Brief Report

The Sports Medicine Content of Family Practice

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With the general participation in sports becoming increasingly popular and the simultaneous growing appreciation of fitness as a basic component of a healthy lifestyle, American family physicians have expanded their roles in sports medicine.[1] Family practice organizations have recognized the need for teaching sports medicine in family practice residencies. The Task Force on Teaching Sports Medicine and Recreation of the Society of Teachers of Family Medicine produced a curriculum guide in 1981,[2] and the Family Health Foundation of America has published a detailed list of curriculum topics in recreational and athletic health care in 1983.[3] In 1984 the American Academy of Family Physicians adopted the Recommended Core Curriculum Guidelines on Sports and Recreational Medicine for Family Practice Residents.[4]

In spite of widespread family physician interest in sports medicine and the teaching efforts that are evolving, a detailed review of the literature failed to yield a content analysis of sports medicine in family practice. The Nebraska Family Practice Sports Medicine Survey was developed in an effort to provide this kind of information.

Methods

The Nebraska Family Practice Sports Medicine survey is a two-page questionnaire devised to ascertain the sports medicine content of physicians' practices. In April 1984 copies of the survey were mailed to the 375 active members of the Nebraska Academy of Family Physicians in a single mailing. Of these 220 (58.4 percent) were returned. Two of the respondents had retired, one was practicing full-time emergency medicine, and one was practicing outside this country; therefore, the tabulated results are based on the remaining 216.

Continued on page 477

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Continued from page 473

Table 1. Laboratory and Screening Procedures Routinely Included by Physicians (n = 200) in Preparticipation Competitive Athletic Physical Examinations

Procedures	No. (%)
Urine glucose and protein check	200 (100)
Hematocrit or hemoglobin	88 (44)
Vision check	139 (69.5)
Hearing test, nonaudiometric	112 (56)
Hearing test, audiometric	23 (11.5)
Tine test	15 (7.5)
DPT/DT immunization if appropriate	148 (74)
Body fat determination with skinfold calipers	3 (1.5)

Results

One hundred forty-one (65 percent) physicians perform "organized team or league physical examinations" for participation in school or community league sports, and 200 (93 percent) routinely perform physical examinations for participation in school or community league sports as part of their practices. The family physicians performing preparticipation physical examinations were polled about the laboratory test and screening procedures they included. Their responses are shown in Table 1.

Ninety-seven (45 percent) of the family physicians responding function as team physicians in one or more sports. Of these team physicians, 96 work with football teams, 76 with basketball teams, and over 60 each with track and field, volleyball, and wrestling teams; other common sports represented include cross country (49), baseball (31), and gymnastics (18). Seventy-six indicated they were team physicians to both male and female athletic teams, and 21 indicated male-only teams. Table 2 demonstrates the sports levels at which family physicians function as team physicians. One hundred eighty-eight (87 percent) of the 216 respondents indicated that they perform physical examinations on adults who desire to start an exercise program. Generally, they include a variety of laboratory and screening procedures in their evaluations (Table 3). Ninety-seven (52 percent) give these patients a specific exercise prescription.

Table 2. Team Physicians (n = 97) by Level of Competition

Competition Level	No.
Elementary school	31
Middle school	40
High school	93
College or university	11
Community league	8

Table 3. Laboratory and Screening Procedures Routinely Included by Physicians (n = 188) in Adult Preparticipation Athletic Physical Examinations

Procedure	No. (%)
Urinalysis	141 (75)
Complete blood count	130 (69)
Chemscreen	117 (62)
Lipid profile	105 (56)
Vitalometry	12 (6)
Body fat determination	6 (3)
Resting electrocardiogram	
Routinely	122 (65)
As appropriate	21 (11)
Exercise electrocardiogram	
Routinely	80 (43)
As appropriate	20 (11)

When asked whether they routinely treat patients (youth and adult) with athletic injuries and overuse syndromes in their practices, 203 (94 percent) of the 216 respondents replied affirmatively.

The survey asked several questions about determining body composition. Fifty-one (24 percent) of the respondents indicated that they know how to determine body fat percentage with skinfold caliper measurements. Twenty-four use the technique for weight-loss counseling, 17 use it for general athletic counseling, and 8 use it to advise wrestlers about their appropriate weight class. Almost one half of the physicians indicated that they would like the opportunity for additional training in this technique.

Comment

These findings demonstrate that family physicians in a large midwestern state take an active role in sports medicine. The data verify the contention by Hartmann et al[5] and Garfinkel[6] that "sports medicine is a natural extension of the family physician's practice." Furthermore, the data substantiate the day-to-day participation of family physicians in the delivery of sports medicine care. Knowing the extent of this participation aids family practice organizations in representing the interests of family physicians with other sports-related organizations and supports family practice educators in their efforts to implement sports medicine curricula.

The survey also raised some unanswered questions. For example, what cluster of functions must a physician perform for an athletic team in order to be designated a "team physician"? How many family physicians actually consult with the coaches and trainers in the schools in their areas? Are the physicians present routinely at athletic competitions? Is it possible to separate family physician functions from sports medicine functions? Some of these questions have been partly examined in previous literature, but they remain fertile ground for further evaluation.

References

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