The Effect of a Year-Long Post-Professional Curriculum on Evidence-Based Practice and Healthcare Outcomes Knowledge, Comfort, and Perceived Importance
Valovitch McLeod TC, McCarty CW, Parsons JT: A.T. Still University, Mesa, AZ

Context: Employing evidence-based practice (EBP) and applying quality improvement through the use of patient-report outcomes are two of the five core competencies proposed by the Institute of Medicine for all healthcare professionals. Furthermore, patient-centered care, EBP, and quality improvement are proposed competencies for accredited post-professional athletic training education programs (PPATEP). However, there have been few investigations determining whether specific education in these topics is learned and retained in post-professional athletic training students (PPATS).

Objective: To evaluate PPATS’ EBP and outcomes knowledge levels prior to and following the implementation of a year-long curriculum. Comfort and importance levels of specific EBP concepts were also assessed. Design: Survey design. Setting: Self-reported online survey. Participants: Eighteen PPATS (8 males and 10 females, age=23.56±1.9yrs, years of athletic training experience=0.46±0.82). Data Collection and Analysis: All participants completed the survey at matriculation and again at completion of the first year of a two-year PPATEP. In between, participants completed the following courses as part of their program of study: Introduction to Clinical Outcomes, Evidence-Based Practice, Healthcare Outcomes, and Patient-Oriented Assessment. The concepts taught in these courses were also integrated into the clinical education program. The survey instrument consisted of 20 multiple-choice EBP knowledge questions, 18 multiple-choice outcomes knowledge questions, and 22 Likert scale items (range 1-4) assessing participants’ comfort (11) and perceived importance (11) regarding EBP concepts. Knowledge scores were calculated by awarded 1 point for the correct response and 0 points for an incorrect response. Composite knowledge scores were tabulated and normalized to percentages. Composite comfort and importance Likert scale scores were attained by calculating the sum and then averaging the score back to the Likert scale (total divided by four). Higher scores indicated greater comfort with, and perceived importance for, the EBP concepts. Significant differences (P<.05) were calculated (SPSS 20.0) using paired T-tests and Wilcoxon signed-rank tests. Results: Pre-curricular EBP knowledge was 52.2%±2.36, while post-curricular EBP knowledge increased to 81.1%±1.40 (P≤0.001). Pre-curricular outcomes knowledge was 48.44%±2.32, while post-curricular outcomes knowledge increased to 62.67%±1.53 (P=0.002). Student’s comfort increased (P≤0.01) from 1.80/4.0 (“uncomfortable”) to 3.10/4.0 (“comfortable”). Importance levels did not change as students perceived the EBP concepts to be “very important” for curricular implementation (3.58/4.0) at matriculation. Conclusions: PPATEP students’ knowledge of EBP and healthcare outcomes increased following the implementation of a series of PPATEP courses. Along with increased knowledge levels, students became more comfortable with these concepts. Interestingly, while pre-curricular knowledge and comfort levels were low, students still perceived EBP concepts to be important for implementation, which indicates they understood these concepts to be very important. Future studies should assess EBP and healthcare outcomes knowledge and comfort
levels following the completion of a PPATEP program (approximately 2 years). Additionally, it is important to determine whether PPATEP graduates implement EBP and healthcare outcome concepts into their clinical practice to enhance their clinical decision-making for improved patient care. **Key Words:** evidence-based practice, healthcare outcomes, curricular implementation, athletic training education. **Word Count:** 483