

safety challenges on an in-patient ward. Then, via written responses to open-ended prompts, participants were given 15 minutes to identify the interns' behaviours and attitudes that reflected a lack of systems thinking and interfered with a culture of safety, and to suggest actions needed for systems improvement. Responses were categorised using a rubric we developed based on EPA 13 with the following eight components: (i) overall view of the intern's ability to deliver safe care; (ii) lack of acknowledgement of his role in the errors that occurred; (iii) inconsistency in demonstrating common safety behaviours; (iv) tendency to be frustrated by system safety requirements; (v) tendency to be a passive observer; (vi) tendency to take a passive role in safety improvement activities; (vii) tendency to communicate in a rigid, rule-based manner; and (viii) global assessment of the participants' ability to identify behaviours and attitudes that contribute to errors, and suggest system improvement actions.

What lessons were learned? With a relatively simple tool, we assessed our medical school graduates' ability to recognise system failures and contribute to a culture of safety. All participants recognised the intern's lack of hand washing and his frustration when he was required to fill out a form as problematic, but only one participant noted the intern's defensiveness when critiqued for his errors as an issue that interferes with safety and improvement. No participant could suggest strategies to remediate workarounds, and overall only 37% of participants suggested there were any actions needed to prevent errors and improve safety. These findings suggest that although all graduates can recognise safety issues when prompted, most lack the ability to contribute to a culture of safety. This may be a result of limited opportunities for students to learn by actively engaging in safety-improvement activities. A standardised simulation-based learning approach could close this gap and enhance the practice-readiness of medical school graduates.

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Correspondence: Grace Ng, New York Simulation Center for the Health Sciences, 3rd Floor, C&D Building, 462 1st Avenue, New York, New York, USA. Tel: 646 501 4010;

E-mail: grace.ng@nyumc.org

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Dignity in adolescent health care: a simulation-based training programme

Daniel Hardoff, Assaf Gefen, Doron Sagi & Amitai Ziv

What problems were addressed? Respecting human dignity and tending to human vulnerability with an empathic attitude, should be an integral component of medical practice.¹ Education for dignity in health care should aim to achieve a culture of caring and behaviours that may improve effective communication. The medical literature has few publications focusing on training physicians to address human dignity issues in adolescent health care. We present a simulation-based training programme that focuses on a dignifying approach during encounters with adolescents and their parents, aiming to improve physicians' communicative competence in adolescent health care.

What was tried? During a period of 1 year, 97 primary care physicians attended eight 1-day simulation-based workshops at the Israel Center for Medical Simulation that focused on a dignifying approach when encountering adolescents and their parents.

Following an introductory lecture on human dignity in medical practice, each workshop presented seven simulated scenarios, presenting typical adolescent health care problems, with dilemmas that require a dignifying approach. The scenarios' topics included the following issues: opposing attitudes of parents and adolescents regarding a proposed medical treatment (parental objection to Ritalin and adolescent refusal to undergo chemotherapy); confidentiality requested by the adolescent patient that might either be kept (adolescent pregnancy and adolescent disclosure of homosexuality) or need to be breached (adolescent's suicidal plans and adolescent disclosing sexual abuse by parent); and parental aggressive behaviour toward the physician (parent discovering contraceptive pills prescribed to his adolescent daughter without parental consent). Following the simulation exercises the encounters were discussed with all participants of each workshop using video recordings of the encounters. Participants could observe different approaches toward each dilemma while the workshop's facilitators highlighted the human dignity aspects.

What lessons were learned? Assessment of the workshop's contribution to the physicians' use of a dignifying approach was based on pre-workshop and 3-months post-workshop self-report 5-point Likert-scale questionnaires that explored participants'

sense of competence and skills in using the dignifying approach in adolescent health care. Post-workshop questionnaires were completed by 41 (42%) participants. Personal characteristics were similar for the post-workshop responders and non-responders. Attrition analysis did not reveal any associations for any personal characteristics, thus allowing the results to be considered relevant to the whole project's cohort. The value of this project is evidenced by the participants' assessments of the workshop's perceived contribution to their communicative skills. Competence topics received higher scores in the post-workshop questionnaires ($p < 0.001$). The significance of utilising the dignifying approach was rated high to very high by 90% of participants and 70% stated that the workshop influenced their behaviour in the clinic. The evaluation of this project was based merely on the participants' subjective reports without objective confirmation of these promising findings. The project's methodology may be applied to train physicians from various disciplines who wish to improve their communication skills by adopting a dignifying approach in the health care they provide to their patients.

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Correspondence: Daniel Hardoff, Israel Center for Medical Simulation, the Chaim Sheba Medical Center, Tel Hashomer, 52621, Israel. Tel: 972 3530 5700; E-mail: drhardoff@gmail.com
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African answers to African problems using mobile technology

Jan Kuehne & Lianne Keiller

What problems were addressed? It is a challenge for clinicians to reconcile the curriculum with lived learning experiences. This task is made increasingly difficult by the demands placed on clinicians to provide additional medical services to ever increasing numbers of patients while also teaching medical students. Fourth-year medical students from the University of Cape Town participate in a 2-week clinical attachment to a primary care Community Health Centre (CHC) in Khayelitsha, Cape Town, South Africa. One of the features of this rotation is a 1-day attachment to the antiretroviral (ARV)/

tuberculosis (TB) clinic. There is limited time for clinical tutorials on treatment protocols imperative to effective TB/human immunodeficiency virus (HIV) patient care at the primary care level. Mobile technology has been suggested as a solution to the problem, but limitations in time and human and financial resources affect the feasibility of this method of education in Africa. The educational value of using self-produced video-clips to supplement face-to-face clinical teaching in a busy clinic deserved evaluation.

What was tried? We designed a mobile technology-enabled resource for teaching and learning in the workplace that would not disrupt clinical service delivery.

Using a Perspex box, lamp and smartphone, the clinician recorded two short (<15 minute) video-clips on patient management. No special media software was used to edit the video other than that on the smartphone. The film was shot in one go from a set script. These videos addressed issues of ARV treatment and diagnostics and treatment of drug-resistant TB based on repeated face-to-face tutorials given by the clinician. The videos were uploaded onto YouTube© and viewed on the clinicians' mobile devices in the clinic. The Kirkpatrick framework of programme evaluation was utilised to assess the utility of the video-clips in the clinic. Student feedback was elicited through five focus group discussions. Pre- and post-intervention questionnaires were used to demonstrate gain in knowledge and video usage. Ethical approval was granted by the University of Cape Town HREC - Human Research Ethics Committee.

What lessons were learned? Short video-clips in the real-time of a busy primary care setting resulted in student satisfaction and knowledge gain. The videos provided students with the opportunity to 'attend' a tutorial while the clinician provided care to patients needing ARV/TB treatment. The students liked that the video-clips were short, scripted and linked to a context, and that there was the ability to ask questions. This kind of contextual learning points to the concept that video-clips should not be used as a decontextualised teaching tool, and that 'contextual knowledge is developed through processes of socialisation and participation rather than exclusively through formal means'.¹

Technology provides opportunities to address the difficulties clinicians face within the African clinical education context without the first-world costs. Contextual just-in-time learning should be the key driving factor for innovation of this nature. Mobile technology allows medical education to become more integrated within the context