

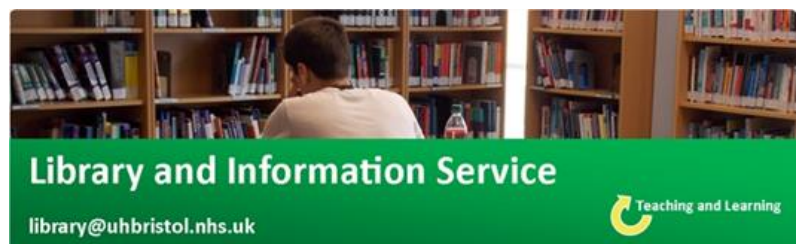
Medical Education

Current Awareness Newsletter



January 2017

Respecting everyone
Embracing change
Recognising success
Working together
Our hospitals.



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 Teaching and Learning

Lunchtime Drop-in Sessions

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February (12.00)

Fri 3rd	Literature Searching
Mon 6th	Critical Appraisal
Tue 14th	Statistics
Wed 22nd	Literature Searching

March (13.00)

Thurs 2nd	Critical Appraisal
Fri 10th	Statistics
Mon 13th	Literature Searching
Tues 21st	Critical Appraisal
Wed 29th	Statistics

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Medical Education journals

Click on journal title (+ Ctrl) for hyperlink

If you require full articles please email: library@uhbristol.nhs.uk

Medical Education

January 2017; Volume 51, Issue 1

The Clinical Teacher

December 2016; Volume 13, Issue 6

BMJ: Education

At a glance: Current topics

BMJ Simulation and Technology Enhanced Learning

January 2017; Volume 3, Issue 1



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Latest Evidence

NICE National Institute for
Health and Care Excellence



Semwal M, Wahabi HA, Posadzki P, Divakar U, Lim KTK, Audouard-Marzin Y, Zary N, Tudor Car L. Offline and computer-based eLearning interventions for medical doctors' education (Protocol). Cochrane Database of Systematic Reviews 2016, Issue 12. Art. No.: CD012465. DOI: 10.1002/14651858.CD012465.

<http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD012465/full>

Vaona A, Pappas Y, Grewal RS, Ajaz M, Majeed A, Car J. Training interventions for improving telephone consultation skills in clinicians. Cochrane Database of Systematic Reviews 2017, Issue 1. Art. No.: CD010034. DOI: 10.1002/14651858.CD010034.pub2.

<http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD010034.pub2/full>

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NHS 'Behind the Headlines'

Current Awareness Database Articles

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Medical Education

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15. Practical trials in medical education: linking theory, practice and decision making.
16. Social network analysis in medical education: a methodology in search of a theory.
17. Moral agency and the medical education researcher.
18. Male reproductive health training during undergraduate medical education: an unmet need for the next generation.
19. Health Systems Science Curricula in Undergraduate Medical Education: Identifying and Defining a Potential Curricular Framework.
20. Fostering the Development of Master Adaptive Learners: A Conceptual Model to Guide Skill Acquisition in Medical Education.
21. Priority Areas and Potential Solutions for Successful Integration and Sustainment of Health Systems Science in Undergraduate Medical Education.
22. The Role for Virtual Patients in the Future of Medical Education.
23. The Role for Virtual Patients in the Future of Medical Education.
24. Teaching the Diagnostic Process as a Model to Improve Medical Education.

1. Leveraging Social Media to Promote Evidence-Based Continuing Medical Education.

Author(s): Flynn, Simone; Hebert, Paul; Korenstein, Deborah; Ryan, Mark; Jordan, William B; Keyhani, Salomeh

Source: PloS one; 2017; vol. 12 (no. 1); p. e0168962

Publication Date: 2017

Publication Type(s): Journal Article

Available in full text at [PLoS One](#) - from ProQuest

Abstract: New dissemination methods are needed to engage physicians in evidence-based continuing medical education (CME). To examine the effectiveness of social media in engaging physicians in non-industry-sponsored CME. We tested the effect of different media platforms (e-mail, Facebook, paid Facebook and Twitter), CME topics, and different "hooks" (e.g., Q&A, clinical pearl and best evidence) on driving clicks to a landing site featuring non-industry sponsored CME. We modelled the effects of social media platform, CME topic, and hook using negative binomial regression on clicks to a single landing site. We used clicks to landing site adjusted for exposure and message number to calculate rate ratios. To understand how physicians interact with CME content on social media, we also conducted interviews with 10 physicians. The National Physicians Alliance (NPA) membership. NPA e-mail recipients, Facebook followers and friends, and Twitter followers. Clicks to the NPA's CME landing site. On average, 4,544 recipients received each message. Messages generated a total of 592 clicks to the landing site, for a rate of 5.4 clicks per 1000 recipients exposed. There were 5.4 clicks from e-mail, 11.9 clicks from Facebook, 5.5 clicks from paid Facebook, and 6.9 clicks from Twitter to the landing site for 1000 physicians exposed to each of 4 selected CME modules. A Facebook post generated 2.3x as many clicks to the landing site as did an e-mail after controlling for participant exposure, hook type and CME topic ($p < 0.001$). Twitter posts ($p = 0.13$) and paid Facebook posts ($p = 0.06$) were not statistically different from e-mail in generating clicks to the landing site. Use of different hooks to engage physicians had no impact on clicks to the landing site. Interviews with physicians suggested that social media might not be a preferred vehicle for disseminating CME. Social media has a modest impact on driving traffic to evidence-based CME options. Facebook had a superior effect on driving physician web traffic to evidence-based CME compared to other social media platforms and email.

Database: Medline

2. Epistemic cognition in medical education: a literature review.

Author(s): Eastwood, Jennifer L; Koppelman-White, Elysa; Mi, Misa; Wasserman, Jason Adam; Krug Iii, Ernest F; Joyce, Barbara

Source: International journal of medical education; Jan 2017; vol. 8 ; p. 1-12

Publication Date: Jan 2017

Publication Type(s): Journal Article Review

Available in full text at [International Journal of Medical Education](#) - from ProQuest

Abstract: To review the research literature on epistemic cognition in medical education. We conducted database searches using keywords related to epistemic cognition and medical education or practice. In duplicate, authors selected and reviewed empirical studies with a central focus on epistemic cognition and participant samples including medical students or physicians. Independent thematic analysis and consensus procedures were used to identify major findings about epistemic cognition and implications for research and medical education. Twenty-seven articles were selected. Themes from the findings of selected studies included developmental frameworks of epistemic cognition revealing simple epistemological positions of medical learners, increasing epistemological sophistication with experience, relationships between epistemic cognition and context, patterns in epistemic orientations to clinical practice, and reactions to ambiguity and uncertainty. Many studies identified the need for new instruments and methodologies to study epistemic cognition in medical education settings and its relationship to clinical outcomes. Relationships between epistemological beliefs and humanistic patient care and influences of medical education practices were commonly cited implications for medical education. Epistemic cognition is conceptualized and operationalized in a variety of ways in the medical research literature. Advancing theoretical frameworks and developing new methodological approaches to examine epistemic cognition are important areas for future research. Also, examination of the relationship between the contexts of medical learning and practice and epistemic cognition has potential for improving medical education. This work also establishes a need for further investigation into the implications of epistemic cognition for humanistic orientations and ultimately for patient care.

Database: Medline

3. WhatsApp messenger as a tool to supplement medical education for medical students on clinical attachment.

Author(s): Raiman, Lewis; Antbring, Richard; Mahmood, Asad

Source: BMC medical education; Jan 2017; vol. 17 (no. 1); p. 7

Publication Date: Jan 2017

Publication Type(s): Journal Article

Available in full text at [BMC Medical Education](#) - from BioMed Central

Available in full text at [BMC Medical Education](#) - from ProQuest

Abstract: Instant messaging applications have the potential to improve and facilitate communication between hospital doctors and students, hence generating and improving learning opportunities. This study aims to demonstrate the feasibility and acceptability of instant messaging communication to supplement medical education for medical students whilst on clinical attachment. A total of 6 WhatsApp Messenger (WhatsApp Inc.) groups were created for medical students on clinical attachment. These were used to provide communication within Problem Based Learning (PBL) groups for a duration of 8 weeks. The frequency and type of communication were recorded. Students' opinions were evaluated through a structured interview process at the end of the study period. A thematic analysis was performed on the content of the instant messaging groups and on the results of the structured interviews. All of the participants were active in their respective messaging groups (19 students and 6 tutors). A total of 582 messages, 22 images and 19 webpage links were sent. Thematic analysis on content of the instant messaging groups identified the following themes: organisational, educational and social. Thematic analysis on the content of interviews identified themes such as the ease of use of instant messaging, benefit of instant messaging to foster understanding and learning, and the ability to access recorded discussions. The findings of this study illustrate a method by which communication within PBL groups can be facilitated by the use of instant messaging. The results indicate the feasibility and acceptability of WhatsApp Messenger in supplementing PBL teaching for medical students, and provides a framework for studies to investigate use amongst larger cohorts of students.

Database: Medline

4. A Simulation to Teach Integrated Care in Undergraduate Medical Education: The "Getting to Know Patients' System of Care" (GPS-CARE) Experience.

Author(s): Qureshi, Aatif; Kwok, Yvonne; Chaudhary, Zarah; Leung, Fok-Han; Mylopoulos, Maria; Sockalingam, Sanjeev

Source: Academic psychiatry : the journal of the American Association of Directors of Psychiatric Residency Training and the Association for Academic Psychiatry; Jan 2017

Publication Date: Jan 2017

Publication Type(s): Journal Article

Database: Medline

5. Shame in Medical Education: A Randomized Study of the Acquisition of Intimate Examination Skills and Its Effect on Subsequent Performance.

Author(s): Hautz, Wolf E; Schröder, Therese; Dannenberg, Katja A; März, Maren; Hölzer, Henrike; Ahlers, Olaf; Thomas, Anke

Source: Teaching and learning in medicine; Jan 2017 ; p. 1-11

Publication Date: Jan 2017

Publication Type(s): Journal Article

Abstract: Although medical students are exposed to a variety of emotions, the impact of emotions on learning has received little attention so far. Shame-provoking intimate examinations are among the most memorable events for students. Their emotions, however, are rarely addressed during training, potentially leading to withdrawal and avoidance and, consequently, performance deficits. However, emotions of negative valence such as shame may be particularly valuable for learning, as they might prompt mental rehearsal. We investigated the effect of shame on learning from the perspective of cognitive load theory. We hypothesized that (a) training modality determines state shame, (b) state shame directly affects the quality of a clinical breast

examination as one example of a shame-provoking exam, and (c) students who experience shame during training outperform those who just discuss the emotion during subsequent performance assessments. Forty-nine advanced medical students participated in a randomized controlled, single-blinded study. After a basic, low-fidelity breast examination training, students were randomized to further practice either on a high-fidelity mannequin including a discussion of their emotions or by examining a standardized patient's real breasts. Last, all students conducted a breast examination in a simulated doctor's office. Dependent variables were measures of outcome and process quality and of situational shame. Students training with a standardized patient experienced more shame during training ($p < .001$, $d = 2.19$), spent more time with the patient ($p = .005$, $d = 0.89$), and documented more breast lumps ($p = .026$, $d = 0.65$) than those training on a mannequin. Shame interacted with training modality, $F(1, 45) = 21.484$, $p < .001$, $\eta^2 = 0.323$, and differences in performance positively correlated to decline in state shame ($r = .335$, $p = .022$). Students experiencing state shame during training do reenact their training and process germane load—in other words, learn. Furthermore, altering simulation modality offers a possibility for educators to adjust the affective component of training to their objectives.

Database: Medline

6. Race/Ethnicity in Medical Education: An Analysis of a Question Bank for Step 1 of the United States Medical Licensing Examination.

Author(s): Ripp, Kelsey; Braun, Lundy

Source: Teaching and learning in medicine; Jan 2017 ; p. 1-8

Publication Date: Jan 2017

Publication Type(s): Journal Article

Abstract:Phenomenon: There is growing concern over racial/ethnic bias in clinical care, yet how best to reduce bias remains challenging, in part because the sources of bias in medical education are poorly understood. One possible source is the routinized use of race/ethnicity in lectures, assessment, and preparatory materials, including question banks for licensing examinations. Because students worldwide use question banks to prepare for the United States Medical Licensing Examination, we examined how race/ethnicity was used in one of the most commonly recommended question banks. We analyzed the use of race/ethnicity in all 2,211 questions in a question bank for Step 1 of the United States Medical Licensing Examination for the following: the frequency of mentions of racial/ethnic groups, whether the use of race/ethnicity was merely descriptive or was central to any part of the question, and whether the question associated race/ethnicity with genetic difference. In sum, 455 of the 2,011 (20.6%) of the questions in the question bank referred to race/ethnicity in the question stem, answer, or educational objective. The frequency of mentions of racial/ethnicity was disproportionate to the U.S. 85.8% referred to White/Caucasians, 9.70% to Black/African Americans, 3.16% to Asian, 0.633% to Hispanics, and 0.633% to Native Americans. No cases referred to Native Hawaiians/Pacific Islanders. The proportion of mentions of race/ethnicity classified as either a routine descriptor or central to the case varied by racial/ethnic category. The association between genetics and disease in cases also varied by racial/ethnic category. Insights. The routinized use of race/ethnicity with no specific goal in preparation materials, such as question banks, risks contributing to racial bias. The implications of routinized use extend to assessment in medical education. Race/ethnicity should be used only when referring to social experiences of groups relevant to their health, not as a proxy for genetics, social class, or culture.

Database: Medline

7. The discomfort of an educator's critical conscience: the case of problem-based learning and other global industries in medical education.

Author(s): Frambach, Janneke M; Martimianakis, Maria Athina Tina

Source: Perspectives on medical education; Jan 2017

Publication Date: Jan 2017

Publication Type(s): Journal Article

Database: Medline

8. Successfully sustaining sex and gender issues in undergraduate medical education: a case study.

Author(s): van der Meulen, Francisca; Fluit, Cornelia; Albers, Mieke; Laan, Roland; Lagro-Janssen, Antoine

Source: Advances in health sciences education : theory and practice; Jan 2017

Publication Date: Jan 2017

Publication Type(s): Journal Article

Abstract: Although several projects have addressed the importance of gender health issues in medical education, the sustainability of change efforts in medical education has rarely been addressed. Understanding the possible facilitators or barriers to sustainability may help to develop future interventions that are effective in maintaining gender health issues as a topic in medical curricula. The aim of this study is to provide a longitudinal evaluation of changes regarding gender health issues that occurred in the past decade and the factors that influenced this process. The coursebooks of eight theoretical courses of the Nijmegen medical curriculum were screened on the basis of criteria for an integrated gender perspective in medical education. To assess the sustainability of gender health issues, the screening results from 2014 were compared with those of a similar project in 2005. In addition, open interviews were conducted with eight coordinators to identify facilitators and barriers influencing the sustainability of gender health issues. Analysis showed that, over the past decade, the implementation of gender health issues was mainly sustained and additional changes were made, resulting in an ongoing gender perspective in the Nijmegen medical curriculum. The coordinators mentioned several factors that influenced the sustainability of implementation in medical education: coordinators' and teachers' gender-sensitive attitude, competing demands, the presence of sex and gender in learning objectives, examinations and evaluation, organizational support and curriculum revisions. Our findings suggest that, in implementing sex and gender in medical education, medical faculties need to focus on top-down support in incorporating sex and gender into core objectives and time spent on incorporating sex and gender into medicine, and on the continuous training of teaching staff.

Database: Medline

9. Cultural competence in medical education: A questionnaire study of Danish medical teachers' perceptions of and preparedness to teach cultural competence.

Author(s): Sorensen, Janne; Smith Jervelund, Signe; Norredam, Marie; Kristiansen, Maria; Krasnik, Allan

Source: Scandinavian journal of public health; Jan 2017 ; p. 1403494816685937

Publication Date: Jan 2017

Publication Type(s): Journal Article

Abstract: The cultural competence training of healthcare professionals is a key element in ensuring the quality of both the access and delivery of healthcare to increasingly ethnically diverse populations. The aim of this study is to investigate Danish medical teachers' opinions about cultural competence, their willingness to receive training and preparedness to teach cultural competence topics. The survey was sent to medical teachers, clinical teachers and external lecturers who teach in the medical programme at the University of Copenhagen. A total of 1400 medical teachers received the survey, and 199 responded. The response rate is 14%. Data were analysed through descriptive calculations, and answers to open-ended questions were coded using content analysis. Results showed that 82.4% of the informants agreed or strongly agreed that the medical education programme should include training on cultural issues, and 60.3% agreed or strongly agreed that students should be assessed on their cultural competence skills. Regarding preparedness to teach a diverse classroom, 88.4% felt somewhat or very prepared to engage and motivate all students. About 70% were interested in receiving training on cultural competence. Generally, there is interest in and acknowledgement of the importance of cultural competence in Danish medical education among teachers at the University of Copenhagen. This creates an opportunity to implement cultural competence in the medical curriculum, training of teachers and strengthening the diversity sensitivity of the organisation. However, support for this programme by management and the allocation of an appropriate level of resources is a prerequisite to the success of the programme.

Database: Medline

10. Yesterday's Doctors: The Human Aspects of Medical Education in Britain, 1957-93.

Author(s): Bates, Victoria

Source: Medical history; Jan 2017; vol. 61 (no. 1); p. 48-65

Publication Date: Jan 2017

Publication Type(s): Journal Article

Abstract: In the wake of the Second World War there was a movement to counterbalance the apparently increasingly technical nature of medical education. These reforms sought a more holistic model of care and to put people - rather than diseases - back at the centre of medical practice and medical education. This article shows that students often drove the early stages of education reform. Their innovations focused on relationships

between doctors and their communities, and often took the form of informal discussions about medical ethics and the social dimensions of primary care. Medical schools began to pursue 'humanistic' education more formally from the 1980s onwards, particularly within the context of general practice curricula and with a focus on individual doctor-patient relationships. Overall from the 1950s to the 1990s there was a broad shift in discussions of the human aspects of medical education: from interest in patient communities to individuals; from social concerns to personal characteristics; and from the relatively abstract to the measurable and instrumental. There was no clear shift from 'less' to 'more' humanistic education, but rather a shift in the perceived goals of integrating human aspects of medical education. The human aspects of medicine show the importance of student activism in driving forward community and ethical medicine, and provide an important backdrop to the rise of competencies within general undergraduate education.

Database: Medline

11. Before your very eyes: the value and limitations of eye tracking in medical education.

Author(s): Kok, Ellen M; Jarodzka, Halszka

Source: Medical education; Jan 2017; vol. 51 (no. 1); p. 114-122

Publication Date: Jan 2017

Publication Type(s): Journal Article

Abstract:Medicine is a highly visual discipline. Physicians from many specialties constantly use visual information in diagnosis and treatment. However, they are often unable to explain how they use this information. Consequently, it is unclear how to train medical students in this visual processing. Eye tracking is a research technique that may offer answers to these open questions, as it enables researchers to investigate such visual processes directly by measuring eye movements. This may help researchers understand the processes that support or hinder a particular learning outcome. In this article, we clarify the value and limitations of eye tracking for medical education researchers. For example, eye tracking can clarify how experience with medical images mediates diagnostic performance and how students engage with learning materials. Furthermore, eye tracking can also be used directly for training purposes by displaying eye movements of experts in medical images. Eye movements reflect cognitive processes, but cognitive processes cannot be directly inferred from eye-tracking data. In order to interpret eye-tracking data properly, theoretical models must always be the basis for designing experiments as well as for analysing and interpreting eye-tracking data. The interpretation of eye-tracking data is further supported by sound experimental design and methodological triangulation.

Database: Medline

12. Narrative inquiry: a relational research methodology for medical education.

Author(s): Clandinin, D Jean; Cave, Marie T; Berendonk, Charlotte

Source: Medical education; Jan 2017; vol. 51 (no. 1); p. 89-96

Publication Date: Jan 2017

Publication Type(s): Journal Article

Abstract:Narrative research, an inclusive term for a range of methodologies, has rapidly become part of medical education scholarship. In this paper we identify narrative inquiry as a particular theoretical and methodological framework within narrative research and outline its characteristics. We briefly summarise how narrative research has been used in studying medical learners' identity making in medical education. We then turn to the uses of narrative inquiry in studying medical learners' professional identity making. With the turn to narrative inquiry, the shift is to thinking with stories instead of about stories. We highlight four challenges in engaging in narrative inquiry in medical education and point toward promising future research and practice possibilities.

Database: Medline

13. Social network analysis in medical education.

Author(s): Isba, Rachel; Woolf, Katherine; Hanneman, Robert

Source: Medical education; Jan 2017; vol. 51 (no. 1); p. 81-88

Publication Date: Jan 2017

Publication Type(s): Journal Article

Abstract: Humans are fundamentally social beings. The social systems within which we live our lives (families, schools, workplaces, professions, friendship groups) have a significant influence on our health, success and well-being. These groups can be characterised as networks and analysed using social network analysis. Social network analysis is a mainly quantitative method for analysing how relationships between individuals form and affect those individuals, but also how individual relationships build up into wider social structures that influence outcomes at a group level. Recent increases in computational power have increased the accessibility of social network analysis methods for application to medical education research. Social network analysis has been used to explore team-working, social influences on attitudes and behaviours, the influence of social position on individual success, and the relationship between social cohesion and power. This makes social network analysis theories and methods relevant to understanding the social processes underlying academic performance, workplace learning and policy-making and implementation in medical education contexts. Social network analysis is underused in medical education, yet it is a method that could yield significant insights that would improve experiences and outcomes for medical trainees and educators, and ultimately for patients.

Database: Medline

14. The interplay of text, meaning and practice: methodological considerations on discourse analysis in medical education.

Author(s): Kärreman, Dan; Levay, Charlotta

Source: Medical education; Jan 2017; vol. 51 (no. 1); p. 72-80

Publication Date: Jan 2017

Publication Type(s): Journal Article

Abstract: The study of discourses (i.e. verbal interactions or written accounts) is increasingly used in social sciences to gain insight into issues connected to discourse, such as meanings, behaviours and actions. This paper situates discourse analysis in medical education, based on a framework developed in organisational discourse analysis and widely deployed in other social science disciplines. This paper aims to examine the constructs of 'discourse' and 'discourse analysis', and how various understandings of discourse and discourse analysis may play out in empirical and analytical settings, with a particular focus on the field of medical education. The study is based on a literature analysis of discourse analysis approaches published in Medical Education.

Findings suggest that empirical studies through discourse analysis can be heuristically understood in terms of the links between text, practices and meaning. Discourse analysis provides a more strongly supported argument when it is possible to defend claims on three levels: practice, using observational data; meaning, using ethnographic data, and text, using conversational and textual data.

Database: Medline

15. Practical trials in medical education: linking theory, practice and decision making.

Author(s): Tolsgaard, Martin G; Kulasegaram, Kulamakan M; Ringsted, Charlotte

Source: Medical education; Jan 2017; vol. 51 (no. 1); p. 22-30

Publication Date: Jan 2017

Publication Type(s): Journal Article

Abstract: Concerns have been raised over the gap between education theory and practice and how research can contribute to inform decision makers on their choices and priorities. Little is known about how educational theories and research outcomes produced under optimal conditions in highly controlled settings generalise to the real-life education context. One way of bridging this gap is applying the concept of practical trials in medical education. In this paper we elaborate on characteristics of practical trials and based on examples from medical education we discuss the challenges, limitations and future directions for this kind of research. Practical trials have the overall aim of informing decision makers. They are carried out in real-life settings and are characterised by (i) comparison of viable alternative education strategies, (ii) broad inclusion criteria regarding participants across several settings and (iii) multiple outcome measures with long-term follow-up to evaluate both benefits and risks. Questions posed by practical trials may be proactive in applying theory in the development of educational innovations or reactive to educational reforms and innovations. Non-inferiority or equivalence designs are recommended when comparing viable alternatives and the use of crossover designs, cluster randomisation or stepped wedge trial designs are feasible when studying implementations across several settings. Outcome measures may include variables related to learners, teachers, educational administration, quality of care, patient outcomes and cost. Practical trials in medical education may contribute to bridge the gap between education theory and practice and aid decision makers in making evidence-based choices and priorities. Conducting practical trials is not without challenges and rigorous design and methods must be applied. Of

concern is that the practical focus may lead to failure to include a sound theoretical basis in the research questions and the interventions studied, and that authors fail to obtain informed consent from their participants.

Database: Medline

16. Social network analysis in medical education: a methodology in search of a theory.

Author(s): Prideaux, David

Source: Medical education; Jan 2017; vol. 51 (no. 1); p. 9-10

Publication Date: Jan 2017

Publication Type(s): Journal Article

Database: Medline

17. Moral agency and the medical education researcher.

Author(s): Ellaway, Rachel H

Source: Medical education; Jan 2017; vol. 51 (no. 1); p. 3-5

Publication Date: Jan 2017

Publication Type(s): Journal Article

Database: Medline

18. Male reproductive health training during undergraduate medical education: an unmet need for the next generation.

Author(s): Finney, Esther; Brannigan, Robert E

Source: Fertility and sterility; Jan 2017; vol. 107 (no. 1); p. 32-33

Publication Date: Jan 2017

Publication Type(s): Editorial

Database: Medline

19. Health Systems Science Curricula in Undergraduate Medical Education: Identifying and Defining a Potential Curricular Framework.

Author(s): Gonzalo, Jed D; Dekhtyar, Michael; Starr, Stephanie R; Borkan, Jeffrey; Brunett, Patrick; Fancher, Tonya; Green, Jennifer; Grethlein, Sara Jo; Lai, Cindy; Lawson, Luan; Monrad, Seetha; O'Sullivan, Patricia; Schwartz, Mark D; Skochelak, Susan

Source: Academic medicine : journal of the Association of American Medical Colleges; Jan 2017; vol. 92 (no. 1); p. 123-131

Publication Date: Jan 2017

Publication Type(s): Journal Article

Abstract:The authors performed a review of 30 Accelerating Change in Medical Education full grant submissions and an analysis of the health systems science (HSS)-related curricula at the 11 grant recipient schools to develop a potential comprehensive HSS curricular framework with domains and subcategories. In phase 1, to identify domains, grant submissions were analyzed and coded using constant comparative analysis. In phase 2, a detailed review of all existing and planned syllabi and curriculum documents at the grantee schools was performed, and content in the core curricular domains was coded into subcategories. The lead investigators reviewed and discussed drafts of the categorization scheme, collapsed and combined domains and subcategories, and resolved disagreements via group discussion. Analysis yielded three types of domains: core, cross-cutting, and linking. Core domains included health care structures and processes; health care policy, economics, and management; clinical informatics and health information technology; population and public health; value-based care; and health system improvement. Cross-cutting domains included leadership and change agency; teamwork and interprofessional education; evidence-based medicine and practice; professionalism and ethics; and scholarship. One linking domain was identified: systems thinking. This broad framework aims to build on the traditional definition of systems-based practice and highlight the need for medical and other health professions schools to better align education programs with the anticipated needs of the systems in which students will practice. HSS will require a critical investigation into existing curricula to determine the most efficient methods for integration with the basic and clinical sciences.

Database: Medline

20. Fostering the Development of Master Adaptive Learners: A Conceptual Model to Guide Skill Acquisition in Medical Education.

Author(s): Cutrer, William B; Miller, Bonnie; Pusic, Martin V; Mejicano, George; Mangrulkar, Rajesh S; Gruppen, Larry D; Hawkins, Richard E; Skochelak, Susan E; Moore, Donald E

Source: Academic medicine : journal of the Association of American Medical Colleges; Jan 2017; vol. 92 (no. 1); p. 70-75

Publication Date: Jan 2017

Publication Type(s): Journal Article

Abstract:Change is ubiquitous in health care, making continuous adaptation necessary for clinicians to provide the best possible care to their patients. The authors propose that developing the capabilities of a Master Adaptive Learner will provide future physicians with strategies for learning in the health care environment and for managing change more effectively. The concept of a Master Adaptive Learner describes a metacognitive approach to learning based on self-regulation that can foster the development and use of adaptive expertise in practice. The authors describe a conceptual literature-based model for a Master Adaptive Learner that provides a shared language to facilitate exploration and conversation about both successes and struggles during the learning process.

Database: Medline

21. Priority Areas and Potential Solutions for Successful Integration and Sustainment of Health Systems Science in Undergraduate Medical Education.

Author(s): Gonzalo, Jed D; Baxley, Elizabeth; Borkan, Jeffrey; Dekhtyar, Michael; Hawkins, Richard; Lawson, Luan; Starr, Stephanie R; Skochelak, Susan

Source: Academic medicine : journal of the Association of American Medical Colleges; Jan 2017; vol. 92 (no. 1); p. 63-69

Publication Date: Jan 2017

Publication Type(s): Journal Article

Abstract:Educators, policy makers, and health systems leaders are calling for significant reform of undergraduate medical education (UME) and graduate medical education (GME) programs to meet the evolving needs of the health care system. Nationally, several schools have initiated innovative curricula in both classroom and workplace learning experiences to promote education in health systems science (HSS), which includes topics such as value-based care, health system improvement, and population and public health. However, the successful implementation of HSS curricula across schools is challenged by issues of curriculum design, assessment, culture, and accreditation, among others. In this report of a working conference using thematic analysis of workshop recommendations and experiences from 11 U.S. medical schools, the authors describe seven priority areas for the successful integration and sustainment of HSS in educational programs, and associated challenges and potential solutions. In 2015, following regular HSS workgroup phone calls and an Accelerating Change in Medical Education consortium-wide meeting, the authors identified the priority areas: partner with licensing, certifying, and accrediting bodies; develop comprehensive, standardized, and integrated curricula; develop, standardize, and align assessments; improve the UME to GME transition; enhance teachers' knowledge and skills, and incentives for teachers; demonstrate value added to the health system; and address the hidden curriculum. These priority areas and their potential solutions can be used by individual schools and HSS education collaboratives to further outline and delineate the steps needed to create, deliver, study, and sustain effective HSS curricula with an eye toward integration with the basic and clinical sciences curricula.

Database: Medline

22. The Role for Virtual Patients in the Future of Medical Education.

Author(s): White, Casey B; Wendling, Adam; Lampotang, Samsun; Lizdas, David; Cordar, Andrew; Lok, Benjamin

Source: Academic medicine : journal of the Association of American Medical Colleges; Jan 2017; vol. 92 (no. 1); p. 10-19

Publication Date: Jan 2017

Publication Type(s): Journal Article

Database: Medline

23. The Role for Virtual Patients in the Future of Medical Education.

Author(s): Robison, Don G; Bridges-Catalano, Julie; Matson, Christine C

Source: Academic medicine : journal of the Association of American Medical Colleges; Jan 2017; vol. 92 (no. 1); p. 9

Publication Date: Jan 2017

Publication Type(s): Journal Article

Database: Medline

24. Teaching the Diagnostic Process as a Model to Improve Medical Education.

Author(s): Sklar, David P

Source: Academic medicine : journal of the Association of American Medical Colleges; Jan 2017; vol. 92 (no. 1); p. 1-4

Publication Date: Jan 2017

Publication Type(s): Journal Article

Database: Medline

Exercise: Systematic Reviews

There are 7 key steps that need to be taken when carrying out a Systematic Review. Can you put them in order?

A. Quality assessment

B. Study selection

C. Synthesis

D. Data extraction

E. Define the question

F. Literature search

G. Writing up

*For assistance with carrying out a **systematic review search** or a **literature search**, please email library@uhbristol.nhs.uk.*

Answers: 1E; 2F; 3B; 4D; 5A; 6C; 7G



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