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### Time to go Global: A consultation on Global Health Competencies for postgraduate doctors

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Title: Time to go Global: A consultation on Global Health Competencies for Doctors

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#### Abstract

Background: There is increasing recognition of the effects of globalisation on health and healthcare. We solicited the views of wide-ranging stakeholders in order to develop core global health competencies for postgraduate doctors.

Methods: Published literature and existing curricula informed writing of seven global health competencies for consultation. A modified policy Delphi involved an online survey and face-to-face and telephone interviews over three rounds.

Results: Over 300 stakeholders participated, including doctors, other health professionals, policymakers and members of public from all continents of the world. Participants indicated that global health competence is essential for postgraduate health professionals. Concerns were expressed about overburdening curricula and identifying what is 'essential' for whom. Conflicting perspectives emerged about the importance and relevance of different global health topics.

Five core competencies were developed: 1.Diversity, human rights and ethics; 2.Environmental, social and economic determinants of health; 3.Global epidemiology; 4.Global health governance; and 5.Health systems and health professionals.

Conclusions: Global health can bring important perspectives to postgraduate curricula, enhancing the ability of doctors to provide quality care. These global health competencies require tailoring to meet different trainees' needs and facilitate their incorporation into curricula. Healthcare and global health are ever-changing; therefore the competencies will require regular review and update.

#### Introduction

In our increasingly interdependent world, global health is relevant to all health professionals. There is a complex interplay between wider determinants of health, population movement, and shifting patterns of health and disease. Health professionals are required to deliver high quality care to patients with diverse needs and backgrounds. Postgraduate education must evolve to prepare health professionals to address the health challenges that globalisation brings. <sup>2</sup>

The potential benefits for health systems of adopting a global health perspective in healthcare practice and management are well recognised.<sup>3 4 5 6 7</sup> Global health education aims to awaken health professionals to the interplay between local and global health, health systems and globalisation. Reduction of health inequalities and improvement of health and well-being can only be realised if health professionals understand the global arena in which they are working.

The need for appropriate global health training has been repeatedly raised, <sup>8</sup> and UK Royal Colleges have responded to this call with conferences, <sup>9</sup> position statements, <sup>10</sup> and strategies. <sup>11</sup> <sup>12</sup> Despite this, the Commission on Medical Education for the 21<sup>st</sup> Century noted "a mismatch between present professional competencies and the requirements of an increasingly interdependent world." A review of eleven UK postgraduate medical and surgical curricula found that only six contained any specific global health competencies, but all curricula contained generic competencies for which a global perspective could be advantageous. <sup>13</sup>

In undergraduate medical education, global health learning outcomes have been proposed <sup>14</sup>. The General Medical Council includes the learning outcome: "Discuss from a global perspective the determinants of health and disease and variations in health care delivery and medical practice" for UK medical undergraduates. <sup>15</sup> Global health competencies have also been explored for UK paediatricians <sup>16</sup> and North American postgraduate health professionals. <sup>17</sup> However, there is no current consensus on the minimum global health competencies required of UK postgraduate doctors, and current curricula vary significantly in terms of global health coverage. <sup>13</sup> <sup>18</sup>

This study aimed to develop core global health competencies relevant for all postgraduate doctors in the UK, and to provide findings that can inform curricula in other countries and for other health professionals.

#### Methods

We carried out a modified policy Delphi consultation to gather and incorporate wideranging views of stakeholders. Consultation took place between March and June 2015 and allowed broad consultation (round one), followed by in-depth discussion with experts (round two), then further consultation with all participants (round three).

The authors formed the committee for the consultation. We reviewed published literature and existing postgraduate medical curricula and proposed seven key global health

competencies. This draft competency document was developed as a basis for consultation in round one (supplementary file 1), which represents the main modification from the standard policy Delphi.

#### Round one

An online questionnaire was circulated to patient, health professional, educator and academic groups who were asked to cascade the questionnaire through their networks and on social media (supplementary file 2). The questionnaire included information about the study and the anonymous use of responses. It invited multiple choice and free text responses about the relevance and feasibility of the competencies for UK health professionals. Participants were invited to offer ideas of how each competency may link to training or work of health professionals in the UK. Consent to participation was deemed implicit in taking the survey. To incentivise participation, we offered participants chance to win a book token. The survey remained open for two weeks.

To inform revision of the competency document for round two, one author compiled descriptive statistics from quantitative results and two authors independently identified themes arising from the qualitative data. Not all suggestions could be accommodated, with the most common reasons for exclusions being conflicting opinions from participants and suggested additions that were beyond the scope of the document. Where there were conflicting opinions, we reached consensus through discussion and reference to published literature, then explored the topic further in round two.

#### Round two

In round two, we interviewed key stakeholders, including patient representatives, global health educators, clinical leaders and trainee representatives. We sought comments on the updated competency document and contentious areas in round one. We developed a participant information sheet and structured interview proforma. Telephone or face-to-face interviews were each carried out by one researcher, who took notes during the interview. Participants were offered a book token to reward their participation. Round two lasted three weeks.

Interview notes were compiled and used to explore themes, including areas of disagreement, drawing on advice from experts (e.g. in economics and ethics) and reference to published literature. We achieved consensus and updated the competencies for round three.

#### Round three

In round three, we invited all first-round participants who had provided a contact address and all second-round participants to comment on the competency document and verify whether their comments had been adequately addressed. Comments were solicited via online questionnaire, which was emailed to participants with the updated document. The survey remained open for one week, with a reminder sent after four days.

We compiled responses and used them to inform the final competencies. We noted areas of ongoing disagreement between participants as discussion points.

#### Results

Figure 1: Consultation participants

#### Core Global Health Competencies

Five interrelated competencies were defined (figure 2 and supplementary file 3).

Figure 2: Global Health Competencies for Doctors

In all rounds over 60% of participants indicated that all of the proposed competencies are relevant to doctors. Participants provided wide-ranging examples of how they relate to training and practice. They felt that the level of detail to which a trainee would need to address each competency would vary depending on their specialty. The competencies were deemed less relevant to and demonstrable by non-medical health professionals. We addressed this feedback by expanding the range of knowledge areas and practice examples provided within each competency to represent the diversity of focuses that may be needed. It is also acknowledged in the introduction of the final competencies document that educators will need to tailor these competencies to trainees' learning needs.

In all rounds, concerns were expressed by participants about overburdening curricula. In response, we amalgamated interrelated competencies and refined competencies such that global health topics can be incorporated into curricula by expanding (rather than adding to the number of) existing competencies. For example to 'demonstrate an awareness of equity in healthcare access and delivery' is a competency frequently encountered in training curricula, which can be enhanced by including a global health perspective such as; 'consider barriers faced by asylum seekers, undocumented migrants, and survivors of torture'.

Participants called for clarity of language, terms and intended audience, which we addressed by adding definitions and revising the document for clarity. Alignment of the competencies with an established learning taxonomy was suggested and we did this using Bloom's taxonomy.<sup>20</sup>

Participants felt that the competencies should reflect a person-centred approach to healthcare, focusing on the patient experience. We refined the competences to this effect. It is recommended that a person-centred approach to learning is taken to reflect that the relevance of learning about global health is to ultimately improve patient care.

Whether global health should be taught through a global health framework, or structured according to existing health professional competencies was discussed. Some participants felt that an ecological model (from population-level down to individual-level topics) should structure learning in global health; others felt that the competencies would appear more relevant if they began with competencies focused on interaction with individuals. Further conflicting perspectives emerged about the relative importance and relevance of each competency. In response a statement and diagram to clarify that all competencies are

interrelated and equally important has been included in the final document. Integration of the competencies into curricula and approach to learning should be tailored to each professional field.

#### Competency 1: Diversity, human rights and ethics

For round one, competencies included 'Human rights and ethics' and 'Cultural diversity and health', which respectively 92% and 93% of participants thought were appropriate and feasible competencies for doctors, and 86% and 89% thought were appropriate and feasible for all postgraduate health professionals. After round one, we amalgamated these competencies into 'Diversity, human rights and ethics'.

#### Competency 2: Environmental, social and economic determinants of health

Competencies before round one included 'Socio-economic determinants of health' and 'Environmental determinants of health', which were deemed appropriate and feasible for doctors by 88% and 72% of participants respectively, and appropriate and feasible for all health professionals by 68% and 54% respectively. In all rounds, comments about environmental determinants of health were at two extremes: some participants stated that understanding environmental issues and their transnational nature is essential for health professionals; others felt that addressing environmental issues is beyond the remit of clinicians. Attempting to respect both views, we included environmental determinants of health within a competency on socio-economic determinants and developed tangible practice examples to highlight how environmental issues may fall within the role of health professionals.

#### Competency 3: Global epidemiology

In round one, 85% and 56% of participants thought that 'Global burden of disease' was an appropriate and feasible competency for doctors and for all postgraduate health professionals respectively. Multiple participants stated that the knowledge areas were too specific and medical to be relevant to non-medical health professionals or even doctors in certain specialities. Some participants suggested that there should be more focus on certain disease areas (mainly non-communicable diseases and mental health), and certain patient groups (older people, refugees, asylum seekers and undocumented migrants). We added more attention to these disease groups and people. We replaced specific disease examples with broader and more accessible examples.

Participants commented that there should be a shift of focus from disease and its treatment to health and its promotion. We made changes throughout the competency (including referencing demographic transition rather than problems of ageing populations), and changed the title of the competency to 'Global epidemiology'.

#### Competency 4: Global health governance

This competency was deemed appropriate and feasible for doctors and for all health professionals by 83% and 58% of participants respectively. Some participants commented that this competency is beyond the learning needs of health professionals. We revised the competency to ensure simplicity and clear relationship to health professional roles.

Participants suggested many additions, such as health impact assessment, transnational health threats and international resources for health (e.g. transplant organs). To avoid being directive and overburdening, we included only overarching and commonly-used concepts.

#### Competency 5: Health systems and health professionals

In round one, the competency 'Health systems' was rated appropriate and feasible for doctors and for all health professionals by 82% and 60% of participants respectively. Many participants felt that health professionals lack understanding of their own health system, therefore understanding other health systems is not feasible; others felt that understanding the components of a health system with examples from other countries could aid comprehension of the local health system.

In round two, participants highlighted the importance of understanding how health system configuration and healthcare workers' roles affect population health; therefore we added further reference to health professionals' roles, migration and work abroad.

#### Discussion

This is a first large scale consultation on global health competencies for UK doctors, consulting over 300 diverse stakeholders with discussion and reflection on global health competencies for postgraduate health professional training. The resulting five core competencies provide an achievable minimum level of core global health competence, required by all postgraduate doctors. The competencies may also inform curriculum development for other postgraduate health professionals. Attainment of these competencies by a medical workforce would help to ensure that health services are equipped to care for diverse populations, deal with global influences on health, and meet health challenges of the future.

The consultation process evoked discussion and controversy. It aimed to develop 'core competencies' adaptable to postgraduate health professionals in the UK. Analysis of the responses from participants confirmed that learning needs are diverse and views of what is relevant and what is essential learning vary amongst stakeholders. An individual's views on the relevance of global health competencies may be subject to the individual's type of work, location, level of responsibility, previous exposure to this subject area or conceptualisation of professionalism, social accountability and the roles of health professionals.

Competencies areas identified in this study are supported by previous work, such as that developing global health learning outcomes for medical undergraduates<sup>14</sup>, competencies for UK postgraduate paediatricians<sup>16</sup> and competencies for USA health professionals<sup>17</sup>, and by forthcoming competencies from the UK Department for International Development (personal communication); all of which identify similar competency areas. The attempt to incorporate global health within core curricula is advocated in previous literature on internationalization.<sup>21</sup>

The findings of this study diverge from previous studies in a number of ways, highlighting the evolving nature of global health and health professional education dialogues. Examples of these areas of divergence include (i) the incorporation of ethics within a competency addressing diversity and human rights, (ii) the equal attention to environmental determinants of health alongside social and economic determinants, (iii) the more indepth exploration of global health governance and health systems as they impact on the design and delivery of services locally, and (iv) a step away from global burden of disease towards a focus on health promotion by using the term 'global epidemiology'. This reinforces the importance of ongoing review and update of health professional curricula to reflect the changing nature and understanding of health and healthcare in our ever more globalized world.

Strengths of this study include the number participants and diversity of their backgrounds, which allowed the combination of perspectives from health professionals in training, key health leaders and lay people. Although the majority of respondents worked in the UK, we also gleaned the opinion of those working in other parts of the world, including low and middle income countries.

Limitations included resource constraints affecting study design the representativeness of the sample surveyed. We encouraged participants to cascade the survey via their networks and social media, and the response rate for round one cannot be calculated. Although the study involved a large number of participants and multiple interactions with study coordinators, the addition of face-to-face group discussions could have generated further ideas and in-depth discussion of contentious issues. Furthermore, resource limitations prevented us from recording and transcribing interviews, therefore there was risk of loss of depth of findings in round two. The identification of participants was dependent on health groups, networks and experts identified by, known or recommended to the authors, therefore the population sampled may not represent the full diversity of stakeholders. The predomince of doctors may have biased views regarding the relevance of competencies for non-medical health professionals.

#### Recommendations

Based on the findings of this study, we recommend that:

 all postgraduate medical education bodies identify how these competencies relate to their trainees' learning needs and incorporate global health into their existing curricula,

- non-medical health professional educators explore how these competencies can be adapted for their trainees, guided by consultation with trainees and other stakeholders, and incorporate the relevant global health competencies,
- new learning, teaching and assessment mechanisms to address these competencies is developed, delivered and evaluated, and
- regular review of global health competencies is undertaken.

In the UK, the need for improved training of health care professionals and creation of healthcare environments to support global health initiatives has been identified. <sup>22,23</sup> Incorporation of core competencies into existing curricula can ensure that health professionals are equipped to care for diverse populations, deal with global influences on health, and meet health challenges of the future.

Conclusions

Comment [c1]: To write

#### Authors' contributions

The design and conduct of the project and reporting of the results was undertaken by the all authors. JH, CB, JW and LP developed the concept for the project. CS, JW, LP, MD, CB, and JH designed a protocol and secured funding. SW designed the revised protocol and coordinated the project. The final draft for consultation had contributions from all authors. AM and SW wrote information for participants. CS, MvS, AM, JE, LO, CB, JH and SW carried out thematic analysis after round one. JW contacted interviewees and coordinated interviews. CS, MvS, LO, MD, CB, JW, JH, LP and SW conducted interviews. SW and MvS compiled results from round 3. All authors carried out analysis and editing of the document following rounds 2 and 3. SW wrote the first draft of this article, which was reviewed and edited by all authors. SW acts as a guarantor for this paper.

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#### Competing interests

All authors declare no competing interests

#### Ethical approval

All participants were provided with full information about the nature of the study, and were asked to give consent to participation (either implicitly by completing the form or email in rounds 1 and 3 or verbally in round 2). No harm could be anticipated to participants, therefore ethical approval was not sought.

#### **Figures**

Figure 1: Consultation Participants

Figure 2: Global health competencies for medical professionals

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