Comparison of Athletic Trainer Stress and Job Satisfaction with Different Models of Care Delivery

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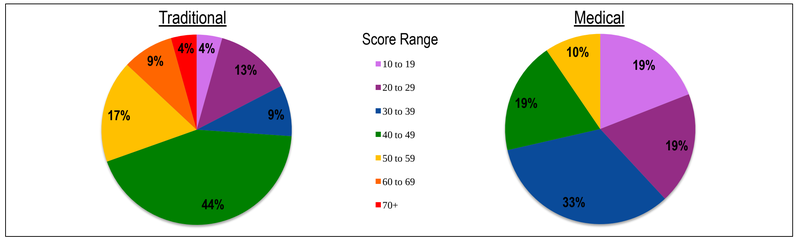
BACKGROUND AND PURPOSE

- Athletic training services are typically delivered by personnel administratively assigned to an athletic department[1]
  - Role of the team physician and/or athletic trainer (AT) may be influenced by athletic program priorities[2]
    - Job satisfaction, work-family conflict, job burnout, and intent to leave an organization are interrelated[3]
    - 68% of ATs consider leaving profession due to poor salary, heavy workload, and lack of time for family[1]
- Some institutions have replaced the "traditional" athletic program model with a "medical" model of service delivery
  - Athletic training services delivered as an extension of a student health services administrative unit[1]
    - Minimizes conflict of interest, with patient care decisions based upon an athlete's medical needs[2]
    - Increases compensation for ATs, elevates quality of patient care, and improves work-life balance[4]
- The purpose of this study was to assess any differences in AT stress and job satisfaction between the traditional model (TM) and the medical model (MM) for delivery of athletic training services

PARTICIPANTS AND PROCEDURES

- Entire full-time AT staff of 8 NCAA Division I institutions with comparable athletic programs (i.e., competition level)
  - 76% (44/58) completed Institute for Collegiate Sports Medicine (ICSM) College/University AT Stress Survey
  - 25 items with 5-level response option (0-4); high score associated with high stress and/or low job satisfaction
  - Survey electronically administered through Research Electronic Data Capture system (REDCap™)
- Responses categorized according to type of administrative model employed by participant's institution
  - Traditional model (TM) n = 23; Medical model (MM) n = 21
- Responses analyzed to identify differences in AT stress and job satisfaction between models of care delivery
  - Independent t-test performed to compare scores; χ^2 tests performed to analyze responses to individual items
  - Results compared to unsolicited responses to the same survey posted by ICSM; n=114 (www.csm-institute.com)

Figure 1: Stress Score (0-100) Comparison



RESULTS

- Mean TM-AT stress score (43.65) significantly greater than mean MM-AT score (32.43); t(42) = 2.96; *P* = 0.005
  - Stress score ≥ 39: TM-AT 74% (17/23), MM-AT 29% (6/21); 7X more likely for TM-AT than MM-AT (Figure 1)
- Response values for 5 survey items demonstrated significant difference in professional satisfaction (Table 1)
  - Median response value presented; *P*-value derived from 2 (model) X 5 (response) χ^2 analysis
- ICSM reports an average stress score of 47.79* at comparable institutions without model specification (Figure 2)
  - Greater proportion of TM-AT reported job dissatisfaction compared to MM-AT (Figure 3)
- Most frequent salary range response (unadjusted for cost of living) lower for TM-AT than MM-AT (Table 2)
- Most frequent hours/week response was greater for TM-AT than MM-AT (Table 3)
- Years of experience responses were more evenly distributed within TM-AT than MM-AT (Table 4)

*ICSM stress scores converted to 0-100 scale

Table 1

Survey Items	TM	MM	*P*
Too little pay	4	1	< 0.001
Rapid program changes (time, schedule)	3	2	<0.001
Denied break, lunch, sick leave, vacation	2	1	0.003
Angry clients or disrespectful supervisors	2	1	0.004
Feel unappreciated or "used"	2	2	0.014
Dread going to work	1	1	0.066
Lack access to social outlet	2	0	0.091
Conflict with coworkers	1	1	0.107
Lack funds to accomplish objectives	2	1	0.139
Feel tired even when get enough sleep	2	2	0.182
Counting down to quitting time	2	1	0.199
Feel less competent than use to feel	1	1	0.386
Job requires monotonous/repetitive tasks	2	1	0.404
Applying rules with no considerations	1	1	0.426
Feel overwhelmed	2	2	0.468
Required to wear many hats	2	2	0.468
Unreliable job funding sources	1	0	0.608
Get angry or irritated easily	2	1	0.646
Chronically dehydrated	2	1	0.715
Using alcohol/drugs unhealthily	0	0	0.732
Worry or trouble sleeping at night	2	2	0.761
Overweight	2	2	0.773
Job lacks clear guidelines or objectives	1	1	0.784
Recurring head/stomach aches, or LBP	1	1	0.954
Job overloads you with work	2	2	0.963

0 = Never 1 = Rarely 2 = Sometimes 3 = Often 4 = Always

Figure 2: Average Stress Score

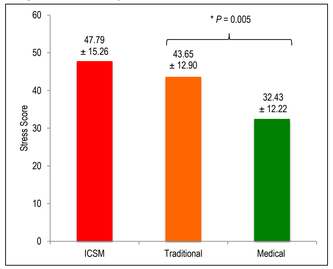


Figure 3: Frequency of "Satisfied" Response*

* Satisfied, Very Satisfied, or Extremely Satisfied response

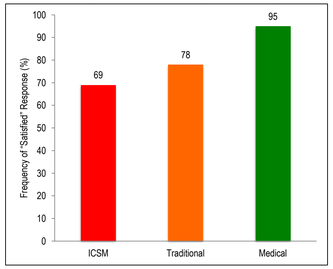


Table 2

Annual Salary ($)	Traditional	Medical
30-49K	65% (15/23)	5% (1/21)
50-69K	26% (6/23)	52% (11/21)
70-89K	4% (1/23)	29% (6/21)
≥90K	4% (1/23)	14% (3/21)

Table 3

Hours Worked/Week	Traditional	Medical
≤50	9% (2/23)	62% (13/21)
51-60	39% (9/23)	29% (6/21)
61-70	30% (7/23)	10% (2/21)
≥71	22% (5/23)	0% (0/21)

Table 4

Years in the Profession	Traditional	Medical
0 to 5	22% (5/23)	33% (7/21)
6 to 10	26% (6/23)	24% (5/21)
11 to 15	26% (6/23)	5% (1/21)
≥16	26% (6/23)	38% (8/21)

CLINICAL RELEVANCE

- ATs who work in the TM setting are less likely to report job satisfaction than those who work in the MM setting
  - TM-ATs reported experiencing greater work-related stress than that reported by MM-ATs
    - May be due to long working hours and lower salaries, unrelated to years of professional experience
- Survey responses suggest greater professional respect and more desirable work-life balance among MM-ATs
  - Large divergence in survey responses between MM-ATs and TM-ATs in relation to specific job stressors
    - Rapid program changes (time, schedule)
    - Angry clients or disrespectful supervisors
    - Denied break, lunch, sick leave, vacation
    - Feel unappreciated or "used"
- The results of this study strongly support a transition from TM to MM for improved job satisfaction
  - Sharing of clinical duties may decrease working hours, improve quality of life, and improve patient care
  - AT role and job security would likely be less dependent on coaches and athletic program administrators

REFERENCES

1. Scheid D. Room for change. *NATA News*. http://www.nata.org/sites/default/files/Collegiate-Healthcare-Model-Article.pdf Updated March 11, 2013. Accessed October 1, 2014.
2. Courson R, Goldenberg M, Cooper L, et al. Inter-association consensus statement on best practices for sports medicine management for secondary schools and colleges. *J Athl Train*. 2014;49(1):128-137.
3. Mazerolle SM, Bruening JE, Casa DJ, Burton LJ. Work-family conflict, part II: job and life satisfaction in National Collegiate Athletic Association Division I-A certified athletic trainers. *J Athl Train*. 2011;43(5):513-522.
4. Laursen RM. A patient-centered model for delivery of athletic training services. *Athl Ther Today*. 2010;15(3):1-3.