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1. Are we at risk of groupthink in our approach to teamwork interventions in health care?
   Alyshah Kaba, Ian Wishart, Kristin Fraser, Sylvain Coderre and Kevin McLaughlin
   Medical Education volume 50, issue 4, pp. 400-408, April 2016

ABSTRACT

Context
The incidence of medical error, adverse clinical events and poor quality health care is unacceptably high and there are data to suggest that poor coordination of care, or teamwork, contributes to adverse outcomes. So, can we assume that increased collaboration in multidisciplinary teams improves performance and health care outcomes for patients?

Methods
In this essay, the authors discuss some reasons why we should not presume that collective decision making leads to better decisions and collaborative care results in better health care outcomes.

Results
Despite an exponential increase in interventions designed to improve teamwork and interprofessional education (IPE), we are still lacking good quality data on whether these interventions improve important outcomes. There are reasons why some of the components of ‘effective teamwork’, such as shared mental models, team orientation and mutual trust, could impair delivery of health care. For example, prior studies have found that brainstorming results in fewer ideas rather than more, and hinders rather
than helps productivity. There are several possible explanations for this effect, including ‘social loafing’ and cognitive overload. Similarly, attributes that improve cohesion within groups, such as team orientation and mutual trust, may increase the risk of ‘groupthink’ and group conformity bias, which may lead to poorer decisions.

**Conclusions**

In reality, teamwork and IPE are not inherently good, bad or neutral; instead, as with any intervention, their effect is modified by the persons involved, the situation and the interaction between persons and situation. Thus, rather than assume better outcomes with teamwork and IPE interventions, as clinicians and educators we must demonstrate that our interventions improve the delivery of health care.

To read more:


And the commentary (no abstract) : Context matters: groupthink and outcomes of health care teams


2. **Prevalence of depression amongst medical students: a meta-analysis**
   Rohan Puthran, Melvyn W B Zhang; Wilson W Tam and Roger C Ho

   *Medical Education* volume 50, issue 4, pp. 456-468, April 2016

**Abstract**

**Context**

Medical schools are known to be stressful environments for students and hence medical students have been believed to experience greater incidences of depression than others. We evaluated the global prevalence of depression amongst medical students, as well as epidemiological, psychological, educational and social factors in order to identify high-risk groups that may require targeted interventions.

**Methods**

A systematic search was conducted in online databases for cross-sectional studies examining prevalences of depression among medical students. Studies were included only if they had used standardised and validated questionnaires to evaluate the prevalence of depression in a group of medical students. Random-effects models were used to calculate the aggregate prevalence and pooled odds ratios (ORs). Meta-regression was carried out when heterogeneity was high.

**Results**

Findings for a total of 62 728 medical students and 1845 non-medical students were pooled across 77 studies and examined. Our analyses demonstrated a global prevalence of depression amongst medical students of 28.0% (95% confidence interval [CI] 24.2–32.1%). Female, Year 1, postgraduate and Middle Eastern medical students were more likely to be depressed, but the differences were not statistically significant. By year of study, Year 1 students had the highest rates of depression at 33.5% (95% CI 25.2–43.1%); rates of depression then gradually decreased to reach 20.5% (95% CI 13.2–30.5%) at Year 5. This trend represented a significant decline ($B = −0.324$, $p = 0.005$). There was no significant difference in prevalences of depression between medical and non-medical students. The overall mean frequency of
suicide ideation was 5.8% (95% CI 4.0–8.3%), but the mean proportion of depressed medical students who sought treatment was only 12.9% (95% CI 8.1–19.8%).

Conclusions
Depression affects almost one-third of medical students globally but treatment rates are relatively low. The current findings suggest that medical schools and health authorities should offer early detection and prevention programmes, and interventions for depression amongst medical students before graduation.

To read more:

3. Twelve tips for early career medical educators
Sayra Cristancho and Lara Varpio
Medical Teacher volume 28, issue 4, 2016

Abstract
The first 10 years of career development pose unique challenges for MD- and PhD-trained faculty members working in medical education. These may include publishing peer-reviewed articles, winning grant funding, teaching, maintaining a clinical practice, and supporting professional communities both within and external to their institution. As the inaugural and current leaders of the ECME group in Canada, we have actively sought to better understand the challenges ECME faculty members face. We developed this understanding by surveying and tracking the qualitative reports of our ECME members, reviewing the (limited) literature available on ECME faculty members’ experiences, and learning from our own experiences as ECME faculty and the advice shared by our own mentors. In this paper, we consolidate this knowledge into 12 tips for ECME faculty members. We suggest these tips will benefit both MD- and PhD-trained ECME faculty members as they strive for professional success.

To read more:

4. What do I do? Developing a competency inventory for postgraduate (residency) program director
Susan Lieff, Ari Zaretsky, Glen Bandiera, Kevin Imrie, Salvatore Spadafora and Susan G. Takahashi.
Medical Teacher Published online April 6, 2016

Abstract
Background: Few new Residency Program Directors (PD) are formally trained for the demands and responsibilities of the leadership aspect of their role. Currently, there are no comprehensive frameworks that describe specific leadership competencies that can inform PD self-reflection or faculty development.

Methods: The authors developed a Postgraduate Program Director Competency Inventory (PPDCI) in order to frame the performance of PDs for a multisource feedback (MSF) program. The development of
the PPDCI occurred in five phases which involved: development of an initial inventory, implementation of a key informant survey of national opinion leaders, execution of a validity survey with postgraduate education leaders and committee members and implementation of a further refined inventory with 17 PD and 147 raters as part of a pilot MSF program.

**Outcomes:** Five distinct domains of leadership competence were identified which included: Communication and relationship management, leadership, professionalism and self-management, environmental engagement, and management skills and knowledge. The content validity of the PPDCI was endorsed by 85% of the key informants. The validity survey indicated strong endorsement of the PPDCI domains and recognition of its utility for both orientation of new PD as well as a frame for self-assessment. The pilot MSF program yielded a further refined and reduced inventory of 26 items of competence as well as recommendations for its utility.

**Conclusions:** Use of this leadership inventory has the potential to ensure effective leadership of postgraduate programs.

**To read more:**


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5. **A PILOT FEASIBILITY STUDY OF A PEER-LED MINDFULNESS PROGRAM FOR MEDICAL STUDENTS**
Diana Koszycki, Jacques Bradwejn, Marlon Danilewitz
*Canadian Medical Education Journal* volume 7 (1) 2016

**ABSTRACT**

**Background:** Mindfulness meditation has gained momentum in medical circles for bolstering wellbeing and other facets of professionalism. This study evaluated the feasibility and benefits of a peer-led mindfulness meditation program (MMP) on medical student wellness and professionalism.

**Method:** Pre-clerkship students were recruited and randomized to the 8-week MMP or wait-list. Feasibility outcomes included ease of recruitment, program attendance and homework compliance. Other outcomes included self-reported psychological distress, empathy, self-compassion, mindfulness, altruism and program satisfaction.

**Results:** The MMP decreased levels of stress and enhanced mindfulness, self-compassion and altruism from baseline to post-study. Changes were not significant for the wait-list condition. Although satisfaction with the MMP was high compliance was suboptimal.

**Conclusions:** A peer-led MMP is feasible and may be a promising approach to enhance medical student wellbeing. Further research is needed to explore strategies to improve program compliance in this student population.

6. **BEDSIDE ULTRASOUND EDUCATION IN CANADIAN MEDICAL SCHOOLS: A NATIONAL SURVEY**

*Peter Steinmetz, Octavian Dobrescu, Sharon Oleskevich, John Lewis*

*Canadian Journal of Medical Education* Volume 7 (1) 2016

**ABSTRACT**

**Background:** This study was carried out to determine the extent and characteristics of bedside ultrasound teaching in medical schools across Canada.

**Methods:** A cross-sectional, survey-based study was used to assess undergraduate bedside ultrasound education in the 17 accredited medical schools in Canada. The survey, consisting of 19 questions was pilot-tested, web-based, and completed over a period of seven months in 2014.

**Results:** Approximately half of the 13 responding medical schools had integrated bedside ultrasound teaching into their undergraduate curriculum. The most common trends in undergraduate ultrasound teaching related to duration (1-5 hours/year in 50% of schools), format (practical and theoretical in 67% of schools), and logistics (1:4 instructor to student ratio in 67% of schools). The majority of responding vice-deans indicated that bedside ultrasound education should be integrated into the medical school curriculum (77%), and cited a lack of ultrasound machines and infrastructure as barriers to integration.

**Conclusions:** This study documents the current characteristics of undergraduate ultrasound education in Canada.


7. **The use of social media to supplement resident medical education the SMART-ME initiative**

*Panagis Galiatsatos, Fernanda Porto-Carreiro, Jennifer Hayashi et al*


**ABSTRACT**

**Background:** Residents work at variable times and are often unable to attend all scheduled educational sessions. Therefore, new asynchronistic approaches to learning are essential in ensuring exposure to a comprehensive education. Social media tools may be especially useful, because they are accessed at times convenient for the learner. Objective: Assess if the use of Twitter for medical education impacts the attitude and behavior of residents toward using social media for medical education.

**Design:** Preintervention and postintervention surveys. Internal medicine resident physicians were surveyed before the launch of a residency-specific Twitter webpage on August 1, 2013, and again 135 days later, to determine their use of the Twitter application and web page, as well as other social media for medical education.

**Participants:** Residents at an internal medicine urban academic training program.
Main Measures: All residents within our training program were administered web-based surveys. The surveys assessed resident views and their frequency of use of social media for medical education purposes, and consisted of 10 Likert scale questions. Each answer consisted of a datapoint on a 15 scale (1not useful, 3useful, 5very useful). The final survey question was open-ended and asked for general comments. Key Results: Thirty-five of 50 residents (70%) completed the presurvey and 40 (80%) participated in the postsurvey. At baseline, 34 out of 35 residents used social media and nine specifically used Twitter. Twentyseven (77%) used social media for medical education; however, only three used Twitter for educational purposes. After the establishment of the Twitter page, the percentage of residents using social media for educational purposes increased (34 of 40 residents, 85%), and 22 used Twitter for this purpose (p<0.001 for the change). The percentage of residents using the application at least once a week also increased from 11.4 to 60.0% (p<0.001). Almost all residents (38 of 40) felt that social media could be useful as a medical education tool, which slightly increased from 30 out of 35 in the preintervention survey (p<0.01).

Conclusion: Residents believe social media could be used for medical education. After we launched a Twitter page for medical education, there was a significant increase in the use and frequency of Twitter for resident medical education over the ensuing 6 months. Further research should be performed to see if social media can impact overall medical knowledge and patient care, and whether longer term use is maintained. Keywords: social media; Twitter; medical education

To read more:

8. Does Compassion-Focused Therapy Training for Health Care Educators and Providers Increase Self-Compassion and Reduce Self-Persecution and Self-Criticism?
Beaumont, Elaine MSc; Irons, Chris PhD; Rayner, Gillian PhD; Dagnall, Neil PhD
Journal of Continuing Education in the Health Professions volume 36 (1) Winter 2016 p. 4-10

Introduction: There is a growing body of evidence within the health care community suggesting that developing feelings of compassion can profoundly affect physical and psychological health. This is an important area of work, and initial research with nonprofessional groups has found that practicing compassion through a variety of experiential practices and meditations can lead to higher levels of compassion for others, sensitivity to suffering, motivation to help, and altruism. This study examines outcome measures after a 3-day introductory workshop on compassion-focused therapy provided to health care providers and educators. The aim of the research is to explore whether the training would increase self-compassion and reduce self-criticism and self-persecution.

Methods: A total of 28 participants who were classified into three groups “nurses and midwives,” “counselors/psychotherapists,” and “other health care providers” completed the Self-Compassion Scale and Functions of Self-Criticizing and Self-Attacking Scale before and after training.

Results: Results reveal an overall statistically significant increase in self-compassion and statistically significant reduction in self-critical judgment after training. There was no statistically significant reduction in self-persecution or self-correction scores after training.
**Discussion:** Developing self-compassion and compassionately responding to our own “self-critic” may lead the way forward in the development of more compassionate care among health care professionals. Training people in compassion-based exercises may bring changes in levels of self-compassion and self-critical judgment. The findings are exciting in that they suggest the potential benefits of training health care providers and educators in compassion-focused practices.


9. Combining the M1 and M2 Classroom: an Effective Method for Vertical and Horizontal Integration of Core Competencies

Renee Leclair and Andrew Binks

*Medical Science Educator* March 2016, Volume 26, Issue 1, 77-83

**Abstract**

Despite recent advances in undergraduate medical education, integration of vertical curricula and simultaneous delivery of competencies remain challenging. To address this educational challenge, we delivered a series of case-based exercises to a combined class of M1 and M2 students to achieve vertical (year-to-year) and horizontal (clinical and basic science) integration. These exercises consisted of a case, concept mapping activity to link basic science content to an underlying symptom, and follow-up discussion. Following the activities, students were asked to complete a survey evaluating the effectiveness of their experience including level of learning, effectiveness of peer teaching, and incorporation of core competencies. Overall, the students described the activity positively (informative and engaging). M1 students reported regularly helping M2 students review the M1 material. Unsurprisingly, the M2 students assisted the M1 students with the M2 material to a greater extent and significantly improved the M1 students’ confidence with that material. The M2 students generally felt successful in peer teaching but reported that it regularly revealed intrinsic knowledge gaps. As important, this activity reportedly addressed competencies in addition to Medical Knowledge, specifically Communication Skills, Practice-Based Learning, and Professionalism. In summary, this learning activity provided opportunities for students to (1) refine clinical reasoning and peer-peer teaching skills, (2) reinforce the basic science content within a clinical context, and (3) integrate several additional key core competencies into the heavily Medical-Knowledge-focused pre-clerkship curriculum. This novel activity facilitated vertical and horizontal integration of several key core competencies in a manner that could be incorporated and assessed in nearly any curricular structure.

**To read more:**

10. The Barriers and Facilitators to Transfer of Ultrasound-Guided Central Venous Line Skills From Simulation to Practice: Exploring Perceptions of Learners and Supervisors
Briseida Mema and Ilene Harris
Teaching and Learning in Medicine volume 28, issue 2, pp. 115-124

Abstract:

**Phenomenon:** Ultrasound-guided central venous line insertion is currently the standard of care. Randomized controlled trials and systematic reviews show that simulation is superior to apprenticeship training. The purpose of this study is to explore, from the perspectives of participants in a simulation-training program, the factors that help or hinder the transfer of skills from simulation to practice.

**Approach:** Purposeful sampling was used to select and study the experience and perspective of novice fellows after they had completed simulation training and then performed ultrasound-guided central venous line in practice. Seven novice pediatric intensive care unit fellows and six supervising faculty in a university-affiliated academic center in a large urban city were recruited between September 2012 and January 2013. We conducted a qualitative study using semistructured interviews as our data source, employing a constructivist, grounded theory methodology.

**Findings:** Both curricular and real-life factors influence the transfer of skills from simulation to practice and the overall performance of trainees. Clear instructions, the opportunity to practice to mastery, one-on-one observation with feedback, supervision, and further real-life experiences were perceived as factors that facilitated the transfer of skills. Concern for patient welfare, live trouble shooting, complexity of the intensive care unit environment, and the procedure itself were perceived as real-life factors that hindered the transfer of skills.

**Insights:** As more studies confirm the superiority of simulation training versus apprenticeship training for initial student learning, the faculty should gain insight into factors that facilitate and hinder the transfer of skills from simulation to bedside settings and impact learners' performances. As simulation further augments clinical learning, efforts should be made to modify the curricular and bedside factors that facilitate transfer of skills from simulation to practice settings.

To read more: