Athletic Training Education Journal; 2008;1(Jan-Mar):21-27

www.nataej.org

Spirituality in the Curricula of Accredited Athletic Training Education Programs

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Objective: The objectives of this study were to examine if topics related to spirituality were being addressed in the curricula of athletic training education programs (ATEPs) and to investigate whether program directors (PDs) believed this to be a topic worthy of inclusion in ATEP experiences.
Design and Setting: A descriptive mixed method study using a web-based survey.
Subjects: The sample consisted of 291 PDs from accredited undergraduate ATEPs in the United States.
Measurements: The items measured included participants' institutional affiliation, years of experience and educational background, perceptions on the propriety of including spiritual topics in ATEP curricula, and general awareness of the literature surrounding spirituality and health.
Results: One hundred ten (79.7%) colleges/universities offered a course in spirituality outside the ATEP curriculum, but only 5 (3.6%) colleges/universities currently offered a course in the ATEP curriculum in which spirituality was the main focus. We found that 89% of PDs believed there was a connection between spirituality and health/healing. Also, 69% agreed that spirituality should be addressed in a variety of ways within ATEPs. Forty seven percent agreed that it was appropriate to address spirituality with patients. Fourteen percent also reported that spirituality should be incorporated in the athletic training competencies and proficiencies.
Conclusions: These data suggest that the majority of PDs believe there is a connection between spirituality and health/healing, and that spirituality should be addressed in a variety of ways in ATEPs.
Key Words: Spirituality, Curriculum, Athletic Training Education, Survey Research, Qualitative Research.

Spirituality is defined as one's personal and emotional pursuit towards understanding answers to the supreme questions about life, meaning, and a higher power.[1] Spirituality can possibly stem from or lead to the establishment of religious routines and the formation of fellowship with other individuals.[1] Researchers have long known that a patient's health status is often positively affected by their spirituality.[2] Reviews in the areas of heart disease, hypertension, cerebrovascular disease, immunological dysfunction, cancer, mortality, pain and disability, exercise, smoking, substance abuse, burnout, depression, anxiety, and suicide have shown there is a strong relationship between spirituality and better health.[2]

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An individual's commitment to spirituality has also been shown to have positive benefits on health by preventing disease, speeding recovery, and allowing patients to remain poised when faced with bad health.[2] Other research suggests that the inclusion or presence of spiritual components in one's life benefits general,[3] physical,[4] emotional,[5] and mental health.[6]

Considering the strong correlation between spirituality and health, a recent trend emerging in many medical schools, nursing programs, and occupational therapy (OT) programs incorporates spirituality into their curricula. Incorporating spirituality into medical practice has occurred not only because of the general health benefits it has been shown to produce, but also because many patients request a spiritual component to their care when being treated by allied health care professionals.[7] One study found that while 77% of patients would like physicians to address their spiritual concerns, it was only addressed with 12% of patients.[7]

Although the topic of spirituality in educational programs is

being discussed, studied, and even advanced in other allied health care fields such as nursing,[8] medicine,[9-10] and occupational therapy,[11] we are not aware of any athletic training specific research. For example, the number of medical schools offering courses pertaining to religion or spirituality and clinical practice has steadily increased since 1994 from 17 to 84 of 126 programs.[12] The purpose of this study was to examine whether the topic of spirituality was being addressed in ATEPs and investigate PD's perceptions of potentially including spirituality in ATEP coursework and educational experiences. Moreover, we sought to explore PD's general perceptions of spirituality.

Methods

Participants

The participants were PDs of accredited undergraduate ATEPs in the United States. There were 291 total CAATE accredited undergraduate programs when the study was conducted. Because spirituality was not part of the explicit educational content in the athletic training competencies at the time of the study, program directors were encouraged to solicit input from other athletic training faculty where appropriate.

Instrument

The survey was constructed by the authors and reviewed by a panel of experts for face and content validity. The survey instrument included 7 demographic questions (e.g., age, sex, years of experience) and information about the college or university where PD's were employed (e.g., school affiliation, public/private); 12 "yes" or "no" questions related to personal beliefs on spirituality, and whether topics related to spirituality were currently included in the ATEP curriculum at their school; and one general comment question whereby PDs were asked to share their thoughts about the inclusion of spirituality topics in ATEPs. The open-ended comments from the PDs were prompted by the statement: "Please share any additional thoughts you might have regarding the inclusion of spirituality topics in ATEPs."

Procedures

A pilot study was completed with 10 PDs from accredited undergraduate ATEPs. After the pilot study was completed, the sample's comments and suggestions were used to critique and refine the survey prior to study administration. As a result of the pilot study, 6 questions were slightly revised to enhance clarity.

Each PD was sent an e-mail which contained a cover letter that included a link to the online survey. The cover letter described the proposed research. Each participant was asked to complete the on-line survey. The e-mail also included a statement informing the participants that by completing and submitting the survey, they were giving their informed consent to participate in the investigation. A follow-up email was sent two weeks after the initial contact. The institutional review board for the protection of human subjects at the sponsoring university approved the research design and procedures for the study.

The survey took approximately 10 minutes to complete and the results were automatically saved to an online tab-delimited text file. The text file was downloaded from the internet and imported into the Statistical Package for the Social Sciences (SPSS) version 12.0 and Excel for statistical analyses.

Statistical Analyses

Analyses included frequencies, two-way tables, and Pearson Chi-Square tests with the significance level set at 0.05. Descriptive statistics were expressed using the mean and standard deviation for the participant's age and years of experience. Frequencies, percentages, and confidence intervals were used to summarize participant responses to the remaining survey items.

The data on years of experience for PDs were not normally distributed; therefore, the Mann-Whitney test was used to test for a difference in years of experience between PDs who were aware that spiritual topics were currently being taught in U.S. medical schools and those who were not.

Inductive Content Analysis

Given the exploratory nature of the second research purpose, open-ended data were solicited from participants. The open-ended data were analyzed using inductive content analysis.[13] The participants' comments were examined and each written entry was treated as a unit of data and coded, or tagged, as a specific concept to capture its meaning. The underlying purpose of creating tags was to produce a set of concepts that represented the information obtained from the open-ended portion of the survey and ultimately allowed the researchers to manage and organize the data.[14] Once each unit of data was coded, the tags were organized into lower and higher order themes[15] using multiple analyst triangulation[16] to ensure trustworthy qualitative results.

Results

Response Rate and Demographics

Surveys were sent to PDs at all 291 accredited undergraduate ATEPs. A total of 142 PDs (male = 85, female = 57) returned the survey. The survey response rate was 49 percent, which is well above the national average of 38 percent for email survey response rates.[17] Among the PDs who responded, 1 (0.7%) had a bachelor's degree, 74 (52.9%) had master's degrees, and 65 (46.4%) had doctoral degrees. The participants' ages ranged from 26 to 64 with a mean age of 40.7 (±8.41). The participants' athletic training experience ranged from 1 to 37 years with a mean of 7.97 (±6.70). Classifications of the types of colleges/universities are presented in Table 1. The total number of colleges/universities affiliated with a religious denomination was 54 (39%), all of which were private institutions.

Spirituality in the ATEP Curriculum

At the time of the study, 110 (79.7%) colleges/universities offered a course in spirituality outside the ATEP curriculum, and 5 (3.6%) colleges/universities offered a course in the ATEP curriculum in which spirituality was the main focus. Nineteen

Table 1. Descriptive Characteristics of Colleges/Universities

	Frequency	%
NCAA Div. I	51	36.4
NCAA Div. II	33	23.6
NCAA Div. III	40	28.6
NAIA Div. I	8	5.7
NAIA Div. II	8	5.7
Public College/Univ.	73	52.1
Private College/Univ.	67	47.9

percent of PDs were aware that the incorporation of spirituality into the curricula has been occurring in over one-half of the U.S. medical schools since 2000.[12] Also, 30% percent of PDs reported that they were aware that other allied health care education programs (e.g., nursing, OT) incorporated spirituality into their curricula.

Overall, 69% of PDs agreed that spirituality should be addressed in a course in a variety of different ways (e.g., lectures, small group discussions, guest speakers, seminars, demonstrations, case-studies) in ATEPs. When questioned if the PDs believed it was appropriate to address spirituality with athletes, clients, or patients, 47% agreed. Fourteen percent of PDs felt that spirituality should be included in the athletic training educational competencies. A summary of the results of PDs' awareness and/or beliefs about spirituality can be found in Table 2.

Table 2. Program Directors Who Are Aware or Believe Each Statement

Question	Freq (n)	%	95% CI
Aware that in 2000, over half of medical schools in USA offered at least one course addressing incorporation of spirituality into clinical practice	26 (142)	18.3	(.13, .23)
Aware that other allied health care education programs (e.g., nursing, occupational therapy) also focus on spirituality in clinical practice	42 (139)	30.2	(.24, .36)
Believes that athletic training education programs should offer a course that focuses on incorporating spirituality into athletic training clinical practice	22 (141)	15.6	(.11, .20)
Believes topic of spirituality should at least be addressed in a course or variety of different ways (e.g., lectures, small group discussions, guest speakers, seminars, demonstrations, case-studies, other classroom activities, etc.) within athletic training education programs	96 (139)	69.1	(.63, .74)
Believes it is appropriate for athletic trainers to address spirituality with athletes/clients/patients	64 (136)	47.1	(.41, .53)
Believes that spirituality should be included in the athletic training educational competencies	20 (139)	14.4	(.10, .18)
Believes it is appropriate for athletic trainers to pray with athletes/clients/patients if prayer is requested by athlete/client/patient and athletic trainer was comfortable with request	102 (139)	73.4	(.68, .78)

No significant difference between genders was found in regard to PDs' awareness that spiritual topics are being taught in medical schools (χ^2*=.031, df=1, p=.859*) and other allied health care educational programs (χ^2*=.543, df=1, p=.461*). PDs who stated they were aware of the inclusion of spirituality had more years of experience (Mann-Whitney *z= -2.607, p=.009*) than those who were not.

PDs from schools with religious affiliations were significantly more aware (χ^2*=4.985, df=1, p=.026*) of the inclusion of spiritual topics in nursing and occupational therapy education programs. However, these same PDs were not aware that spiritual topics are being infused into the curricula of medical schools (χ^2*=.188, df=1, p=.664*). Also, PDs from religiously affiliated schools were significantly more likely to support the incorporation of spirituality into the curriculum of ATEPs (χ^2*=7.807, df=1, p=.005*).

Personal Beliefs Related to Spirituality

Three specific questions inquired about the PDs' personal beliefs on spirituality. These results are presented in Table 3. The three personal belief questions were each cross-tabulated with whether PDs thought spirituality should be addressed in a variety of ways within the ATEP. Significant relationships were found for all three questions. The results showed that PDs who believed there was a connection between health and healing (χ^2*=14.147, df=1, p<.001*), that addressing spirituality with clients could lead to faster recovery times (χ^2*=35.164, df=1, p<.001*), or believed that addressing spirituality with clients could result in a better mental status (χ^2*=26.824, df=1, p<.001*), were significantly more likely to endorse the inclusion of spirituality into the curriculum of ATEPs.

Table 3. Personal Beliefs of Program Directors

	Frequency (n)	%	95% CI
Believes in connection between spirituality & health/healing	125 (140)	89.3	(.84, .95)
Believes that addressing spirituality with athletes/clients/patients would lead to faster recovery times	73 (132)	55.3	(.44, .67)
Believes that addressing spirituality with athletes/clients/patients would result in a better mental status for athlete/client/patient	101 (134)	75.4	(.67, .84)

Qualitative Findings

A total of 98 open-ended comments were written in the returned surveys. All comments were initially organized into 9 lower order themes, which were ultimately collapsed and organized into 4 main higher order themes (see Table 4): 1) deterrents to implementing spirituality into athletic training curricula; 2) situational aspects of spirituality; 3) spirituality viewed as essential; and 4) teaching spirituality.

Table 4. Higher and Lower Order Themes of Inductive Analysis

	Total # of Comments
Deterrents to implementing spirituality into athletic training curricula	35
Legal issues	19
Saturation of competencies	8
Beyond scope of athletic training practice	8
Situational aspects of spirituality	39
Spirituality is personal/open to interpretation	30
Complexity of definition of spirituality	9
Spirituality viewed as essential	8
Spirituality is important to healing process	5
Component of overall wellness	3
Teaching spirituality	16
Integration into existing courses	14
Socialization	2

Deterrents to Implementation

The higher order theme of deterrents may explain why some PDs are hesitant to introduce spirituality into the ATEP curricula. The lower order themes included the following: 1) saturation of competencies; 2) legal issues; and 3) beyond the scope of athletic training practice. The deterrent saturation of competencies related to the belief that there are already too many educational competencies and proficiencies in athletic training. Eight comments were under this lower order theme. One PD described a concern with this by stating that, "If spirituality is included in ATEPs, something has to be removed. We are already putting 10 pounds of competencies into a 5-pound bag, and we cannot shove in any more."

The problem of legal issues had 19 comments comprising this lower order theme. Many PDs declared that the idea of separation of church and state would make implementation of spirituality difficult. For example, one stated, "Being in a state institution and understanding the separation of church and state is a huge issue, the introduction of spirituality as a requirement would potentially create problems in state institutions or in schools without religious affiliations." Another PD commented:

> "I am very comfortable with my own spirituality and am able to openly share that perspective being employed in a church sponsored institution with fellow ATCs, student athletic trainers, and athletes. However, having formerly worked in a state-sponsored public university, there was a significant difference…While others respected my values, they didn't always understand my religion and because of being in a public institution, a separation of church and state obviously had to be maintained."

The last deterrent was that spirituality was considered beyond the scope of athletic training practice. A total of 8 comments were recorded under this lower order theme. One PD explained his/her thoughts on this deterrent by stating:

> "I believe that discussing spirituality with clients/patients is best left to those professionals qualified in the respective discipline…If I may relate it to psychology… [there have been] many times in the past 17 years while working in the field of athletic training [when] issues have developed relating to the individual's mental disposition. I, not qualified in this specific area, listened attentively, even provided some supportive and reassuring words, and then promptly referred these individuals to a licensed psychiatrist or psychologist for counseling and care. Spirituality may be a great adjunct for specific populations, but I would not endorse or support the athletic trainer to yet again, venture into another area to learn just enough to be dangerous…"

Situational Aspects of Spirituality

The second higher order theme, situational aspects of spirituality, provides insight into the personal and complex nature of the topic. Two lower order themes in this area included the following: 1) spirituality is personal and open for interpretation, and 2) spirituality is complex and difficult to define. Thirty comments were noted under the first lower order theme. One PD simply acknowledged that, "It is difficult to mandate spirituality to others.

I believe it is an individual's choice." Another one wrote:

> "All is not black and white! There may be instances where I might want to address and use spirituality with athletes under my care, but I would not feel comfortable in all situations. Spirituality is an individual thing and although I might be able to facilitate it in some situations, I know that some athletes would think I was forcing it on them. It is still a very touchy subject [and] very personal."

The complexity of the definition of spirituality was the second situational aspect of spirituality. A total of 9 comments were within this specific lower order theme. One participant commented that, "People define 'spirituality' in many ways." Another PD stated that, "spirituality is a very complex notion, and is one that may have a significantly different contextual meaning and application for different individuals."

Spirituality Viewed as Essential

The third theme, spirituality viewed as essential, provides evidence that some PDs believe its importance should not be overlooked in ATEP curricula. The component of overall wellness, as well as spirituality being important to the healing process, comprised the two lower-order themes. The component of overall wellness was a reason why spirituality was viewed as essential, with 3 comments under this lower order theme. One PD explained the connection of spirituality to overall wellness by stating:

> "I am a strong believer that the mind, body, and spirit are intertwined and that we, as allied health [care] professionals, cannot ignore any aspect of a person in helping them [sic] heal, or we are doing them [sic] a major disservice. This does not mean imposing my beliefs, but understanding where they (athletes, clients or patients) are spiritually and helping them find ways to tap into their belief system to enhance healing emotionally, physically, etc."

Another reason offered for viewing spirituality as essential was that spirituality was considered important to the healing process. A total of 5 comments were made under this particular lower order theme. A simply stated comment from one PD read as follows, "I do strongly believe that spirituality should be addressed in psychological reactions to injury and the rehabilitative process, as athletes/patients who rely on this mechanism of support should be encouraged to utilize it as a tool to recovery."

Teaching Spirituality

The final higher order theme of teaching spirituality also contained 2 lower order themes: socialization and integration into existing courses. The lower order theme of socialization as a part of teaching spirituality had a total of 2 comments. One PD felt his/her spirituality was transferred through socialization when he/she said, "Having a spiritual based life, I believe by living my life as I do, others pick up on my spiritual influence in my teaching, past career as a practicing ATC, etc."

The integration of spirituality into existing courses was the final lower order theme of teaching spirituality. Fourteen total comments were listed within this lower order theme. The integration of spirituality into many courses was the focus of one particular PD who wrote, "Spirituality should not be compartmentalized into one course…It is a topic that should be addressed in many courses, such as rehabilitation, modalities and clinical education experiences. It is indeed a very important topic to address in any health care profession." A summary of the total number of comments for each higher and lower order theme is presented in Table 4.

Discussion

Our study examined whether the topic of spirituality was being addressed in ATEPs, investigated whether PDs believe spirituality should be included in curricula, and explored PD's perceptions of spirituality. Very few ATEP curricula (3.6%) offered a course in which spirituality was the main focus. The fact that a limited number of ATEPs included a course in spirituality may largely be due to the relatively recent focus on spirituality in allied health care education programs. To date, virtually no published articles exist that specifically address the idea of spirituality in athletic training, and none directly address the topic of integrating spirituality into the curriculum of ATEPs. We discovered that PDs at religious-affiliated schools had an increased awareness of the incorporation of spirituality into other allied health care professions (and not medical schools). One possible reason for this awareness is that spirituality has been included in the school's curricula (specifically the nursing profession) for a longer period of time, whereas some medical schools have only recently added spirituality as a component to their curricula. Another potential reason why these PDs were more aware of spirituality is because of the religious affiliation of their respective schools. The increased awareness by PDs could also be influenced by the housing of multiple allied health care programs within the same college or academic unit, thus allowing for cross-curricular familiarity.

Also of interest was the finding that more experienced PDs were more aware that many medical schools are integrating spirituality into their curricula. Perhaps this awareness can be attributed to professional development and experience.

Overall, this study suggests that PDs are generally unaware that spirituality is being incorporated into medical schools (18.6%) and other allied health care curricula (30.4%). Therefore, there is a need to develop awareness regarding why and how spirituality is being addressed in athletic training curricula prior to infusing it into the profession.

Ironically, while nearly 90% of PDs believed that there was a connection between spirituality and health/healing, only 55% of PDs believed that addressing spirituality with athletes would lead to faster recovery times. The results may indicate that there was an inherent belief in the connection between spirituality and

health/healing. On the other hand, if a PD was to address spirituality, the majority believed that their outside influence (addressing of spirituality) may have no direct effect on the individual's speed of recovery. The results of this study may lead to conjecture that PDs feel inadequate to address an individual's spirituality. The feeling of inadequacy may make them hesitant to address spirituality for fear of making mistakes. Previous work has shown that not being sure of one's own beliefs and not fully understanding what spiritual care entails are factors that hinder addressing spirituality with patients.[18]

The majority of PDs seem to agree that there is an important relationship between spirituality and health/healing and that spirituality should be integrated into ATEP curricula. However, the fact that less than half of the PDs surveyed believed it was appropriate to address spirituality with athletes, clients, and patients may suggest an uneasiness or fear of incorporating spirituality principles into everyday practice. Some PDs may consider addressing spirituality to be beyond the scope of practice for an athletic trainer. Pesut[19] suggested that part of the difficulty in integrating spirituality into medical curricula is that individuals world views differ, and health professionals define spirituality in different ways. How one defines spirituality may impact whether and how it is included in a curriculum.

The small percentage (14%) of PDs that desired to have spirituality added into the athletic training educational competencies might suggest that PDs are apprehensive about how to include spirituality into their respective curricula. This apprehension may stem from possible legal risks as well as concerns about adding yet more content to an already intense curriculum.

Concerns about how to incorporate spirituality into curricula have surfaced in other allied health care education programs. A survey of OT programs revealed that the inclusion of spirituality into the curricula is generally supported, but also showed that there were questions regarding the overall importance of the topic, how and where spirituality fit into OT education, and how spirituality could be assessed with patients.[11]

Additionally, the majority of nursing programs incorporate spirituality into their curricula, both in public and private schools, but they also have dealt with comparable difficulties in their integration efforts. Results from a recent study show an uncertainty in the nursing faculties' comprehension of spirituality, suggesting a lack of knowledge concerning what constitutes spirituality along with an absence of individual comfort when addressing this issue.[9]

The situational aspects of spirituality (e.g., spirituality is personal/open for interpretation and the complexity of the definition of spirituality) may also play a role in whether spirituality is incorporated into a curriculum. Overall, PDs found spirituality so private an issue that they were unsure of how they could teach it without coming across as presenting only one particular belief, or even worse, being perceived as forcing the subject of spirituality on their students. An additional reason for this difficulty may be the lack of a universal agreement on the definition of spirituality.

Another concern raised in the current study was the tenet of "separation of church and state." The implementation of spirituality into allied health curricula has been occurring for over a decade,[20] however, and many educational programs have recognized that the spiritual needs of patients are not necessarily addressed in a religious manner.[21] Indeed spirituality is a much broader concept that encompasses whether one's life has meaning and purpose, how one decides to treat other people, whether life is satisfying and meaningful, etc. Addressing the spiritual needs of others involves both intrapersonal and interpersonal connectedness, though excluding issues of religiosity and "God" from spiritual education in allied health curricula would "…exclude the beliefs of a significant portion of the population…graduates will care for."[19] Perhaps, however, a starting point for discussion is viewing spirituality as a component of wellness.

Contrary to the idea of the separation of church and state, is the idea of spirituality as an element of wellness. The inclusion of spirituality as an element of wellness was an important reason for some PDs to argue for the incorporation of spirituality into athletic training curricula. Spirituality has long been identified as one of seven components of wellness, and could be included in a standard evaluation of an athlete, client, or patient within the wellness context.[22] A number of PDs have recognized the importance of spirituality as a component of overall wellness and have begun incorporating spirituality into their rehabilitation courses. Since nearly 90% of the PDs who completed this survey felt there was a connection between spirituality and health/healing, a rehabilitation course may be an appropriate setting to introduce the topic to students. Callister et al.[23] suggest infusing the topic through the entire curriculum. The infusion of spirituality can be done in a variety of teaching formats including lectures, small group discussions, patient interviews, special readings, and case studies.[24-25]

Spirituality is an important topic to PDs, but there exists a level of hesitancy related to fully integrating spirituality into curricula. Puchalski,[26] a leading researcher in the area of spirituality and health, recently stated that, "Spirituality and health is gradually becoming a recognized discipline within medicine." As an allied health profession, athletic training would be well served to begin discussions related to the inclusion of spiritual topics in the curricula of ATEPs.

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