Athletic Trainers' Attitudes Toward Drug Screening of Intercollegiate Athletes

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Abstract: *Since the inception of NCAA-mandated drug screening in 1986, college athletic trainers have found themselves involved at various levels in institutional drug-screening programs. Several legal, moral, and ethical questions have been raised regarding the drug screening of college athletes, and studies have been conducted to rate athletes' attitudes toward this practice. We examined the responses of certified athletic trainers employed in college settings to ascertain their attitudes toward the drug screening of athletes in general, and, specifically, how they view their role in this process. Surveys were distributed to 500 college athletic trainers randomly selected from the membership database maintained by the National Athletic Trainers' Association, Inc (Dallas, TX). The results of this survey indicate that the majority of athletic trainers feel that their association with the drug-screening process places them in the dual role of police and counselor, but that this relationship does not negatively affect their rapport with their athletes. Opinions regarding the drug-screening process and the importance of education in deterring drug use are somewhat dependent upon the athletic trainer's involvement in the drug-screening process. Athletic trainers possess a stronger desire to serve as resource persons who organize substance abuse education programs rather than serving as administrators of the sampling process.*

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The National Collegiate Athletic Association (NCAA) formed a Drug Education Committee in 1973 in an effort to thwart the use of drugs and alcohol by athletes at its member institutions. During 1986, the NCAA began random drug screening of athletes participating in national championships. Motivated in part by the NCAA-sponsored postseason screening, as well as an attempt at the institutional level to curb the use of drugs and alcohol among its athletes, many institutions implemented "in-house" programs designed to deter drug use among its athletes. The NCAA's list of banned drugs includes 76 individual substances grouped into six classifications (Table 1). Individual institutions may choose to expand or condense the list of substances to be identified during the screening process based on factors such as the capabilities of the analysis laboratory used and the associated cost.

There is little disagreement that the use of illegal drugs and alcohol occurs in college athletics, although it has been suggested that the rate is less than that of the student body as a whole.[6] A recent study conducted by Schneider and Morris[6] examined the prevalence of drug use among 197 college athletes at a single institution. Twenty-four (12%) respondents claimed to have used banned substances, including alcohol, at least once a month; 112 (57%) claimed to have experimented with illegal substances at least once; and 85 (43%) knew of other athletes who regularly use illegal substances. Eighty (41%) of the student-athletes questioned in this study indicated that drug use (including alcohol) was socially acceptable.

The athletic trainer's participation in the drug-screening process is not mandated or even endorsed by the NCAA. Institutional administrators have delegated this task to the athletic training staff because of their proximity to the athletes, the coaching staff, the administrative staff, and the health care community. Additionally, athletic trainers have been called upon to serve as the first line of detection in identifying athletes who may be suspected of drug use through the physical and psychosocial changes in student-athletes using steroids[4] and the behavioral patterns of drug-dependent student-athletes.[7]

The same relationships that place the athletic trainer in the "ideal" position to conduct drug-screening programs also create some inherent personal and professional hazards. Ehrlich warned that athletic trainers involved in drug testing of their student-athletes run a risk of compromising any positive relationships with their athletes.[3] Professionally, many athletic trainers lack the qualifications and education necessary to properly assess the needs of the drug-dependent athlete.

While prior studies have surveyed student-athletes regarding their attitudes about substance abuse programs, and others have called upon the athletic trainer to be aware of the signs and symptoms of drug use, little is known about how athletic trainers regard these programs, the related issues, and their "ideal" role in

Table 1.—NCAA Banned Drug Classes

Classification	Common Examples
Stimulants	Amphetamine, caffeine, cocaine
Anabolic agents	Clenbuterol, nandrolone, testosterone
Depressants	Alcohol
Diuretics	Benzthiazide, chlorthalidone, triamterene
Street drugs	Heroin, marijuana
Hormones and analogues	Growth stimulating hormones

Table 2.—Frequency of Drug Education and Drug-Screening Programs Based on the Type of Substance Involved (Multiple Responses Allowed)

	Type of Program(s) Used			
Substance Involved	Not Performed	Educational	Rehabilitational	Punitive
Performance enhancing drugs	28 (12.8%)	173 (79.4%)	77 (35.3%)	75 (34.4%)
Recreational drugs	21 (9.6%)	179 (82.1%)	102 (46.8%)	89 (40.8%)
Alcohol use	22 (10.1%)	183 (83.9%)	99 (45.4%)	61 (28.0%)

the drug-screening process. The purpose of this study is to determine the attitudes of athletic trainers regarding their roles in various types of drug-screening programs. Data should provide functional feedback for athletic trainers and administrators relative to the policies and procedures of these programs.

Methods

A portion of the survey tool was constructed using the instrument employed by Abdenour et al[1] as a model. We expanded this instrument to obtain data specifically regarding the athletic trainer's attitudes and opinions toward the drug-screening process.

The instrument identified the division of the college or university where the athletic trainer was employed and the administrative unit housing the athletic training services component. We collected demographic information identifying the number of years the respondent has been certified as an athletic trainer, the number of years of employment at the current institution, and gender. Additional information regarding the health counseling practices of the athletic training department regarding contemporary social issues was also included on the survey instrument for use in a related study. We did not ask for the identity of the respondents or the institution where employed, in order to assure confidentiality.

We collected information regarding the type of drug-screening and drug education programs at randomly selected colleges and universities and, if applicable, whether a legal opinion had been made regarding the institution's drug-screening policies and procedures. The survey instrument used a five-point Likert scale that ascertained athletic trainers' attitudes toward drug screening in general and the specific process as it relates at their institution. We asked the participants to rate (on a scale of Strongly Agree to Strongly Disagree) how much they supported or rejected each of 16 statements. Our instrument was pilot-tested and any needed corrections were made.

We randomly selected the names and addresses of 500 certified athletic trainers, who indicated that they were employed in the college or university setting during the 1992–1993 academic year, from the membership database maintained by the National Athletic Trainers' Association, Inc (Dallas, TX). We then distributed the survey instrument with a cover letter describing the purpose and intent of our study. A self-addressed, stamped envelope was included for return of survey. Because of the confidentiality promised to the respondents, no second mailing was conducted.

Returned surveys were entered into a database using an IBM-compatible computer. Frequencies, means, standard deviations, and statistical tests were performed using SPSS-PC (SPSS, Inc, Chicago, IL). We identified p values of less than .05 as being significant for *t* test analysis.

Results

Of the 500 surveys mailed, 218 (43.6%) were returned in usable form. The respondents were predominantly male (183 (83.9%)), had been certified for an average of 17.6 ± 6.17 years, and had been employed at their present institution for an average of 13.6 ± 8.29 years. The majority of our returns were from NCAA Division I athletic trainers, with this group accounting for 141 (64.7%) of the responses. The percentage of returns based on gender does not accurately represent the university setting as 37% of collegiate athletic trainers are females and is most likely representative of a sampling error.

Of the 218 athletic trainers responding to the survey, 132 (61%) indicated that their institution was involved in non-NCAA-mandated drug-screening programs. In those institutions conducting these drug-screening programs, 86 of the 132 (65.2%) had received a legal opinion supporting the athletic department's testing policies and procedures.

Institutions tended to implement educational programs designed to inform the student-athlete about the hazards associated with the use of performance-enhancing drugs, recreational drugs, and alcohol (Table 2). The most common type of drug use awareness program was educational campaigns against the use of alcohol, with 183 (83.9%) of the respondents indicating that their institution conducted this type of program. Athletes who tested "positive" for the use of recreational drugs were the primary subjects of rehabilitative and punitive programs. Twenty-two (10.1%) of the respondents indicated that their institutions were not involved in

Table 3.—Aggregate Opinions of Athletic Trainers' Attitudes Toward Intercollegiate Drug Screening (N = 218)

Survey Item	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5	No Response	Mean	SD
Regarding drug screening, athletic trainers are often times forced to assume the role of both police and counselor.	10 (4.6%)	17 (7.8%)	55 (25.2%)	52 (23.9%)	82 (37.6%)	2 (0.9%)	3.8	1.2
Drug testing has compromised my relationship and rapport with athletes in some sports.	61 (28.0%)	43 (19.7%)	44 (20.2%)	26 (11.9%)	24 (11.0%)	20 (9.2%)	2.5	1.4
Athletic trainers should facilitate the organization of a substance abuse education program.	21 (9.6%)	21 (9.6%)	83 (38.1%)	51 (23.4%)	41 (18.8%)	1 (0.5%)	3.3	1.2
Student-athletes should have an educational session at least once a year.	7 (3.2%)	2 (0.9%)	16 (7.3%)	33 (15.1%)	160 (73.4%)	0 (0.0%)	4.6	0.9
Administrators genuinely support health/wellness educational programs.	11 (5.1%)	28 (12.8%)	69 (31.7%)	60 (27.5%)	50 (22.9%)	0 (0.0%)	3.5	1.1
Coaches genuinely support health/wellness educational programs.	12 (5.5%)	41 (18.8%)	88 (40.5%)	47 (21.6%)	29 (13.3%)	1 (0.5%)	3.2	1.1
Athletic trainers should be a resource for the organization of drug rehabilitation programs.	18 (8.3%)	33 (15.1%)	78 (35.8%)	53 (24.3%)	36 (16.5%)	0 (0.0%)	3.3	1.2
Education, without testing, will be an effective deterrent to substance abuse.	72 (33.0%)	69 (31.7%)	58 (26.6%)	16 (7.3%)	3 (1.4%)	0 (0.0%)	2.1	1.0
Atheletic trainers should be the organizers of urine specimen collecting for drug testing.	116 (53.2%)	45 (20.6%)	41 (18.8%)	12 (5.5%)	4 (1.8%)	0 (0.0%)	1.8	1.0
Coaches have been, or would be, supportive of a player in drug rehabilitation.	7 (3.2%)	33 (15.1%)	79 (36.2%)	57 (26.2%)	38 (17.4%)	4 (1.8%)	3.4	1.1
I feel that drug screening is an invasion of privacy.	107 (49.1%)	58 (26.6%)	36 (16.5%)	8 (3.7%)	9 (4.1%)	0 (0.0%)	1.9	1.1
Targeting athletes only, rather than the student body as a whole, is an inherently discriminatory practice.	48 (22.0%)	46 (21.1%)	53 (24.3%)	34 (15.6%)	37 (17.0%)	0 (0.0%)	2.8	1.4
If required, I would submit to a drug screen in order to keep my job.	8 (3.7%)	5 (2.3%)	27 (12.4%)	41 (18.8%)	136 (62.3%)	1 (0.5%)	4.4	1.0

any type of drug education or drug-screening program.

The aggregate results of athletic trainers' opinions regarding the drug-screening process are presented in Table 3. Athletic trainers indicated that their involvement with the institution's drug-screening program placed them in the dual role of being "police" and counselors, with 134 (62.1%) agreeing with this statement. This opinion coincides with 161 (73.8%) respondents objecting to the practice of athletic trainers organizing the urine specimen collection process. Contrary to the warnings made by Ehrlich,[3] 104 (47.7%) of the respondents felt that this role had jeopardized their rapport with their athletes.

Athletic trainers strongly agreed that educational sessions should be a major component of the process. However, 141 (64.7%) of the respondents indicated that educational sessions must be reinforced by actual implementation of the drug-screening process. There is a strong opinion that a single educational session, combined with at least one drug screen, has a year-round influence on the habits of student-athletes.

Responses indicated that athletic trainers do not feel that screening athletes is an invasion of privacy, with 165 (75.7%) of the respondents disagreeing or strongly disagreeing with this concept. Little agreement could be reached on the idea that targeting athletes only, rather than the student body as a whole, is an inherently discriminatory practice, with 94 (43.1%) disagreeing with this statement and 71 (32.6%) supporting it. Furthermore, 177 (81.6%) respondents indicated that they would submit to a drug screen as a prerequisite for continued employment at their institution.

Of those 132 athletic trainers involved in drug-screening programs, 39 (29.5%) rated the programs as being "Very Effective," 76 (57.6%) as "Somewhat Effective," and 14 (10.6%) as "Not Effective." Involvement with drug-screening programs resulted in a high rating of support from their administrators, with 63 (47.7%) rating their administrators as "Very Supportive," 65 (49.2%) as "Somewhat Supportive," and only 4 (3.0%) as "Not Supportive." The remaining athletic trainers did not respond to this question on the survey.

A *t* test between the responses from athletic trainers employed at institutions that had mandated drug-

screening programs, and those that did not have such programs revealed some statistically significant differences in opinions. Those athletic trainers employed at institutions having no drug-screening program held a lower opinion of administrators' support of these programs than those athletic trainers actually involved in the process, with mean scores of 3.30 and 3.64 ($t(216) = -2.15$, $p < .05$), respectively. This perception extended to the support from the coaching staff, with athletic trainers from institutions with no programs rating support lower (3.00) than those athletic trainers from institutions with drug-screening programs (3.30) ($t(215) = -2.06$, $p < .05$). Those athletic trainers employed at institutions that do not conduct drug screening also expressed a stronger opinion that drug education programs alone would be an effective deterrent to use (2.36) than those involved in the drug-screening process (1.97) ($t(216) = -2.86$, $p < .05$).

Athletic trainers who were not involved in the drug-screening process felt more strongly that such practices against student-athletes only was a discriminatory process (3.09) compared to the responses from those individuals involved in drug screening (2.68) ($t(216) = 2.16$, $p < .05$). Although both groups were opposed to athletic trainers being the organizers of urine-specimen collecting for the test, those athletic trainers not currently involved in the process held a significantly stronger opinion (1.62) than those responses from athletic trainers involved in the process (1.95) ($t(216) = -2.38$, $p < .05$).

The opinions regarding the drug-screening process held by females and males were analyzed using a *t* test with pooled variances to account for the large discrepancy in sample size. This analysis revealed that the drug-testing process was viewed as having compromised the relationship of male athletic trainers with their athletes (2.64) more than female athletic trainers (1.96) ($t(193) = -2.37$, $p < .05$). Additionally, females were more likely to disagree with the statement, "Drug-screening programs are only effective in the season in which they are done," than male athletic trainers, 1.84 to 2.34 ($t(210) = -2.56$, $p < .05$). No other differences in opinion between genders were found.

Discussion

Substance-abuse education programs or drug-screening programs were conducted by 170 (78%) of the athletic trainers responding to this survey. The program's emphasis was placed on the educational aspect, but 187 (85.6%) of the respondents involved in drug-screening programs indicated that their institutions also implemented rehabilitational programs. Repeated positive tests could result in punitive actions against the student-athlete at 160 (73.5%) of the institutions conducting drug screening.

Although education has been identified as a primary ingredient in preventing drug use in this and other studies,[1,4,6] both athletic trainers and student-athletes agree that the actual act of testing is necessary to deter drug use. The majority of athletic trainers sampled in this study expressed the opinion that a single test and/or a single educational session would be effective in preventing year-round drug use. This is in disagreement with the opinions expressed by athletes.[1,6] The athletes sampled in these studies felt that both testing and education were only effective in the season in which they were done, and, the more testing performed, the better the deterrent.

Student-athletes held the coaching staff's support for a player in drug rehabilitation following a positive test at a higher level than did athletic trainers. A study of 407 college football players indicated that 264 (65%) expressed the opinion that a coach would be supportive of an athlete in drug rehabilitation,[1] compared to 95 (44%) of the athletic trainers questioned in this study.

Athletic trainers and student-athletes are in agreement that drug screening is not an invasion of privacy. Our results indicate that 17 (7.8%) of athletic trainers held the opinion that this practice was an infringement of an athlete's rights, compared to "only" 31 (17%) of the athletes surveyed by Schneider and Morris.[6] The distribution of responses for the statement, "Targeting athletes, rather than the student body as a whole, is an inherently discriminatory practice," indicated that athletic trainers hold varied views as to whether or not this practice should be extended to the student body as a whole (2.84 ± 1.4).

Institutions designing a drug-screening program have been encouraged to seek an opinion on its legality prior to implementation.[2,4,5,7] One third of the athletic trainers involved in drug screening who responded to our survey indicated that no such opinion had been passed on their institution's drug-screening policies and procedures. Such practices could expose the athletic trainer, the athletic department, and the institution itself to undue liability.

Conclusion

Athletic trainers are attempting to not be placed in the position of conflicting interests such as those described by Ehrlich.[3] The results of this study indicate that athletic trainers are uncomfortable serving as the agent used to identify and detect student-athletes who may have a substance-abuse problem and then serving as a counseling resource for them. The respondents of this study indicated that athletic trainers did not view themselves as the individuals to be designated to design and implement the drug-screening programs. Rather, the results of this study indicate that athletic trainers prefer to serve as the resource persons for the organization of substance-abuse and substance-rehabilitation programs.

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