Testing educational tools for Public Health learning in the Health Sciences curricula in Africa

Astrid Turner, Public Health Medicine specialist and lecturer at the School of Health Systems and Public Health (SHSPH), University of Pretoria. She is responsible for the coordination of public health teaching in the undergraduate curriculum at the SHSPH and her current areas of interest include medical education, health economics and malaria. Astrid.Turner@up.ac.za

Public health (PH) has a population focus that focuses primarily on prevention of illness and promotion of health through the use of evidence-based research and practice. For this reason PH holds little interest for medical students who focus on the individual with disease outcomes. The disinterest on the part of the medical students, the primary post-graduate focus of PH, and the shortage of PH professionals each are unique challenges that highlight the need to capture the interest of medical students and to communicate the relevance of the inclusion of PH in the medical curriculum. But PH is a key component in the competency-based medical education (CBME) frameworks that are used in several countries. Amongst other objectives, CBME seeks to ensure that graduating health professionals have the competencies – including PH competencies – required to meet the demands of the health system and society.

Two developments in the South African medical education arena have shown strides towards a CBME framework in public health. In 2012, several PH academics and educators initiated a process to develop a PH competency framework for medical students. In 2014, the Health Professions Council of SA (HPCSA) adapted the Canadian Medical Education Directives for Specialists (CanMEDS) framework for its purposes and outlined key competencies – including competencies related to public health – according to important roles (1).

The poor opinion of medical students on the educational experience of PH in their curriculum is common (2-3) and educators have tested many strategies and interventions to improve the students' learning experience in public health in other contexts (4-6).

Currently, a range of tools such as traditional teaching guides and templates for presentations, case study scenarios, information graphic ("infographic") materials, competency-based assessment tools, simulation programmes, manuals, links to informative websites and social media platforms and others combining new interactive technologies (e.g. keypad responders) exist for the majority of clinical disciplines (7-10). Apart from a few institutions abroad, there appears to be a lack of such educational tools – and evaluations of their effectiveness - in the public health arena and more so in the undergraduate environment.

One possible strategy to improve the learning about PH in the undergraduate medical curriculum is to test educational tools that have been successfully used elsewhere. A Scholarship of Teaching and Learning (SoTL) from the Faculty of Education in the Health Sciences Faculty at the University of Pretoria afforded the satellite organizers with an ideal opportunity to identify and test existing educational tools that could be used for teaching public health in the local undergraduate medical curriculum. This SoTL project is aligned with the regulatory requirement by the HPCSA to ensure the inclusion of public health in the medical curriculum and the trend to ensure that key competencies, including public health, are measurable. In addition this project will advance the work of the national group of interested PH educators to consolidate the national competency framework for PH in the medical curriculum that would support the HPCSA competency standards.

Thus far, tools have been identified and incorporated into a draft online platform. In time, existing, adapted and new tools will be housed on a national repository that would be freely accessible to students, educators and PH professionals.

Identifying key features and drawbacks of the tools

During the PHASA conference a satellite session was held as part of the SoTL project. For a selection of tools included in the project, groups of attendees discussed whether the tool would be appropriate, applicable, useful and accessible; key features that made it attractive; its application and challenges/drawbacks to its use. An overview of the results of the discussions is provided in Table 1.

Table 1: Summary of group discussions on tools

Educational tool/aid	Key features of tool/s	Drawbacks to using tool/s
Special interest group (students)	Can be used in all health sciences; also get participants via social media and word of mouth. Can market and build in incentives: credits for participation; certificate; food. Can link to a cause for advocacy.	Sustaining interest. Practicalities like time to meet etc.
Games	Appropriate, accessible, many examples. Interesting. Small group tasks.	Technical – PC/Wi-Fi; training in the area. Complexity (time).
Infographics & other (Pecha Kucha)	Can also be used by academics, not just students. Allows people to see the big picture Creativity and new skill. Other uses to consider: evaluation, quiz. Infographic: can get groups to collaborate online and contribute. Can use new tools such as Pecha Kucha and films for a more powerful impression.	

In addition, during the session Prinitha Pillay shared the VOICE advocacy tool (http://www.rhap.org.za/voice-project-manual/) with the group and encouraged educators to familarise themselves with the tool which is a useful resource to achieve one of the more complex PH competencies.

It is hoped that those that attended the session will also continue to participate in the project by either participating in testing some tools or participating in a national network of public health educators.

For those who were not at the satellite session and who would like to know more or would like to test or contribute a tool and share their experiences, please contact Astrid Turner Astrid.turner@up.ac.za or Liz Wolvaardt Liz.wolvaardt@up.ac.za. The repository (under construction) is available online. https://ourpublichealthsa.wordpress.com/

The author hereby acknowledges Liz Wolvaardt and Prinitha Pillay for their contributions to the project and satellite session.

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