the treatment. The degree of their agreement, however, was lower than in the case of Statement 2. A physician's financial interest in an innovative treatment could influence his or her willingness to propose a new treatment and alter the nature of the informed consent discussion with the patient. These potential sources of inappropriate influence are particularly important because the innovative treatment by definition lacks empiric support or expert consensus acceptance. Furthermore, even the appearance of impropriety could tarnish the physician-patient relationship.

Doctors and ethicists seem to agree that it is appropriate to use innovative treatments as long as the patient is informed fully and the physician has no financial interest in the development of the innovative technique.

Case Scenario 4: Confidentiality

A major university recruited Patient 4 to play football and considered offering him a full scholarship. Without the

athletic scholarship, Patient 4 could not afford to attend the school. During an on-campus evaluation by the university team physician, Patient 4 told the doctor that he experienced three concussions requiring hospitalization while playing high school football. Patient 4 requested that the physician keep this information confidential to avoid jeopardizing his college football career and potential scholarship (Table 4).

Analysis

Physicians in general owe their patients a duty to keep confidential that information gathered in their encounters. To provide appropriate medical care, patients must share personal and often embarrassing information with their physicians. In the classic patient-doctor relationship, there are rare instances when the physician has not only the right but the duty to violate a patient's confidences, but in general, absolute confidentiality is the rule.

In sports medicine, numerous occasions arise to challenge the patient's confidentiality. For one example, coaches have a legitimate right and need to know about a patient's fitness to compete.⁸ In addition, the media will express a claim to knowledge about the athlete's health.¹⁷ Because the doctor is hired by the team to keep the patient healthy for the sport, physicians may face divided loyalties.^{9,18} The following statements attempt to clarify when a team physician should keep information private, and when the information may be shared.

TABLE 4. Confidentiality Survey

Statement	Ethicists Mean Response (standard deviation)	Physicians Mean Response (standard deviation)
1. Although the physician is hired by the team, he must maintain patient confidentiality and therefore is forbidden to relay that history of concussions to team officials.	25.4 (31.0)	19.1 (29.6)
2. The team physician has an obligation to protect players from unnecessary danger; the doctor therefore must relay the patient's history of concussions to the team to prevent the patient from playing college football.	63.7 (36.4)	79.6 (27.0)
3. The physician has a duty to clarify the nature of the doctor-patient relationship before the examination, namely, that he is not the patient's private doctor and confidentiality is therefore not guaranteed.	95.8 (4.64)*	73.8 (32.3)
4. If Patient 4 requested confidentiality before divulging the information, the physician must decline the offer. The physician should tell the team that the patient has some information he did not share and maybe it should be looked into.	54.3 (38.2)	70.1 (33.1)
5. If the patient obtained his physical examination from a private physician not affiliated with the university, that physician must respect the patient's request for confidentiality. Accordingly, this private physician must send in the medical forms omitting the history of concussions if the patient were to demand that.	34.6 (35.5)	33.3 (37.5)
6. There are some secrets that team-hired physicians may keep from the team if the secrets are not medically relevant. One example may be sexual orientation.	89.3 (21.1)	82.4 (26.0)

*p = 0.0001.

Physicians and ethicists uniformly disagreed with Statement 1 that although the physician is hired by the team, he must maintain patient confidentiality and is forbidden to relay that history of concussions to team officials. This disagreement means that they recognize that a team physician holds a unique position. The fact that the doctor has been hired by a team to do a specific job influences what the doctor must keep confidential. Because the physician has been hired to assess the athlete's fitness to compete, it would be ludicrous to forbid that doctor from sharing that information.

Doctors and ethicists agreed with Statement 2 that the team physician has an obligation to protect players from unnecessary danger; the doctor therefore must relay the patient's history of concussions to the team to prevent the patient from playing college football. Although both groups agreed with the statement, they agreed to only a limited extent. Nevertheless, their agreement extends the physician's obligation from the negative of not hiding information, to the positive duty of actually sharing germane information. The team physician must satisfy his role obligations even if they conflict with the athlete's stated wishes.

Physicians and ethicists agreed with the statement that the physician has a duty to clarify the nature of the doctor-patient relationship before the examination that he is not the patient's private doctor and confidentiality is not guaranteed. Some have recommended obtaining an athlete's permission in advance to disclose facts relevant to performance to the coach and other team officials.⁷ The athlete's expectations appear important to the propriety of disclosing information.⁹ Although both groups agreed with Statement 3, ethicists did so to a substantially stronger degree than did the sports medicine doctors. This difference may be attributable to the difference between abstract ethics and applied practices. It is preferable in the abstract for physicians to clarify the nature of their relationship to the patient at the outset. It may seem stilted, however, for physicians to begin each encounter with a formalized warning. In addition, such a warning could cause athletes to doubt their caregiver's interests and thereby limit the doctor's ability to provide appropriate medical treatment.

Ethicists were ambivalent in response to Statement 4 that if the patient requested confidentiality before divulging the information, the physician must decline the offer. The physician should tell the team that the patient has some information he did not share that the team may want to look into. Team doctors were more supportive of this, although the disagreement did not meet the defined threshold of 20 points. The physicians may be placing greater emphasis on their obligation to share relevant medical information with team officials.

Physicians and ethicists disagreed with Statement 5 to a similar degree. This statement that if the patient obtained his physical examination from a private physician not affiliated with the university, the physician must respect the patient's request for confidentiality. Accordingly, this private physician

must send in the medical forms omitting the history of concussions if the patient were to demand that. Although the doctor in this statement does not officially work for the team, he maintained an obligation to be truthful. Omitting the patient's history of concussions circumvents the team's purpose in sending the doctor the forms. Therefore, even though the doctor has an obligation to maintain the patient's confidentiality, the doctor has no corresponding duty to lie or mislead.

The final statement seeks to clarify the line between information that should be kept confidential and that which can be shared. Physicians and ethicists fairly strongly agreed that there are some secrets that a team-hired physician may keep from the team if the secrets are not medically relevant. One example may be sexual orientation. Although a team doctor must share data germane to an athlete's performance, other data not directly relevant to the athlete's fitness to compete may be kept private. Arguably, the line between relevant and irrelevant information is not always clear. Team marketing officials may be concerned about the athlete's sexual orientation. Or, when a doctor watches an athlete drink a six pack of beer on the airplane ride after a game, the coach may want to learn this information. Team doctors must use careful discretion when considering sharing deeply personal information to satisfy a remote and tenuous team claim for information. Nevertheless, doctors and ethicists seem to agree team physicians should warn patients in advance of the information they would share with team officials, provide these officials with information relevant to the athlete's ability to compete, and keep other information confidential.

Case Scenario 5: Conflicting Healthcare Goals

Patient 5, the starting guard for a playoff-bound team, suffered a twisting injury of the knee 6 weeks before the first playoff game. An MRI scan revealed a torn medial meniscus in a region amenable to repair. The patient's doctor identified two treatment options: meniscal repair or meniscectomy (removal). The meniscectomy would require minimal rehabilitation and almost guarantee the patient's participation in playoff games, but in the long run, meniscectomy would substantially increase the patient's chances of having degenerative arthritis develop. A meniscal repair offers the chance at pain-free function in the near term and the probable avoidance of articular degeneration. The drawback to a repaired meniscus is that it could retear at an inopportune time, and could prevent Patient 5 from competing in the playoff games. The surgeon thought that despite the risks of short-term failure, attempted meniscal repair is the best option. Patient 5 wanted to maximize the chances of playing in the postseason and demanded a meniscectomy (Table 5).

Analysis

Although the primary goal of most medical care is to reduce suffering and prolong healthy life, these are not always

TABLE 5. Conflicting Healthcare Goals Survey

Statement	Ethicists Mean Response (standard deviation)	Physicians Mean Response (standard deviation)
1. The physician must do the meniscectomy if Patient 5 wanted it.	41.8 (41.7)	50.8 (40.0)
2. The physician may refuse to do the meniscectomy but must refer the patient to a surgeon who would do it.	85.1 (23.3)*	53.0 (36.3)
3. The physician should not mention the option of a meniscectomy because it is too tempting for Patient 5; he was unable to think rationally in the middle of the season.	16.1 (26.1)	11.1 (19.1)

*p = 0.0001.

the goals in sports medicine. For the injured athlete, the goal simply may be to return to the playing field, regardless of pain or risk of long-term disability.¹⁴ Even though the team doctor's role is to support the patient's ability to compete, this support should not occur in a vacuum.⁹ The traditional aims of healthcare also must apply. This case attempts to highlight the ethical challenges arising when short-term athletic goals compete with long-term health goals. The question here is whether the physician should allow the patient to assume long-term health risks, such as postmeniscectomy arthritis, for short-term reasons, such as athletic performance.

Physicians and ethicists were ambivalent about the first statement. They did not significantly agree or disagree with the statement that the physician must do the meniscectomy if the patient wants it. We think the main source of ambivalence is that it is not clear that the patient truly wants the surgery. He may have made his decision under duress from team officials or others. Also, maybe the physician has a duty to see that the patient gets the treatment he wants, but not necessarily to do the surgery. Perhaps referral to a colleague satisfies that obligation. This is addressed by Statement 2.

Statement 2 reads: "The physician may refuse to do the meniscectomy but must refer the patient to a surgeon who would do it." On this statement, doctors and ethicists expressed significant discordance with each other. Although ethicists agreed with the statement, physicians were ambivalent. Ethicists thought that although physicians may refuse to do a procedure, they still maintain the duty to refer the patient to someone who will do the procedure. However, doctors were less assured of this obligation. Physicians may think that such a referral is self-defeating, that their duty is to see that the patient does not get the surgery, not to make him happy for the short-term. Alternatively, they may see finding a willing surgeon to be solely the patient's responsibility.

Doctors and ethicists strongly disagreed with the third statement that the physician should not mention the option of a meniscectomy because it is too tempting for the patient, he is unable to think rationally in the middle of the season. The general rule is that physicians should not withhold relevant medi-

cal information from their patients. Like any other autonomous adult, athletes should be fully informed of all reasonable treatment options so that they can freely choose the one they prefer. Although doctors may excuse themselves from a patient's care because the patient requests a treatment the doctor would rather not do, physicians' preferences cannot cause them to withhold information material to a patient's medical decision.

Case Scenario 6: Enabling Dangerous Behavior

Consider the following letter to the editor published in the New York Times, January 26, 2000: "The overriding problem in professional boxing is . . . that it is a vicious 'sport' that should be outlawed. A sport in which one of the participants is trying to hurt the other and render him or her unconscious is immoral. While in other sports, like football, an injury to a participant is incidental, in boxing it is the essence of the contest. How many more deaths and serious injuries have to occur in the ring before this barbarism is ended?" (Table 6).

Analysis

Sport involves risk. Almost any athletic activity, especially competitive sports, subject the body to often substantial risks of injury. Team physicians strive to prevent these injuries and treat them when they occur. Severe to devastating injuries in professional football and Olympic skiing are commonplace. No sport, however, is as controversial for its risk to participants as is boxing. The moral controversy surrounding boxing provides insights into the sports medicine physician's role in enabling dangerous behavior.

Ethicists and physicians were ambivalent about the first statement that boxing is immoral. Given the ongoing disagreement about the morality of boxing evidenced in the medical and popular press, the ambivalence is not unexpected. Some condemn limits to boxing as unwarranted limitations to individual freedom,¹⁰ whereas others condemn the sport's inherently violent goal.^{2,5,6}

With respect to the second statement, that boxing requires a different ethical analysis than football because in boxing the injuries are deliberate, physicians and ethicists again

TABLE 6. Enabling Dangerous Behavior Survey

Statement	Ethicists Mean Response (standard deviation)	Physicians Mean Response (standard deviation)
1. Boxing is immoral.	51.6 (41.3)	32.1 (30.8)
2. Boxing requires a different ethical analysis than football, because in boxing the injuries are deliberate.	52.6 (41.9)	42.2 (35.6)
3. A doctor should refuse to serve as a ringside physician because such attendance implies that doctors approve, or at least do not disapprove, of boxing.	41.5 (38.2)*	21.5 (28.3)
4. Physicians must attend at dangerous sports (including boxing) to minimize the sport's inherent risks.	46.2 (37.1)*	79.3 (27.9)

*p = 0.0001.

are ambivalent. Many claim boxing differs fundamentally from other dangerous sports, because the intended goal of the sport is to beat one's opponent into unconsciousness.^{5,6} In this way, boxing differs from other sports in which severe injuries are byproducts of other intended aims.

Ethicists and doctors differed significantly in their responses to the statement that a doctor should refuse to serve as a ringside physician because such attendance implies that doctors approve, or at least do not disapprove, of boxing. Ethicists were ambivalent to the statement, but physicians disagreed with it. Doctors denied the assertion that attendance at the event implies sanctioning of it, or are convinced that the good they can do while in attendance more than offsets the negative factors.

With respect to the final statement, physicians and ethicists again disagreed with each other to a substantial degree. Statement 4 states that physicians must attend at dangerous sports (including boxing) to minimize the sport's inherent risks. Physicians supported this statement. Viewed in light of responses to Statement 3, physicians seem obligated to attend at dangerous sports to minimize injury, but seem uncomfortable having such participation viewed as support for the activity. Ethicists, however, were ambivalent toward this statement as they were toward all of the previous boxing statements.

In general, the variance in scores among the ethicists was high for this section indicating that there is no unified approach among professional ethicists to this problem. This may reflect a lack of consensus from society at large.

LIMITATIONS OF THE STUDY

Our efforts to define ethical norms and to assess the degree to which these norms are known by practitioners are not perfect. The survey instrument may be the first impediment. The cases selected may not adequately reflect the underlying ethical issues. The responses categorized into agreement or disagreement with a given statement may overlook important nuances. The survey also did not address all issues, not even all defined in our earlier work.¹ Questions about resource alloca-

tion, informed consent, and drugs in sports were omitted for brevity and because we could not compose questions that tested well in a pilot study.

It also may have been wrong to select professional ethicists as the defining body. A lack of relevant clinical information may hamper these ethicists' ability to answer these questions correctly, and even clinically adept ethicists are not all-knowing. There is no reason to stipulate that their answers are to be treated as gospel. Despite these limitations, we think that this survey can be used to infer essential concepts regarding ethical practice.

The team physician is not exempt from the concerns of medical ethics because his or her patients are healthy athletes. To the contrary, there is an entire set of distinct ethical issues when treating the athlete-as-patient. On the whole, team physicians surveyed showed substantial concordance with the views of ethicists on ethical issues in sports medicine; in 18 of 23 statements there was agreement between the groups. We concluded that team physicians show a high degree of moral reasoning. There was high variance seen within and between the groups for many of the statements. From this high degree of variance, there are several unresolved areas in the field of sports medicine ethics.

Finally, knowing the right answer is not always equivalent to doing the right thing. It is, however, a necessary first step. Therefore, this study is offered not only as a statement of the answers the panels provided, but as a means of keeping the questions in public view.

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