University Hospitals Bristol NHS
NHS Foundation Trust

Medical Education

Evidence Update

March 2018

(Quarterly)

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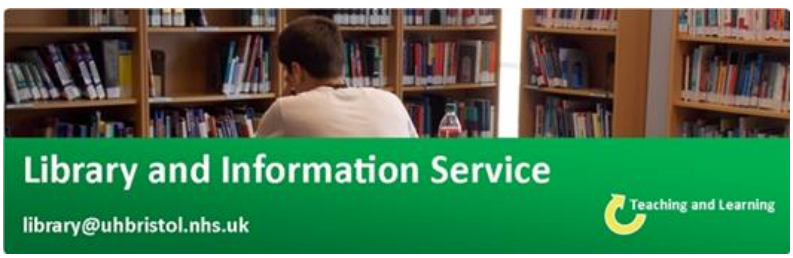

Lunchtime Drop-in Sessions

All sessions last one hour

April (12.00-13.00)

5th (Thu)	**Literature Searching**
9th (Mon)	**Critical Appraisal**
17th (Tue)	**Statistics**
25th (Wed)	**Literature Searching**

May (13.00-14.00)

3rd (Thu)	**Critical Appraisal**
11th (Fri)	**Statistics**
14th (Mon)	**Literature Searching**
22nd (Tue)	**Critical Appraisal**
30th (Wed)	**Statistics**

Your Outreach Librarian – Sarah Barrett

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Outreach: Your Outreach Librarian can help facilitate evidence-based practice for all in the team, as well as assisting with academic study and research. We also offer one-to-one or small group training in **literature searching, critical appraisal and medical statistics**. Get in touch: library@uhbristol.nhs.uk

Literature searching: We provide a literature searching service for any library member. For those embarking on their own research it is advisable to book some time with one of the librarians for a one-to-one session where we can guide you through the process of creating a well-focused literature research. Please email requests to library@uhbristol.nhs.uk

Contents

Journals: Tables of Contents

Click on journal title (+ Ctrl) for hyperlink
If you require full articles please email: library@uhbristol.nhs.uk

Medical Education
March 2018; Volume 52, Issue 3

The Clinical Teacher
February 2018; Volume 15, Issue 1

BMJ: Education
At a glance: Current topics

BMJ Simulation and Technology-Enhanced Learning
January 2018; Volume 4, Issue 1

Latest Evidence

NICE National Institute for Health and Care Excellence

Is Video-Based Education an Effective Method in Surgical Education? A Systematic Review

Source: PubMed - 12 February 2018 - Publisher: Journal Of Surgical Education
OBJECTIVE: Visual signs draw more attention during the learning process. Video is one of the most effective tool including a lot of visual cues

New medical schools to open to train doctors of the future

Five universities will be home to new medical schools offering undergraduate places under plans unveiled today to boost the number of doctors training in the region.

Source: Health Education England

Cochrane Library

Vaona A, Banzi R, Kwag KH, Rigon G, Cereda D, Pecoraro V, Tramacere I, Moja L. **E-learning for health professionals.** Cochrane Database of Systematic Reviews 2018, Issue 1. Art. No.: CD011736. DOI: 10.1002/14651858.CD011736.pub2.

UpToDate®

OpenAthens login required. Register here: https://openathens.nice.org.uk/

Departmental News

News, Research, Conferences, Training etc

Please contact us with any departmental news you wish to share with your colleagues in your Evidence Update bulletin.
library@uhbristol.nhs.uk

Library Clinic

Stop by and find out more about our services. We will be here to answer any questions you may have!

March 19th: **Welcome Centre, BRI** *10.00-16.00*

April 4th: **Foyer, Education Centre** *12.00-14.00*

April 11th: **Foyer, St Michael's Hospital** *12.00-14.00*

May 2nd: **Canteen (Level 9, BRI)** *12.00-14.00*

June 6th: **Terrace (Level 4, Education Centre)** *12.00-14.00*

June 19th: **Welcome Centre, BRI** *10.00-16.00*

July 3rd: **Welcome Centre, BRI** *10.00-16.00*

July 4th: **Canteen (Level 9, BRI)** *12.00-14.00*

August 8th: **Foyer, Education Centre** *12.00-14.00*

August 29th: **Foyer, St Michael's Hospital** *12.00-14.00*

September 5th: **Canteen (Level 9, BRI)** *12.00-14.00*

September 11th: **Welcome Centre, BRI** *10.00-16.00*

October 3rd: **Terrace (Level 4, Education Centre)** *12.00-14.00*

November 7th: **Canteen (Level 9, BRI)** *12.00-14.00*

December 5th: **Foyer, Education Centre** *12.00-14.00*

December 11th: **Welcome Centre, BRI** *10.00-16.00*

Recent Database Articles

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

1. Systematic Review of Standardized Patient Use in Continuing Medical Education.

Author(s): Wilbur, Kerry; Elmubark, Alaa; Shabana, Sara

Source: The Journal of continuing education in the health professions; ; vol. 38 (no. 1); p. 3-10

Publication Type(s): Journal Article

PubMedID: 29517612

Abstract:INTRODUCTIONThe standardized patient (SP) has assumed a fundamental role in undergraduate medical education since first conceived over 50 years ago. While widely used in student training and assessment of communication and clinical examination across health disciplines, little is known how SPs enhance knowledge or skill development among professionals. We conducted a systematic review to determine the effectiveness of SPs in continuing medical education (CME) programs.METHODSAuthors independently searched for studies published between 1966 and 2016, describing CME initiatives using SP encounters as practice for participants compared with those which did not. Studies assessing virtual patients or mannequins or employing SPs for assessment only were excluded. Learning outcomes were characterized according to the Kirkpatrick framework for determining the effectiveness of training programs.RESULTSFour hundred eighty-eight studies were identified, but only five were eligible for analysis. Most were conducted with small numbers of primary care physicians in North America. CME topics related to opioid prescribing, breast cancer examination and cancer screening, smoking cessation, and chronic asthma management. In the two studies testing knowledge, no difference was found between intervention and control groups (Kirkpatrick level 2). Improved behaviors were demonstrated in breast cancer patient examination and interview and decreased opioid-prescribing rates among selected participants in two studies (Kirkpatrick level 3). Only one study investigated patient outcomes and found reduced rates of uncontrolled asthma in practices of physicians who were assigned to SP practice encounters in the CME training (Kirkpatrick level 4).DISCUSSIONThere is little rigorous outcome study of CME programs incorporating SPs. Given the necessary human and fiscal resources associated with their use, our review highlights the need to reconsider the SP role in CME unless further purposeful evaluation to determine participant behavior change and related patient outcomes is pursued.

Database: Medline

2. Simulation-Based Learning Strategies to Teach Undergraduate Students Basic Surgical Skills: A Systematic Review

Author(s): Theodoulou I.; Nicolaides M.; Athanasiou T.; Papalois A.; Sideris M.

Source: Journal of Surgical Education; 2018

Publication Date: 2018

Publication Type(s): Article In Press

Abstract: Objective: We aimed to identify and critically appraise all literature surrounding simulation-based learning (SBL) courses, to assess their relevance as tools for undergraduate surgical education, and create a design framework targeted at standardizing future SBL. Methods: We performed a systematic review of the literature using a specific keyword strategy to search at MEDLINE database. Results: Of the 2371 potentially eligible titles, 472 were shortlisted and only 40 explored active interventions in undergraduate medical education. Of those, 20 were conducted in the United States, 9 in Europe and 11 in the rest of the world. Nineteen studies assessed the effectiveness of SBL by comparing students' attributes before and after interventions, 1 study assessed a new tool of surgical assessment and 16 studies evaluated SBL courses from the students' perspectives. Of those 40 studies, 12 used dry laboratory, 7 wet laboratory, 12 mixed, and 9 cadaveric SBL interventions. The extent to which positive results were obtained from dry, wet, mixed, and cadaveric laboratories were 75%, 57%, 92%, and 100%, respectively. Consequently, the SBL design framework was devised, providing a foundation upon which future SBL interventions can be designed such that learning outcomes are optimized. Conclusions: SBL is an important step in surgical education, investing in a safer and

more efficient generation of surgeons. Standardization of these efforts can be accelerated with SBL design framework, a comprehensive guide to designing future interventions for basic surgical training at the undergraduate level.

Database: EMBASE

3. A Clinical Librarian Embedded in Medical Education: Patient-Centered Encounters for Preclinical Medical Students.

Author(s): Blake, Lindsay; Yang, Frances M; Brandon, Hutton; Wilson, Benjamin; Page, Renee

Source: Medical reference services quarterly; 2018; vol. 37 (no. 1); p. 19-30

Publication Date: 2018

Publication Type(s): Journal Article

PubMedID: 29327991

Abstract: Adding patient encounters and simulation to the preclinical years of medical school is becoming increasingly popular. This article describes the creation of active learning opportunities by a clinical librarian that are aimed at training preclinical students through the use of simulated patient scenarios. Scenarios for second-year students walk them through the evidence-based resources needed in clinical years and beyond through a standardized patient encounter. Scenarios for first-year students involve role-play of cases where the patient and physician bring contrasting ideas to the outpatient interaction. All scenarios are carried out under the guidance of a clinician and librarian.

Database: Medline

4. Medical Students' Implicit Bias and the Communication of Norms in Medical Education.

Author(s): Hernandez, Rachael

Source: Teaching and learning in medicine; 2018; vol. 30 (no. 1); p. 112-117

Publication Date: 2018

Publication Type(s): Journal Article

PubMedID: 29240453

Abstract:ISSUEMedical educators should consider how institutional norms influence medical students' perceptions of implicit bias. Understanding normative structures in medical education can shed light on why this influence is associated with students' resistance to implicit bias.EVIDENCEExtant research across diverse fields of study uncovers and theorizes layers of norms and normative systems and how they are related to ethical behavior. This review bridges the fields of communication, bioethics, and medical education, constructing an organized foundation and common language by which researchers can build effective educational interventions. First, the nature and effects of implicit bias are described. Second, the nature of normative systems in medical education is explicated. Concepts from the fields of education and communication are transferred to medical education. Third, the structure of the communication of norms in medical education is revealed, through theoretical research in bioethics and empirical medical education research.IMPLICATIONSRecommendations are provided for medical educators to improve activities intended to encourage reflection on implicit bias. These recommendations include reframing educational activities as endeavors in "personal" development and uncovering and transforming those normative structures that encourage resistance to implicit bias.

Database: Medline

5. A systematic review of serious games in medical education: quality of evidence and pedagogical strategy.

Author(s): Gorbanev, Iouri; Agudelo-Londoño, Sandra; González, Rafael A; Cortes, Ariel; Pomares, Alexandra; Delgadillo, Vivian; Yepes, Francisco J; Muñoz, Óscar

Source: Medical education online; Dec 2018; vol. 23 (no. 1); p. 1438718

Publication Date: Dec 2018

Publication Type(s): Journal Article

PubMedID: 29457760

Available at Medical Education Online - from Europe PubMed Central - Open Access

Available at Medical Education Online - from PubMed Central

Abstract:INTRODUCTIONThe literature shows an optimistic landscape for the effectiveness of games in medical education. Nevertheless, games are not considered mainstream material in medical teaching. Two research questions that arise are the following: What pedagogical strategies do developers use when creating games for medical education? And what is the quality of the evidence on the effectiveness of games?METHODSA systematic review was made by a multi-disciplinary team of researchers following the Cochrane Collaboration Guidelines. We included peer-reviewed journal articles which described or assessed the use of serious games or gamified apps in medical education. We used the Medical Education Research Study Quality Instrument (MERSQI) to assess the quality of evidence in the use of games. We also evaluated the pedagogical perspectives of such articles.RESULTSEven though game developers claim that games are useful pedagogical tools, the evidence on their effectiveness is moderate, as assessed by the MERSQI score. Behaviourism and cognitivism continue to be the predominant pedagogical strategies, and games are complementary devices that do not replace traditional medical teaching tools. Medical educators prefer simulations and quizzes focused on knowledge retention and skill development through repetition and do not demand the use of sophisticated games in their classrooms. Moreover, public access to medical games is limited.DISCUSSIONOur aim was to put the pedagogical strategy into dialogue with the evidence on the effectiveness of the use of medical games. This makes sense since the practical use of games depends on the quality of the evidence about their effectiveness. Moreover, recognition of said pedagogical strategy would allow game developers to design more robust games which would greatly contribute to the learning process.

Database: Medline

6. Use of fictional medical television in health sciences education: a systematic review.

Author(s): Hoffman, Beth L; Hoffman, Robert; Wessel, Charles B; Shensa, Ariel; Woods, Michelle S; Primack, Brian A

Source: Advances in health sciences education : theory and practice; Mar 2018; vol. 23 (no. 1); p. 201-216

Publication Date: Mar 2018

Publication Type(s): Journal Article Review

PubMedID: 28083814

Abstract: While medical television programs are popular among health profession trainees, it is not clear to what extent these programs affect their knowledge, perceptions, and/or behaviors. Therefore, we conducted a systematic review of research evaluating associations between program exposure and outcomes. We conducted systematic literature searches in Pubmed, CINAHL, and PsycINFO. Selected studies were required to be scholarly research, involve exposure to fictionalized medical television programming by health professional students, and assess associations between exposure and outcomes. Studies were classified according to quality and factors related to population, exposure, and outcomes. Of 3541 studies identified, 13 met selection criteria. Six studies involved undergraduate medical students, one involved nursing students, two involved both medical and nursing students, two involved medical residents, one involved medical students, residents and attending physicians, and one involved graduate epidemiology students. Mean study quality according to the MERSQI was 8.27. The most commonly assessed television programs were ER and Grey's Anatomy (six each). Five studies assessed regular viewing habits, and found that fictional medical programs are popular among students and that students recall health topics from episodes. The eight studies that assessed the association with outcomes when using clips as educational tools reported high satisfaction and increased knowledge of the presented health topics. While relatively few published studies have explored influences of fictional medical television on health professional students, those conducted suggest that students often view these television programs independently and that integration of this programming into medical education is feasible and acceptable.

Database: Medline

7. Mobile Technology in E-Learning for Undergraduate Medical Education on Emergent Otorhinolaryngology-Head and Neck Surgery Disorders: Pilot Randomized Controlled Trial.

Author(s): Lee, Li-Ang; Wang, Shu-Ling; Chao, Yi-Ping; Tsai, Ming-Shao; Hsin, Li-Jen; Kang, Chung-Jan; Fu, Chia-Hsiang; Chao, Wei-Chieh; Huang, Chung-Guei; Li, Hsueh-Yu; Chuang, Cheng-Keng

Source: JMIR medical education; Mar 2018; vol. 4 (no. 1); p. e8

Publication Date: Mar 2018

Publication Type(s): Journal Article

PubMedID: 29519776

Available at JMIR medical education - from Europe PubMed Central - Open Access

Abstract:BACKGROUNDThe use of mobile technology in e-learning (M-TEL) can add new levels of experience and significantly increase the attractiveness of e-learning in medical education. Whether an innovative interactive e-learning multimedia (IM) module or a conventional PowerPoint show (PPS) module using M-TEL to teach emergent otorhinolaryngology-head and neck surgery (ORL-HNS) disorders is feasible and efficient in undergraduate medical students is unknown.OBJECTIVEThe aim of this study was to compare the impact of a novel IM module with a conventional PPS module using M-TEL for emergent ORL-HNS disorders with regard to learning outcomes, satisfaction, and learning experience.METHODSThis pilot study was conducted at an academic teaching hospital and included 24 undergraduate medical students who were novices in ORL-HNS. The cognitive style was determined using the Group Embedded Figures Test. The participants were randomly allocated (1:1) to one of the two groups matched by age, sex, and cognitive style: the IM group and the PPS group. During the 100-min learning period, the participants were unblinded to use the IM or PPS courseware on a 7-inch tablet. Pretests and posttests using multiple-choice questions to evaluate knowledge and multimedia situational tests to evaluate competence were administered. Participants evaluated their satisfaction and learning experience by the AttrakDiff2 questionnaire, and provided feedback about the modules.RESULTSOverall, the participants had significant gains in knowledge (median of percentage change 71, 95% CI 1-100, P

Database: Medline

8. Simulation-Based Skill Training for Trainees in Cardiac Surgery: A Systematic Review

Author(s): Ribeiro I.B.; Ngu J.M.C.; Lam B.-K.; Edwards R.A.

Source: Annals of Thoracic Surgery; Mar 2018; vol. 105 (no. 3); p. 972-982

Publication Date: Mar 2018

Publication Type(s): Review

Abstract: Background: Simulation-based training has been an important part of the solution to address the shortfalls in cardiac surgery training. This review was conducted to identify and systematically summarize existing evidence on outcomes and methodological quality of simulation-based skills training for cardiac surgery trainees. Methods: MEDLINE, Embase, and ERIC (Education Resources Information Center) databases were searched. Studies included peer-reviewed publications with simulation-based skill training in cardiac surgery programs with outcome measures of performance. Data extraction covered the type of skills training, simulator type and fidelity, the level of trainees, assessment tools, assessors, study design and its components, strengths and limitations, and elements required for the Medical Education Research Study Quality Instrument score. The review followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines. Results: Of 16 studies that met the criteria, only four (25%) randomized controlled trials were identified, and the remaining were observational studies. Seven observational studies (43.7%) were single-group pre-post tests. The mean number of trainees was 20.4 (SD, 14.1). Low-fidelity simulators were used in 13 studies (81.2%). Most of the studies (81.3%) were high quality based on a Medical Education Research Study Quality Instrument score of 12 or more. Evidence of assessment tool validation was absent among all studies. No study outcome measures were directed to skills transfer to the operating room or patient outcomes. Overall learning outcomes' effect sizes were consistently high (2.2; SD, 1.6), with junior residents benefitting most (effect size, 2.8; SD, 2.2) Conclusions: Simulation-based skill training is associated with improved learning outcomes for cardiac surgery trainees with large effect sizes, but more behavior-level outcomes are required to fully assess its value.Copyright © 2018 The Society of Thoracic Surgeons

Database: EMBASE

9. Enhanced Requirements for Assessment in a Competency-Based, Time-Variable Medical Education System.

Author(s): Gruppen, Larry D; Ten Cate, Olle; Lingard, Lorelei A; Teunissen, Pim W; Kogan, Jennifer R

Source: Academic medicine : journal of the Association of American Medical Colleges; Mar 2018; vol. 93 (no. 3S)

Publication Date: Mar 2018

Publication Type(s): Journal Article

PubMedID: 29485482

Abstract: Competency-based, time-variable medical education has reshaped the perceptions and practices of teachers, curriculum designers, faculty developers, clinician educators, and program administrators. This

increasingly popular approach highlights the fact that learning among different individuals varies in duration, foundation, and goal. Time variability places particular demands on the assessment data that are so necessary for making decisions about learner progress. These decisions may be formative (e.g., feedback for improvement) or summative (e.g., decisions about advancing a student). This article identifies challenges to collecting assessment data and to making assessment decisions in a time-variable system. These challenges include managing assessment data, defining and making valid assessment decisions, innovating in assessment, and modeling the considerable complexity of assessment in real-world settings and richly interconnected social systems. There are hopeful signs of creativity in assessment both from researchers and practitioners, but the transition from a traditional to a competency-based medical education system will likely continue to create much controversy and offer opportunities for originality and innovation in assessment.

Database: Medline

10. From the workshop to the workplace: Relocating faculty development in postgraduate medical education.

Author(s): Morris, Clare; Swanwick, Tim

Source: Medical teacher; Mar 2018 ; p. 1-5

Publication Date: Mar 2018

Publication Type(s): Journal Article

PubMedID: 29527971

Abstract:INTRODUCTIONPostgraduate medical education takes place almost entirely in the clinical workplace, supported by healthcare professionals who strive to combine service and educational roles. Over the past decade, we have witnessed the emergence and growth of new forms of educational activity within postgraduate medical education. Under the umbrella term of "faculty development", these activities move beyond a narrow emphasis on "teaching the teachers to teach" to a wide range of interventions focused on enhancing educational climate, educational infrastructure and educational practices within and across healthcare organizations.METHODDrawing on key developments in the UK over the last 10 years, we trace how faculty development in postgraduate medical education has evolved, illustrate the plurality of purposes, and practices currently being adopted and signal emerging trends.DISCUSSIONWe highlight that due to the location of UK medical training programs outside "the academy", innovations and developments in faculty development are largely silent in the formal medical education literature. Changing demographics, service pressures, and evolving healthcare systems continue to present serious challenges to both work-based training and learning.

Database: Medline

11. Why assessment in medical education needs a solid foundation in modern test theory.

Author(s): Schauber, Stefan K; Hecht, Martin; Nouns, Zineb M

Source: Advances in health sciences education : theory and practice; Mar 2018; vol. 23 (no. 1); p. 217-232

Publication Date: Mar 2018

Publication Type(s): Journal Article

PubMedID: 28303398

Abstract: Despite the frequent use of state-of-the-art psychometric models in the field of medical education, there is a growing body of literature that questions their usefulness in the assessment of medical competence. Essentially, a number of authors raised doubt about the appropriateness of psychometric models as a guiding framework to secure and refine current approaches to the assessment of medical competence. In addition, an intriguing phenomenon known as case specificity is specific to the controversy on the use of psychometric models for the assessment of medical competence. Broadly speaking, case specificity is the finding of instability of performances across clinical cases, tasks, or problems. As stability of performances is, generally speaking, a central assumption in psychometric models, case specificity may limit their applicability. This has probably fueled critiques of the field of psychometrics with a substantial amount of potential empirical evidence. This article aimed to explain the fundamental ideas employed in psychometric theory, and how they might be problematic in the context of assessing medical competence. We further aimed to show why and how some critiques do not hold for the field of psychometrics as a whole, but rather only for specific psychometric approaches. Hence, we highlight approaches that, from our perspective, seem to offer promising possibilities when applied in the assessment of medical competence. In conclusion, we advocate for a more differentiated view on psychometric models and their usage.

Database: Medline

12. Accreditation of Medical Education Programs: Moving From Student Outcomes to Continuous Quality Improvement Measures.

Author(s): Blouin, Danielle; Tekian, Ara

Source: Academic medicine : journal of the Association of American Medical Colleges; Mar 2018; vol. 93 (no. 3); p. 377-383

Publication Date: Mar 2018

Publication Type(s): Journal Article

PubMedID: 28746072

Abstract: Accreditation of undergraduate medical education programs aims to ensure the quality of medical education and promote quality improvement, with the ultimate goal of providing optimal patient care. Direct linkages between accreditation and education quality are, however, difficult to establish. The literature examining the impact of accreditation predominantly focuses on student outcomes, such as performances on national examinations. However, student outcomes present challenges with regard to data availability, comparability, and contamination.The true impact of accreditation may well rest in its ability to promote continuous quality improvement (CQI) within medical education programs. The conceptual model grounding this paper suggests accreditation leads medical schools to commit resources to and engage in self-assessment activities that represent best practices of CQI, leading to the development within schools of a culture of CQI. In line with this model, measures of the impact of accreditation on medical schools need to include CQI-related markers. The CQI orientation of organizations can be measured using validated instruments from the business and management fields. Repeated determinations of medical schools' CQI orientation at various points throughout their accreditation cycles could provide additional evidence of the impact of accreditation on medical education. Strong CQI orientation should lead to high-quality medical education and would serve as a proxy marker for the quality of graduates and possibly for the quality of care they provide.It is time to move away from a focus on student outcomes as measures of the impact of accreditation and embrace additional markers, such as indicators of organizational CQI orientation.

Database: Medline

13. Organisational perspectives on addressing differential attainment in postgraduate medical education: a qualitative study in the UK.

Author(s): Woolf, Katherine; Viney, Rowena; Rich, Antonia; Jayaweera, Hirosha; Griffin, Ann

Source: BMJ open; Mar 2018; vol. 8 (no. 3); p. e021314

Publication Date: Mar 2018

Publication Type(s): Research Support, Non-u.s. Gov't Journal Article

PubMedID: 29525774

Available at BMJ Open - from HighWire - Free Full Text

Available at BMJ Open - from Europe PubMed Central - Open Access

Available at BMJ Open - from PubMed Central

Abstract:OBJECTIVESTo explore how representatives from organisations with responsibility for doctors in training perceive risks to the educational progression of UK medical graduates from black and minority ethnic groups (BME UKGs), and graduates of non-UK medical schools (international medical graduates (IMGs)). To identify the barriers to and facilitators of change.DESIGNQualitative semistructured individual and group interview study.SETTINGPostgraduate medical education in the UK.PARTICIPANTSIndividuals with roles in examinations and/or curriculum design from UK medical Royal Colleges. Employees of NHS Employers.RESULTSRepresentatives from 11 medical Royal Colleges (n=29) and NHS Employers (n=2) took part (55% medically qualified, 61% male, 71% white British/Irish, 23% Asian/Asian British, 6% missing ethnicity). Risks were perceived as significant, although more so for IMGs than for BME UKGs. Participants based significance ratings on evidence obtained largely through personal experience. A lack of evidence led to downgrading of significance. Participants were pessimistic about effecting change, two main barriers being sensitivities around race and the isolation of interventions. Participants felt that organisations should acknowledge problems, but felt concerned about being transparent without a solution; and talking about race with trainees was felt to be difficult. Participants mentioned 63 schemes aiming to address differential attainment, but these were typically local or specialty-specific, were not aimed at BME UKGs and were largely

unevaluated. Participants felt that national change was needed, but only felt empowered to effect change locally or within their specialty.CONCLUSIONSRepresentatives from organisations responsible for training doctors perceived the risks faced by BME UKGs and IMGs as significant but difficult to change. Strategies to help organisations address these risks include: increased openness to discussing race (including ethnic differences in attainment among UKGs); better sharing of information and resources nationally to empower organisations to effect change locally and within specialties; and evaluation of evidence-based interventions.

Database: Medline

14. Mindfulness interventions in medical education: A systematic review of their impact on medical student stress, depression, fatigue and burnout.

Author(s): Daya, Zahra; Hearn, Jasmine Heath

Source: Medical teacher; Feb 2018; vol. 40 (no. 2); p. 146-153

Publication Date: Feb 2018

Publication Type(s): Journal Article

PubMedID: 29113526

Abstract:INTRODUCTIONMindfulness-based interventions (MBIs) have gained popularity in medical education. A systematic review was conducted to determine the effectiveness of MBIs for reducing psychological distress in undergraduate medical students.METHODSA search protocol was conducted using online databases Embase, PubMed, PsycINFO, and MEDLINE. Articles were required to meet the following criteria to be included: (1) describe a MBI or use of mindfulness exercises as part of an intervention, (2) include at least one of: stress, burnout, fatigue, or depression, as an outcome, (3) include quantitative outcomes, and (4) published in English in a peer-reviewed journal.RESULTSTwelve articles were reviewed. Seven studies reported improvements in at least one targeted outcome. Four of seven studies exploring the impact on stress reported improvements. Five articles studying depression reported reductions. One study exploring burnout reported a decrease on a single subscale. Only one study measured the impact on fatigue (no change reported). Half of studies reviewed included predominantly female samples.CONCLUSIONSMixed evidence was found for the use of MBIs for reducing psychological distress in undergraduate medical students. Future work should aim to clarify the impact of mindfulness on burnout and fatigue, and explore the replicability of improvements in male medical students alone.

Database: Medline

15. The role of 3D printing in anatomy education and medical training: A narrative review

Author(s): Li K.; Kui C.; Lee E.; Keenan I.; Wong S.; Yan B.; Tse G.; Chan J.; Wu W.; Li G.; Liu T.

Source: Journal of Anatomy; Feb 2018; vol. 232 (no. 2); p. 331

Publication Date: Feb 2018

Publication Type(s): Conference Abstract

Abstract: The popularity of three-dimensional printing (3Dp) has increased during the last decade in parallel with the development and availability of this beneficial and effective technology. 3Dp concerns the production of accurate 3D objects from a processed data set. This technology is therefore appropriate for the production of anatomical models from magnetic resonance imaging (MRI) and computed tomography (CT) data. To understand the current relevance and importance of 3Dp, it is essential to determine the best evidence supporting the use of this technology. It is also necessary to establish the presence of any barriers preventing successful utilisation of this approach. We have conducted a narrative review to identify recent literature that describes primary research with respect to the evaluation of 3Dp in anatomy and medical education. We seek to establish the effectiveness and potential roles of 3Dp in terms of the theoretical and practical benefits of this technology in anatomy education as well as cost and resource implications. We have also investigated the utility and capability of 3Dp in medical practice and the influence of this technology on medical research in order to establish and illustrate the broad applications of 3Dp in medicine. This narrative review was performed through utilising a student partnership approach whereby undergraduate students have worked collaboratively with academic educators. Terms related to 3Dp were agreed upon and PubMed searches identified primary studies published up to March 2017. Relevance of each study was determined against the four core principles: (i) Anatomy education; (ii) Surgical training; (iii) Medical research; (iv) Medical usage. We have identified several key areas where good evidence exists in support of the use of 3Dp in anatomy education and surgical training when compared to established and traditional approaches. We have also identified limitations with respect to the usage of 3Dp. While we conclude here that the current literature supports incorporation of anatomical 3Dp

models into education and training, this narrative review is intended as the basis of a future systematic review, with or without meta-analysis, of 3Dp in anatomy, surgery and medicine. Ethical approval was not required for this work.

Database: EMBASE

16. Social media use within medical education: A systematic review to develop a pilot questionnaire on how social media can be best used at BSMS

Author(s): Whyte W.; Henessy C.

Source: Journal of Anatomy; Feb 2018; vol. 232 (no. 2); p. 309

Publication Date: Feb 2018

Publication Type(s): Conference Abstract

Abstract: Since the early 2000s social media has become a major part of our daily lives, and over the past decade it has found its way into the medical profession. Despite its ubiquity, only 5 systematic reviews exist on the subject of social medial use within medical education. The reviews conclude that there are positive correlations linked to social media use however the studies are restricted by the same limitations: a lack of quantitative data and the fact that social media research fast becomes outdated. This review will therefore examine the latest studies in order to identify which questions remain to be answered and what areas need further development in order for social media to become a credible resource within medical education. The information gained from this process will be amalgamated to create a valid questionnaire which will produce quantitative data. A systematic review of Pubmed, Cochrane, PsychINFO, ERIC & Scopus was conducted following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. The search was from 1st January 2014 to the 12th January 2017 and included keywords linked with social media and medical education. 27 papers were identified: 12 qualitative and 15 quantitative. From this data a questionnaire was drafted and put to a focus group in order for it to be validated. Research Governance and Ethics Committee at BSMS confirmed that ethical approval was not needed for piloting a questionnaire. Six major themes were identified and analysed: community & interactivity, communication & feedback, learning theories, social media vs traditional didactic lectures, role of faculty and professionalism. Quantitative data was limited but highlighted the efficiency of social media use especially when Facebook and Twitter were used. After the analysis a validated questionnaire was produced. Social media can be a useful tool within the medical curriculum if implemented correctly. The final questionnaire can be used to generate quantitative data on the following questions: which platforms are most effective and for what purposes? How beneficial is social media to teaching? and What do students understand the benefits/disadvantages of academic social media platforms to be?

Database: EMBASE

17. A systematic review on critical thinking in medical education

Author(s): Chan Z.C.Y.

Source: International Journal of Adolescent Medicine and Health; Feb 2018; vol. 30 (no. 1)

Publication Date: Feb 2018

Publication Type(s): Review

Abstract: Critical thinking is the ability to raise discriminating questions in an attempt to search for better ideas, a deeper understanding and better solutions relating to a given issue. This systematic review provides a summary of efforts that have been made to enhance and assess critical thinking in medical education. Nine databases [Ovid MEDLINE(R), AMED, Academic Search Premier, ERIC, CINAHL, Web of Science, JSTOR, SCOPUS and PsycINFO] were searched to identify journal articles published from the start of each database to October 2012. A total of 41 articles published from 1981 to 2012 were categorised into two main themes: (i) evaluation of current education on critical thinking and (ii) development of new strategies about critical thinking. Under each theme, the teaching strategies, assessment tools, uses of multimedia and stakeholders were analysed. While a majority of studies developed teaching strategies and multimedia tools, a further examination of their quality and variety could yield some insights. The articles on assessment placed a greater focus on learning outcomes than on learning processes. It is expected that more research will be conducted on teacher development and students' voices.

Database: EMBASE

18. Making the leap to medical education: a qualitative study of medical educators' experiences.

Author(s): Browne, Julie; Webb, Katie; Bullock, Alison

Source: Medical education; Feb 2018; vol. 52 (no. 2); p. 216-226

Publication Date: Feb 2018

Publication Type(s): Journal Article

PubMedID: 29193365

Abstract:CONTEXTMedical educators often have prior and primary experience in other academic and clinical disciplines. Individuals seeking successful careers in the education of medical students and doctors must, at some point in their development, make a conscious transition into a new identity as a medical educator. This is a necessary move if individuals are to commit to acquiring and maintaining specialist expertise in medical education. Some achieve this transition successfully, whereas others struggle and may even lose interest and abandon the endeavour. We explored senior educators' experiences of achieving the transition into medical education and their views on what helps and what hinders the process.METHODSIn 2015 we conducted three focus groups with 15 senior medical educators. All focus group discussions were audiorecorded and transcribed verbatim. We applied transition theory to guide our deductive analysis, using Schlossberg's Four S (4S) framework to code and report participants' self-reported perceptions of those factors relating to Self, Situation, Support and Strategy that had assisted them to make a successful transition to a fully acknowledged medical educator identity. Through inductive analysis, we then identified 17 explanatory sub-themes common to all three focus groups.RESULTSBackground and circumstances, individual motivation, a sense of control, organisational support, and effective networking and information-seeking behaviour were factors identified as contributing to successful transition into, and maintenance of, a strong self-identity as a medical educator.CONCLUSIONSThe experiences of established medical educators and, in particular, an exploration of the factors that have facilitated their transition to an acknowledged self-identity as a medical educator could assist in supporting new educators to cope with the changes involved in developing as a medical educator.

Database: Medline

19. Medicine as a Community of Practice: Implications for Medical Education.

Author(s): Cruess, Richard L; Cruess, Sylvia R; Steinert, Yvonne

Source: Academic medicine : journal of the Association of American Medical Colleges; Feb 2018; vol. 93 (no. 2); p. 185-191

Publication Date: Feb 2018

Publication Type(s): Journal Article

PubMedID: 28746073

Abstract: The presence of a variety of independent learning theories makes it difficult for medical educators to construct a comprehensive theoretical framework for medical education, resulting in numerous and often unrelated curricular, instructional, and assessment practices. Linked with an understanding of identity formation, the concept of communities of practice could provide such a framework, emphasizing the social nature of learning. Individuals wish to join the community, moving from legitimate peripheral to full participation, acquiring the identity of community members and accepting the community's norms.Having communities of practice as the theoretical basis of medical education does not diminish the value of other learning theories. Communities of practice can serve as the foundational theory, and other theories can provide a theoretical basis for the multiple educational activities that take place within the community, thus helping create an integrated theoretical approach.Communities of practice can guide the development of interventions to make medical education more effective and can help both learners and educators better cope with medical education's complexity. An initial step is to acknowledge the potential of communities of practice as the foundational theory. Educational initiatives that could result from this approach include adding communities of practice to the cognitive base; actively engaging students in joining the community; creating a welcoming community; expanding the emphasis on explicitly addressing role modeling, mentoring, experiential learning, and reflection; providing faculty development to support the program; and recognizing the necessity to chart progress toward membership in the community.

Database: Medline

20. Implementing economic evaluation in simulation-based medical education: challenges and opportunities.

Author(s): Lin, Yiqun; Cheng, Adam; Hecker, Kent; Grant, Vincent; Currie, Gillian R

Source: Medical education; Feb 2018; vol. 52 (no. 2); p. 150-160

Publication Date: Feb 2018

Publication Type(s): Journal Article

PubMedID: 28949032

Abstract:CONTEXTSimulation-based medical education (SBME) is now ubiquitous at all levels of medical training. Given the substantial resources needed for SBME, economic evaluation of simulation-based programmes or curricula is required to demonstrate whether improvement in trainee performance (knowledge, skills and attitudes) and health outcomes justifies the cost of investment. Current literature evaluating SBME fails to provide consistent and interpretable information on the relative costs and benefits of alternatives.CONTENTEconomic evaluation is widely applied in health care, but is relatively scarce in medical education. Therefore, in this paper, using a focus on SBME, we define economic evaluation, describe the key components, and discuss the challenges associated with conducting an economic evaluation of medical education interventions. As a way forward to the rigorous and state of the art application of economic evaluation in medical education, we outline the steps to gather the necessary information to conduct an economic evaluation of simulation-based education programmes and curricula, and describe the main approaches to conducting an economic evaluation.CONCLUSIONA properly conducted economic evaluation can help stakeholders (i.e., programme directors, policy makers and curriculum designers) to determine the optimal use of resources in selecting the modality or method of assessment in simulation. It also helps inform broader decision making about allocation of scarce resources within an educational programme, as well as between education and clinical care. Economic evaluation in medical education research is still in its infancy, and there is significant potential for state-of-the-art application of these methods in this area.

Database: Medline

21. Integrating Social Determinants of Health Into Graduate Medical Education: A Call for Action.

Author(s): Siegel, Jennifer; Coleman, David L; James, Thea

Source: Academic medicine : journal of the Association of American Medical Colleges; Feb 2018; vol. 93 (no. 2); p. 159-162

Publication Date: Feb 2018

Publication Type(s): Journal Article

PubMedID: 29140918

Abstract: Social determinants of health (SDH) are the major drivers of health and disparate health outcomes across communities and populations. Given this, the authors assert that competency in recognizing and mitigating SDH should become a vital component of graduate medical education in all specialties. Although the most effective approaches to educating trainees about SDH are uncertain, in this Invited Commentary, the authors offer several key principles for implementing curricula focusing on SDH. These include universalization of the material, integration into clinical education, identification of space for trainee introspection, clarification of specific competencies in identification and mitigation of SDH, and creation of robust faculty development programming. The authors highlight several examples of curricular approaches to SDH, touching on orientation, experiential learning, community-based and service-learning opportunities, interprofessional activities, and the hidden curriculum. The authors argue that all clinical trainees must learn to recognize and mitigate SDH and that doing so will allow them to achieve meaning and mastery in medicine and to better meet society's pressing health needs.

Database: Medline

22. Sharing stories about medical education in difficult circumstances: Conceptualizing issues, strategies, and solutions.

Author(s): McKimm, Judy; Mclean, Michelle; Gibbs, Trevor; Pawlowicz, Ewa

Source: Medical teacher; Feb 2018 ; p. 1-8

Publication Date: Feb 2018

Publication Type(s): Journal Article

PubMedID: 29490567

Abstract:BACKGROUNDGlobal economic forces, political decisions, and natural disasters are only some of the factors that affect contemporary healthcare education. Given the centrality of health in all settings, the future

of healthcare education depends on how we overcome these difficult circumstances.METHODSThrough a series of collaborative activities involving healthcare educators from around the world and their attempts to overcome these difficulties, the authors have developed a conceptual model centered around the people involved, the impact of culture, and organizations and systems.RESULTSThe model can help to frame discussions and develop strategies about how best we, as a community of health professionals and educators, collaborate and share wisdom, experiences and resources to assist colleagues who might be struggling to deliver education. What has clearly emerged from this work is the centrality of leadership and management in effectively challenging and addressing difficult circumstances.CONCLUSIONSContemporary health professions' education leadership needs to be inclusive, mindful, compassionate and caring; echoing and role-modeling how we expect our students to be with patients and colleagues. This means being willing to confront unacceptable behaviors and speak out and challenge authority when needed. It also requires awareness and understanding of the complex systems in which healthcare education is provided.

Database: Medline

23. The Application of Observational Practice and Educational Networking in Simulation-Based and Distributed Medical Education Contexts.

Author(s): Welsher, Arthur; Rojas, David; Khan, Zain; VanderBeek, Laura; Kapralos, Bill; Grierson, Lawrence E M

Source: Simulation in healthcare : journal of the Society for Simulation in Healthcare; Feb 2018; vol. 13 (no. 1); p. 3-10

Publication Date: Feb 2018

Publication Type(s): Journal Article

PubMedID: 29117091

Abstract:INTRODUCTIONResearch has revealed that individuals can improve technical skill performance by viewing demonstrations modeled by either expert or novice performers. These findings support the development of video-based observational practice communities that augment simulation-based skill education and connect geographically distributed learners. This study explores the experimental replicability of the observational learning effect when demonstrations are sampled from a community of distributed learners and serves as a context for understanding learner experiences within this type of training protocol.METHODSParticipants from 3 distributed medical campuses engaged in a simulation-based learning study of the elliptical excision in which they completed a video-recorded performance before being assigned to 1 of 3 groups for a 2-week observational practice intervention. One group observed expert demonstrations, another observed novice demonstrations, and the third observed a combination of both. Participants returned for posttesting immediately and 1 month after the intervention. Participants also engaged in interviews regarding their perceptions of the usability and relevance of video-based observational practice to clinical education.RESULTSChecklist (P

Database: Medline

24. Utility of selection methods for specialist medical training: A BEME (best evidence medical education) systematic review: BEME guide no. 45.

Author(s): Roberts, Chris; Khanna, Priya; Rigby, Louise; Bartle, Emma; Llewellyn, Anthony; Gustavs, Julie; Newton, Libby; Newcombe, James P; Davies, Mark; Thistlethwaite, Jill; Lynam, James

Source: Medical teacher; Jan 2018; vol. 40 (no. 1); p. 3-19

Publication Date: Jan 2018

Publication Type(s): Journal Article

PubMedID: 28847200

Abstract:BACKGROUNDSelection into specialty training is a high-stakes and resource-intensive process. While substantial literature exists on selection into medical schools, and there are individual studies in postgraduate settings, there seems to be paucity of evidence concerning selection systems and the utility of selection tools in postgraduate training environments.AIMTo explore, analyze and synthesize the evidence related to selection into postgraduate medical specialty training.METHODCore bibliographic databases including PubMed; Ovid Medline; Embase, CINAHL; ERIC and PsycINFO were searched, and a total of 2640 abstracts were retrieved. After removing duplicates and screening against the inclusion criteria, 202 full papers were coded, of which 116 were included.RESULTSGaps in underlying selection frameworks were illuminated. Frameworks defined by locally derived selection criteria, and heavily weighed on academic parameters seem to be giving way to the evidencing of competency-based selection approaches in some settings. Regarding

selection tools, we found favorable psychometric evidence for multiple mini-interviews, situational judgment tests and clinical problem-solving tests, although the bulk of evidence was mostly limited to the United Kingdom. The evidence around the robustness of curriculum vitae, letters of recommendation and personal statements was equivocal. The findings on the predictors of past performance were limited to academic criteria with paucity of long-term evaluations. The evidence around nonacademic criteria was inadequate to make an informed judgment.CONCLUSIONSWhile much has been gained in understanding the utility of individual selection methods, though the evidence around many of them is equivocal, the underlying theoretical and conceptual frameworks for designing holistic and equitable selection systems are yet to be developed.

Database: Medline

25. A systematic review of leadership training for medical students.

Author(s): Lyons, Oscar; Su'a, Bruce; Locke, Michelle; Hill, Andrew

Source: The New Zealand medical journal; Jan 2018; vol. 131 (no. 1468); p. 75-84

Publication Date: Jan 2018

Publication Type(s): Research Support, Non-u.s. Gov't Journal Article Review

PubMedID: 29346359

Available at The New Zealand medical journal - from ProQuest (Hospital Premium Collection) - NHS Version

Available at The New Zealand medical journal - from EBSCO (MEDLINE Complete)

Abstract:BACKGROUNDLeadership is increasingly being recognised as an essential requirement for doctors. Many medical schools are in the process of developing formal leadership training programmes, but it remains to be elucidated what characteristics make such programmes effective, and to what extent current programmes are effective, beyond merely positive learner reactions. This review's objective was to investigate the effectiveness of undergraduate medical leadership curricula and to explore common features of effective curricula.METHODSA systematic literature search was conducted. Articles describing and evaluating undergraduate medical leadership curricula were included. Outcomes were stratified and analysed according to a modified Kirkpatrick's model for evaluating educational outcomes.RESULTSEleven studies met inclusion criteria. Leadership curricula evaluated were markedly heterogeneous in their duration and composition. The majority of studies utilised pre- and post- intervention questionnaires for evaluation. Two studies described randomised controlled trials with objective measures. Outcomes were broadly positive. Only one study reported neutral outcomes.CONCLUSIONSA wide range of leadership curricula have shown subjective effectiveness, including short interventions. There is limited objective evidence however, and few studies have measured effectiveness at the system and patient levels. Further research is needed investigating objective and downstream outcomes, and use of standard frameworks for evaluation will facilitate effective comparison of initiatives.

Database: Medline

26. Eye-tracking technology in medical education: A systematic review.

Author(s): Ashraf, Hajra; Sodergren, Mikael H; Merali, Nabeel; Mylonas, George; Singh, Harsimrat; Darzi, Ara

Source: Medical teacher; Jan 2018; vol. 40 (no. 1); p. 62-69

Publication Date: Jan 2018

Publication Type(s): Journal Article

PubMedID: 29172823

Abstract:BACKGROUNDEye-tracking technology is an established research tool within allied industries such as advertising, psychology and aerospace. This review aims to consolidate literature describing the evidence for use of eye-tracking as an adjunct to traditional teaching methods in medical education.METHODSA systematic literature review was conducted in line with STORIES guidelines. A search of EMBASE, OVID MEDLINE, PsycINFO, TRIP database, and Science Direct was conducted until January 2017. Studies describing the use of eye-tracking in the training, assessment, and feedback of clinicians were included in the review.RESULTSThirty-three studies were included in the final qualitative synthesis. Three studies were based on the use of gaze training, three studies on the changes in gaze behavior during the learning curve, 17 studies on clinical assessment and six studies focused on the use of eye-tracking methodology as a feedback tool. The studies demonstrated feasibility and validity in the use of eye-tracking as a training and assessment method.CONCLUSIONSOverall, eye-tracking methodology has contributed significantly to the training, assessment, and feedback practices used in the clinical setting. The technology provides reliable quantitative

data, which can be interpreted to give an indication of clinical skill, provide training solutions and aid in feedback and reflection. This review provides a detailed summary of evidence relating to eye-tracking methodology and its uses as a training method, changes in visual gaze behavior during the learning curve, eye-tracking methodology for proficiency assessment and its uses as a feedback tool.

Database: Medline

27. A Randomized Controlled Study of Art Observation Training to Improve Medical Student Ophthalmology Skills.

Author(s): Gurwin, Jaclyn; Revere, Karen E; Niepold, Suzannah; Bassett, Barbara; Mitchell, Rebecca; Davidson, Stephanie; DeLisser, Horace; Binenbaum, Gil

Source: Ophthalmology; Jan 2018; vol. 125 (no. 1); p. 8-14

Publication Date: Jan 2018

Publication Type(s): Journal Article

PubMedID: 28781219

Abstract:PURPOSEObservation and description are critical to the practice of medicine, and to ophthalmology in particular. However, medical education does not provide explicit training in these areas, and medical students are often criticized for deficiencies in these skills. We sought to evaluate the effects of formal observation training in the visual arts on the general and ophthalmologic observational skills of medical students.DESIGNRandomized, single-masked, controlled trial.PARTICIPANTSThirty-six first-year medical students, randomized 1:1 into art-training and control groups.METHODSStudents in the art-training group were taught by professional art educators at the Philadelphia Museum of Art, during 6 custom-designed, 1.5-hour art observation sessions over a 3-month period. All subjects completed pre- and posttesting, in which they described works of art, retinal pathology images, and external photographs of eye diseases.MAIN OUTCOME MEASURESGrading of written descriptions for observational and descriptive abilities by reviewers using an a priori rubric and masked to group assignment and pretesting/posttesting status.RESULTSObservational skills, as measured by description testing, improved significantly in the training group (mean change +19.1 points) compared with the control group (mean change -13.5 points), P = 0.001. There were significant improvements in the training vs. control group for each of the test subscores. In a poststudy questionnaire, students reported applying the skills they learned in the museum in clinically meaningful ways at medical school.CONCLUSIONSArt observation training for first-year medical students can improve clinical ophthalmology observational skills. Principles from the field of visual arts, which is reputed to excel in teaching observation and descriptive abilities, can be successfully applied to medical training. Further studies can examine the impact of such training on clinical care.

Database: Medline

28. Balint groups in undergraduate medical education: a systematic review

Author(s): Monk A.; Hind D.; Crimlisk H.

Source: Psychoanalytic Psychotherapy; Jan 2018; vol. 32 (no. 1); p. 61-86

Publication Date: Jan 2018

Publication Type(s): Article

Abstract: Objective: Though Balint groups feature increasingly in UK medical school curricula, there is no evidence-based consensus on what undergraduates might gain from participation, and how this might happen. To address this, we systematically reviewed primary research studies involving medical student Balint groups and their relationship with patient-centredness, using narrative synthesis. Data sources: Four major databases were searched from origin until 9 September 2016. The Journal of the Balint Society was hand-searched from 1971 until 9 September 2016. Study selection: English language studies reporting quantitative and/or qualitative methods examining Balint groups in medical students vs. other/no comparator. Results: Eight studies were included. Quantitative findings report statistically significant improvements to student's empathy and intellectual interest following group participation vs. control ($p = 0.03$, $p = 0.046$, respectively). Discussion content was similar across high-income countries. There was considerable heterogeneity when students rated the efficacy of groups. All evidence had high or unclear risk of bias, or was of medium/low quality. Conclusion: Balint groups might help medical students to become more patient-centred, by increasing students' empathic abilities and supporting their personal and professional growth. Groups are more subjectively effective when optional rather than compulsory. Discussion content is comparable to groups in continuing medical education.

Database: EMBASE

29. Effects of efforts to optimise morbidity and mortality rounds to serve contemporary quality improvement and educational goals: A systematic review

Author(s): Smaggus A.; Mrkobrada M.; Appleton A.; Marson A.

Source: BMJ Quality and Safety; Jan 2018; vol. 27 (no. 1); p. 74-84

Publication Date: Jan 2018

Publication Type(s): Review

Available at BMJ Quality & Safety - from BMJ Journals - NHS

Available at BMJ Quality & Safety - from BMJ Journals

Abstract: Background The quality and safety movement has reinvigorated interest in optimising morbidity and mortality (M&M) rounds. We performed a systematic review to identify effective means of updating M&M rounds to (1) identify and address quality and safety issues, and (2) address contemporary educational goals. Methods Relevant databases (Medline, Embase, PubMed, Education Resource Information Centre, Cumulative Index to Nursing and Allied Health Literature, Healthstar, and Global Health) were searched to identify primary sources. Studies were included if they (1) investigated an intervention applied to M&M rounds, (2) reported outcomes relevant to the identification of quality and safety issues, or educational outcomes relevant to quality improvement (QI), patient safety or general medical education and (3) included a control group. Study quality was assessed using the Medical Education Research Study Quality Instrument and Newcastle-Ottawa Scale-Education instruments. Given the heterogeneity of interventions and outcome measures, results were analysed thematically. Results The final analysis included 19 studies. We identified multiple effective strategies (updating objectives, standardising elements of rounds and attaching rounds to a formal quality committee) to optimise M&M rounds for a QI/safety purpose. These efforts were associated with successful integration of quality and safety content into rounds, and increased implementation of QI interventions. Consistent effects on educational outcomes were difficult to identify, likely due to the use of methodologies ill-fitted for educational research. Conclusions These results are encouraging for those seeking to optimise the quality and safety mission of M&M rounds. However, the inability to identify consistent educational effects suggests the investigation of M&M rounds could benefit from additional methodologies (qualitative, mixed methods) in order to understand the complex mechanisms driving learning at M&M rounds.

Database: EMBASE

30. Toward Competency-Based Medical Education.

Author(s): Powell, Deborah E; Carraccio, Carol

Source: The New England journal of medicine; Jan 2018; vol. 378 (no. 1); p. 3-5

Publication Date: Jan 2018

Publication Type(s): Journal Article

PubMedID: 29298154

Available at The New England journal of medicine - from ProQuest (Hospital Premium Collection) - NHS Version

Available at The New England journal of medicine - from Ovid (Journals @ Ovid)

Database: Medline

31. Competency-based medical education: the discourse of infallibility.

Author(s): Boyd, Victoria A; Whitehead, Cynthia R; Thille, Patricia; Ginsburg, Shiphra; Brydges, Ryan; Kuper, Ayelet

Source: Medical education; Jan 2018; vol. 52 (no. 1); p. 45-57

Publication Date: Jan 2018

Publication Type(s): Journal Article

PubMedID: 29076231

Abstract:BACKGROUNDOver the last two decades, competency-based frameworks have been internationally adopted as the primary educational approach in medicine. Yet competency-based medical education (CBME) remains contested in the academic literature. We look broadly at the nature of this debate to explore how it may

shape scholars' understanding of CBME, and its implications for medical education research and practice. In doing so, we deconstruct unarticulated discourses and assumptions embedded in the CBME literature.METHODSWe assembled an archive of literature focused on CBME. The archive dates from 1996, the publication year of the first CanMEDS Physician Competency Framework. We then conducted a Foucauldian critical discourse analysis (CDA) to delineate the dominant discourses underpinning the literature. CDA examines the intersections of language, social practices, knowledge and power relations to highlight how entrenched ways of thinking influence what can or cannot be said about a topic.FINDINGSDetractors of CBME have advanced an array of conceptual critiques. Proponents have often responded with a recurring discursive strategy that minimises these critiques and deflects attention from the underlying concept of the competency-based approach. As part of this process, conceptual concerns are reframed as two practical problems: implementation and interpretation. Yet the assertion that these are the construct's primary concerns was often unsupported by empirical evidence. These practices contribute to a discourse of infallibility of CBME.DISCUSSIONIn uncovering the discourse of infallibility, we explore how it can silence critical voices and hinder a rigorous examination of the competency-based approach. These discursive practices strengthen CBME by constructing it as infallible in the literature. We propose re-approaching the dialogue surrounding CBME as a starting point for empirical investigation, driven by the aim to broaden scholars' understanding of its design, development and implementation in medical education.

Database: Medline

32. Experiences of pressure to conform in postgraduate medical education.

Author(s): Grendar, Jan; Beran, Tanya; Oddone-Paolucci, Elizabeth

Source: BMC medical education; Jan 2018; vol. 18 (no. 1); p. 4

Publication Date: Jan 2018

Publication Type(s): Journal Article

PubMedID: 29298717

Available at BMC medical education - from BioMed Central

Available at BMC medical education - from Europe PubMed Central - Open Access

Available at BMC medical education - from EBSCO (MEDLINE Complete)

Abstract:BACKGROUNDPerception of pressure to conform prevents learners from actively participating in educational encounters. We expected that residents would report experiencing different amounts of pressure to conform in a variety of educational settings.METHODSA total of 166 residents completed questionnaires about the frequency of conformity pressure they experience across 14 teaching and clinical settings. We examined many individual characteristics such as their age, sex, international student status, level of education, and tolerance of ambiguity; and situational characteristics such as residency program, type of learning session, status of group members, and type of rotation to determine when conformity pressure is most likely to occur.RESULTSThe majority of participants (89.8%) reported pressure to conform at least sometimes in at least one educational or clinical setting. Residents reported higher rates of conformity during informal, rather than formal, teaching sessions, p

Database: Medline

33. Current efforts in medical education to incorporate national health priorities.

Author(s): Nair, Manisha; Fellmeth, Gracia

Source: Medical education; Jan 2018; vol. 52 (no. 1); p. 24-33

Publication Date: Jan 2018

Publication Type(s): Journal Article

PubMedID: 28771800

Abstract: As a reflection on the Edinburgh Declaration, this conceptual synthesis presents six important challenges in relation to the role of medical education in meeting current national health priorities.CONTEXTThis paper presents a conceptual synthesis of current efforts in medical education to incorporate national health priorities as a reflection on how the field has evolved since the Edinburgh Declaration. Considering that health needs vary from country to country, our paper focuses on three broad and cross-cutting themes: health equity, health systems strengthening, and changing patterns of disease.METHODSConsidering the complexity of this topic, we conducted a targeted search to broadly sample and critically review the literature in two phases. Phase 1: within each theme, we assessed the current challenges

in the field of medical education to meet the health priority. Phase 2: a search for various strategies in undergraduate and postgraduate education that have been tested in an effort to address the identified challenges. We conducted a qualitative synthesis of the literature followed by mapping of the identified challenges within each of the three themes with targeted efforts.FINDINGSWe identified six important challenges: (i) mismatch between the need for generalist models of health care and medical education curricula's specialist focus; (ii) attitudes of health care providers contributing to disparities in health care; (iii) the lack of a universal approach in preparing medical students for 21st century health systems; (iv) the inability of medical education to keep up with the abundance of new health care technologies; (v) a mismatch between educational requirements for integrated care and poorly integrated, specialised health care systems; and (vi) development of a globally interdependent education system to meet global health challenges. Examples of efforts being made to address these challenges are offered.DISCUSSIONAlthough strategies for combatting these challenges exist, the effectiveness of educational models depends on them being locally adaptable and applicable. Curricular reform must go hand-in-hand with research and evaluation to develop comprehensive futuristic models of teaching and learning that will adequately prepare health professionals to address the challenges.

Database: Medline

34. Including health promotion and illness prevention in medical education: a progress report.

Author(s): Hays, Richard

Source: Medical education; Jan 2018; vol. 52 (no. 1); p. 68-77

Publication Date: Jan 2018

Publication Type(s): Journal Article

PubMedID: 28905431

Abstract:CONTEXTIn 1988, the World Federation of Medical Education called for reform in medical education, publishing 12 recommendations. The sixth recommendation of this Edinburgh Declaration was to 'complement instruction about the management of patients with increased emphasis on promotion of health and prevention of disease'. Thirty years on, this paper reports an exploration of what has changed since then.METHODSSeveral search strategies were used, including websites of medical standards organisations, and formal searches of PubMed and Google Scholar using key words such as 'medical education standards', 'health promotion', 'illness prevention', 'effectiveness' and 'assessment'. As these searches produced more descriptive than evidence-based papers, the exploration widened to follow evolving discussions about changing emphases in medical education relevant to public health.RESULTSHealth promotion and illness prevention are in the undergraduate medical education standards of the more influential regulators. There is little evidence of the impact of this inclusion on graduate outcomes and later medical practice, although 'differently educated' doctors may have contributed to the success of broader public health strategies achieved through reorganisation of health care, media campaigns and legislation changes. There is greater success in postgraduate specialty training of general practitioners and public health doctors. The discussion about public health interventions and the roles of doctors has moved on to topics such as patient safety, the health of doctors, global health and planetary health.CONCLUSIONSThe inclusion of health promotion and illness prevention strategies in undergraduate curricula varied considerably, but was strongest in programmes claiming social accountability and responding to medical education standards of the more influential regulators. However, the contribution of medical education to improvements in health care and the health of populations is difficult to measure. It may be timely to revisit the purpose and practicality of broadening the scope of undergraduate medical curricula in public health medicine.

Database: Medline

35. Context matters when striving to promote active and lifelong learning in medical education.

Author(s): Berkhout, Joris J; Helmich, Esther; Teunissen, Pim W; van der Vleuten, Cees P M; Jaarsma, A Debbie C

Source: Medical education; Jan 2018; vol. 52 (no. 1); p. 34-44

Publication Date: Jan 2018

Publication Type(s): Journal Article

PubMedID: 28984375

Available at Medical Education - from rug.nl

Abstract:WHERE DO WE STAND NOW?: In the 30 years that have passed since The Edinburgh Declaration on Medical Education, we have made tremendous progress in research on fostering 'self-directed and independent study' as propagated in this declaration, of which one prime example is research carried out on problem-based learning. However, a large portion of medical education happens outside of classrooms, in authentic clinical contexts. Therefore, this article discusses recent developments in research regarding fostering active learning in clinical contexts.SELF-REGULATED, LIFELONG LEARNING IN MEDICAL EDUCATIONClinical contexts are much more complex and flexible than classrooms, and therefore require a modified approach when fostering active learning. Recent efforts have been increasingly focused on understanding the more complex subject of supporting active learning in clinical contexts. One way of doing this is by using theory regarding self-regulated learning (SRL), as well as situated learning, workplace affordances, self-determination theory and achievement goal theory. Combining these different perspectives provides a holistic view of active learning in clinical contexts. ENTRY TO PRACTICE, VOCATIONAL TRAINING AND CONTINUING PROFESSIONAL DEVELOPMENT: Research on SRL in clinical contexts has mostly focused on the undergraduate setting, showing that active learning in clinical contexts requires not only proficiency in metacognition and SRL, but also in reactive, opportunistic learning. These studies have also made us aware of the large influence one's social environment has on SRL, the importance of professional relationships for learners, and the role of identity development in learning in clinical contexts. Additionally, research regarding postgraduate lifelong learning also highlights the importance of learners interacting about learning in clinical contexts, as well as the difficulties that clinical contexts may pose for lifelong learning. However, stimulating self-regulated learning in undergraduate medical education may also make postgraduate lifelong learning easier for learners in clinical contexts.

Database: Medline

36. Coordinating medical education and health care systems: the power of the social accountability approach.

Author(s): Boelen, Charles

Source: Medical education; Jan 2018; vol. 52 (no. 1); p. 96-102

Publication Date: Jan 2018

Publication Type(s): Journal Article

PubMedID: 28884465

Abstract:CONTEXTAs the purpose of medical education is to produce graduates able to most effectively address people's health concerns, there is general agreement that coordination with the health care system is essential. For too long, coordination has been dealt with in a subjective manner with only few landmarks to ensure objective and measurable achievements. Over the last 30 years, since the Edinburgh Declaration on medical education, progress has been made, namely with the concept of social accountability.METHODSThe social accountability approach provides a way to plan, deliver and assess medical education with the explicit aim to contribute to effective, equitable and sustainable health system development. It is based on a system-wide scope exploring issues from identification of people's and society's health needs to verification of the effects of medical education in meeting those needs. A wide international consultation among medical education leaders led to the adoption of the Global Consensus on Social Accountability of Medical Schools.EXPERIENCESBenchmarks of social accountability are in the process of being conceived and tested, enabling medical schools to steer medical education in a more purposeful way in relation to determinants of health. A sample of schools using the social accountability approach claims to have had a positive influence on health care system performance and people's health status.CONCLUSIONImproved coordination of medical education and other key stakeholders in the health system is an important challenge for medical schools as well as for countries confronted with an urgent need for optimal use of their health workforce. There is growing interest worldwide in defining policies and strategies and supporting experiences in this regard.

Database: Medline

37. "Aspirations of people who come from state education are different": how language reflects social exclusion in medical education.

Author(s): Cleland, Jennifer; Fahey Palma, Tania

Source: Advances in health sciences education : theory and practice; Jan 2018

Publication Date: Jan 2018

Publication Type(s): Journal Article

PubMedID: 29368073

Abstract: Despite repeated calls for change, the problem of widening access (WA) to medicine persists globally. One factor which may be operating to maintain social exclusion is the language used in representing WA applicants and students by the gatekeepers and representatives of medical schools, Admissions Deans. We therefore examined the institutional discourse of UK Medical Admissions Deans in order to determine how values regarding WA are communicated and presented in this context. We conducted a linguistic analysis of qualitative interviews with Admissions Deans and/or Staff from 24 of 32 UK medical schools. Corpus Linguistics data analysis determined broad patterns of frequency and word lists. This informed a critical discourse analysis of the data using an "othering" lens to explore and understand the judgements made of WA students by Admissions Deans, and the practices to which these judgments give rise. Representations of WA students highlighted existing divides and preconceptions in relation to WA programmes and students. Through using discourse that can be considered othering and divisive, issues of social divide and lack of integration in medicine were highlighted. Language served to reinforce pre-existing stereotypes and a significant 'us' and 'them' rhetoric exists in medical education. Even with drivers to achieve diversity and equality in medical education, existing social structures and preconceptions still influence the representations of applicants and students from outside the 'traditional' medical education model in the UK. Acknowledging this is a crucial step for medical schools wishing to address barriers to the perceived challenges to diversity.

Database: Medline

38. The UK medical education database (UKMED) what is it? Why and how might you use it?

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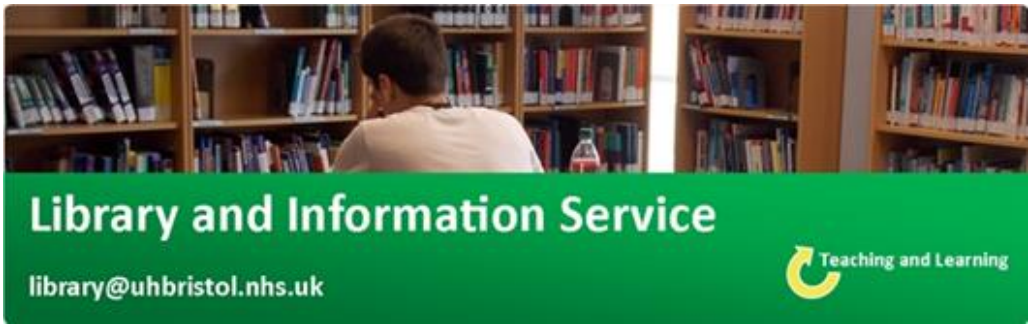
Abstract:BACKGROUNDEducating doctors is expensive and poor performance by future graduates can literally cost lives. Whilst the practice of medicine is highly evidence based, medical education is much less so. Research on medical school selection, undergraduate progression, Fitness to Practise (FtP) and postgraduate careers has been hampered across the globe by the challenges of uniting the data required. This paper describes the creation, structure and access arrangements for the first UK-wide attempt to do so.OVERVIEWA collaborative approach has created a research database commencing with all entrants to UK medical schools in 2007 and 2008 (UKMED Phase 1). Here the content is outlined, governance arrangements considered, system access explained, and the potential implications of this new resource discussed. The data currently include achievements prior to medical school entry, admissions tests, graduation point information and also all subsequent data collected by the General Medical Council, including FtP, career progression, annual National Training Survey (NTS) responses, career choice and postgraduate exam performance data. UKMED has grown since the pilot phase with additional datasets; all subsequent years of students/trainees and stronger governance processes. The inclusion of future cohorts and additional information such as admissions scores or bespoke surveys or assessments is now being piloted. Thus, for instance, new scrutiny can be applied to selection techniques and the effectiveness of educational interventions. Data are available free of charge for approved studies from suitable research groups worldwide.CONCLUSIONIt is anticipated that UKMED will continue on a rolling basis. This has the potential to radically change the volume and types of research that can be envisaged and, therefore, to improve standards, facilitate workforce planning and support the regulation of medical education and training. This paper aspires to encourage proposals to utilise this exciting resource.

Database: Medline



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