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Can Active Learning via the Socratic Method Improve Knowledge Retention Amongst Emergency Medicine Residents?

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and short answer items. Descriptive statistics were reported. Qualitative analysis of short answers used a thematic approach.

Results: 205 educators participated. The most common publication was peer-reviewed research manuscript. 31% (61/197) had training in research methodology. Time constraint was the greatest barrier to scholarship (8.61/10). There was a mismatch between actual and ideal hours spent on job related tasks. 69.8% (111/159) of researchers perform research in education. Barriers to research were lack of time, support, expertise, mentorship, funding, reward, challenges of adhering to scientifically rigorous methods, and achieving publication. The most motivating factors to performing research were personal intellectual stimulation and to be a better teacher, 7.57/10 and 6.91/10 respectively. Research study design and scientific writing were the most desired skills to acquire, 61.2%(112/183) and 49.7%(91/183) respectively. Preferred formats for developing research skills were online and a home institution faculty development course; 65/181 and 61/181 favor these respectively. 49.7%(91/183) have a mentor.

Conclusions: Multiple barriers to performing scholarship were identified and impact educators to varying degrees. Potential strategies for improvement were suggested. This information may inform interventions to help support educators in their scholarly pursuits.

7 Barriers to the Remediation of Struggling Learners: A Qualitative Study

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Background: Physician trainees are expected to progress through educational milestones to achieve competence appropriate to their level of training. Meeting this expectation requires identification of the struggling resident through outcomes-based and learner-centered assessments with subsequent action taken to remediate the observed deficiencies.

Objectives: This study was designed to better understand faculty perspectives on remediation, including the barriers to the implementation of a remediation plan for struggling residents.

Methods: The authors conducted structured focus groups of regional stakeholders in medical education to explore barriers to the process of remediating struggling residents. Due to limited existing research and theory around remediation, the authors utilized a constructivist qualitative design with conventional content analysis to evaluate the data. Concepts related to barriers to remediation were identified and overarching themes were developed.

Results: Major themes identified as barriers to remediation were: (1) faculty concern about the premature labeling of residents as "struggling" and the stigma that comes with remediation; (2) limited availability of resources to devote to remediation; (3) inadequate faculty development and training around the development and implementation of remediation plans; (4) a lack of, or an unwillingness, of resident participation; and (5) a lack of consistent and honest documentation.

Conclusions: The process of remediation is hindered by the emotional response of faculty, a dearth of resources and expertise, learner factors, and a lack of honest and consistent documentation. When implementing a remediation program for a struggling resident, educators should address these elements prior to initiation of the plan.

8 Can Active Learning via the Socratic Method Improve Knowledge Retention Amongst Emergency Medicine Residents?

Wood S, Teran F, Strayer R, Shah K / Mount Sinai, New York, NY

Background: Socratic instruction utilizes targeted questions to expand learners' understanding of a subject. In medical education, a form of the Socratic method known as "pimping" is used, which at its best may help learners attain greater knowledge in a slightly stressful environment. Although "pimping" is a common teaching strategy for medical students, it has not been studied as an educational tool for Emergency Medicine residents.

Objectives: The focus of this pilot study was to assess Emergency Medicine residents' perceptions of "pimping" and to evaluate whether teaching via Socratic instruction can enhance knowledge retention amongst residents compared with a standard lecture format.

Methods: This was a prospective, randomized-controlled study performed during emergency department shifts at an urban, academic hospital. Groups of 3-4 residents received a bedside teaching session on head trauma either in a Socratic method i.e. "pimping" style or a lecture style. Groups were taught by one of two emergency physicians trained via an online module and a live session. Residents were asked the same pre-defined set of questions during the session. Afterwards, both groups completed a questionnaire assessing their perceptions of "pimping". Four weeks after the teaching session, residents completed a follow up quiz.

Results: 72 residents participated in our study. Results of our questionnaire showed that 54% of residents found "pimping" to be an effective teaching method most or all of the time. 82% would use Socratic instruction as a teaching method at least some of the time.

57 out of 72 residents (79%) completed the follow up quiz. Average scores were identical for residents in the "pimping" group (66.2%) compared with the non-pimping group (65.9%). Interns in the "pimping" group had higher

average scores than those in the non-pimping group (59.6% compared with 52.9%).

Conclusions: Despite the practice of "pimping" falling somewhat out of favor, our data indicates that residents have a favorable view towards this educational modality and most would use it as a teaching strategy. Although a difference in knowledge retention between the two groups was not demonstrated, larger studies are needed to evaluate the value of Socratic instruction.

9 Career Satisfaction and Continued Educational Experiences

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Background: Despite increasing popularity as a specialty choice, emergency medicine (EM) continues to have problems with physician burnout. A recent Medscape survey placed EM as the specialty with highest number of physicians reporting burnout (51%). Many factors have been associated with burnout/career satisfaction, but there is little data on how continued educational experiences affect these outcomes.

Objectives: To assess career satisfaction and factors affecting career satisfaction in a group of community emergency physicians attending an international educational conference.

Methods: A mobile app survey using CrowdCompass was administered in October 2015, during a large international conference (Essentials of Emergency Medicine) asking the following two questions: On a scale of 1-5, how satisfied are you with Emergency Medicine as your medical specialty?" and the free response question: "What have you done and/or what can be done to improve your career satisfaction?". Concept codes were developed with an inductive approach and each response was coded based on the concepts present. If a response contained multiple concepts, it was coded once for each concept it contained.

Results: Of 1753 conference attendees, 391 responses were collected for the question asking respondents to rate his/her career satisfaction. There were 348 respondents (89%) who rated her career satisfaction as a 4 or 5 on the Likert scale (satisfied or very satisfied respectively). For the free response question, 219 responses were obtained. The top three most coded concepts were shifts/scheduling (45, 21%), work-life balance (38, 17%) and continued medical education/conference attendance (21, 10%).

Conclusions: Community emergency physicians who attended a large international educational conference have high rates of career satisfaction. This is higher than the 65.2% reported to have "high satisfaction in a previous study. Top contributors to career satisfaction are scheduling/shift burden, work-life balance, and continuing medical education. Although previous studies have shown lack of opportunity to attend conferences to be associated with burnout, our qualitative data shows that participating in educational conferences is a top contributor to increased career satisfaction.

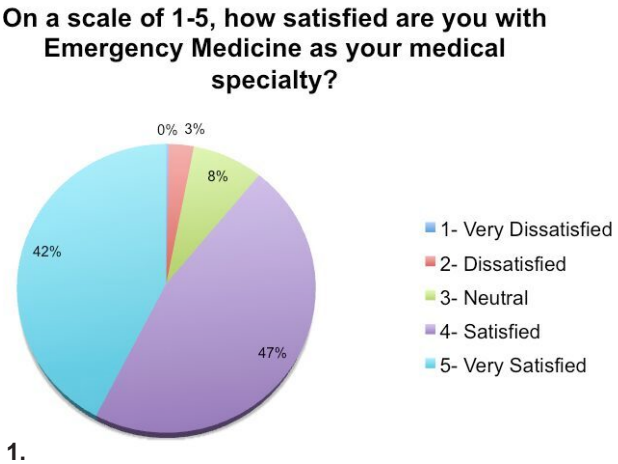

Figure 1.

Table 1.

Concept Codes	Frequency Coded	Percentage of Responses
Shift burden/Scheduling	45	20.5%
Work-Life Balance	38	17.4%
Conferences/Medical Education	21	9.6%
Administrative Burden	17	7.8%
Clinical Support	13	5.9%
Teaching/Academics	11	5.0%
Diverse Work Environments	8	3.7%
Positive Thinking	7	3.2%
Systems Issues	6	2.7%
Sense of Community	6	2.7%
Respect/Autonomy	6	2.7%
Complete change in work environment	3	1.4%
Salary/Compensation	3	1.4%
Litigation/Malpractice	2	0.9%

10 Comparison of the Efficacy of High-Fidelity Patient Simulation Versus Traditional Lecture-based Didactics in Emergency Medicine Toxicology Education

Leduc J, Tolova V, Boroughf W, Bassett R, Kowalski J / Einstein Medical Center Philadelphia, Philadelphia, PA; Centura Health, Denver, CO; Kennedy University Hospital/Rowan University School of Osteopathic Medicine, Stratford, NJ

Background: High fidelity patient simulation (SIM) has been gaining widespread use in medical education. Evidence regarding advantages in both knowledge retention and learner satisfaction is growing. There is scant data pertaining to instruction in toxicology, where SIM is particularly appealing.

Objectives: We compared two models of toxicology education - one involving simulated toxicology cases, and the