Global public health training in the UK: preparing for the future

Andrew C.K. Lee¹, Jennifer A. Hall², Kate L. Mandeville³

¹Section of Public Health, School of Health and Related Research, The University of Sheffield, Regent Court, 30 Regent Street, Sheffield S1 4DA, UK
²Centre for International Health and Development, Institute of Child Health, University College London, 30 Guilford Street, London WC1N 1EH, UK
³Department of Infection and Population Health, Hampstead Campus, Royal Free Hospital, Rowland Hill Street, London NW3 2PF, UK

Address correspondence to Andrew Lee, E-mail: andrewlee@doctors.org.uk, andrew.lee@shef.ac.uk

ABSTRACT

Background Many major public health issues today are not confined by national boundaries. However, the global public health workforce appears unprepared to confront the challenges posed by globalization. We therefore sought to investigate whether the current UK public health training programme adequately prepares its graduates to operate in a globalized world.

Methods We used mixed methods involving an online cross-sectional survey of UK public health trainees on the international content of the Faculty of Public Health’s written examination, a qualitative review of the Faculty’s 2007 training curriculum and a questionnaire survey of all training deaneries in the UK.

Results We found that global health issues are not addressed by the current training curriculum or in the written examination despite trainee interest for this. Many of the deaneries were also unreceptive to international placements.

Conclusions Despite the recognized educational legitimacy of global health placements and the favourable UK policy context, the opportunities and international content of public health training remain limited. In order to retain its position as a leader in the field of public health, the UK needs to adapt its training programme to better reflect today’s challenges.

Keywords education, global health, public health, training

Background

Health is global. In today’s globalized world, the traditional paradigm of health care, with its biomedical focus on disease-based, episodic acute-care interventions, is increasingly inadequate.¹,² Global health issues have complex and multiple determinants that circumvent, undermine and are oblivious to the territorial boundaries of states and are thus not easily addressed by individual countries through domestic institutions.³ As the former director general of the World Health Organization Dr Bruntland succinctly put it, ‘The separation between domestic and international health problems is no longer useful’.⁴

Global health has several different interpretations; Box 1 highlights the difference between international and global health and contains Koplan et al.’s⁵ definition of global health, which will be used for the purposes of this article. The Association of Schools of Public Health note that ‘global health and public health are indistinguishable’.⁶ Since ‘the global in global health refers to the scope of problems, not their location’,⁵ global health issues encompass everything from pandemics of infectious diseases to climate change or obesity. Therefore, irrespective of location, many of the ‘public health’ challenges health professionals face are in fact ‘global health’ challenges and require an understanding of the determinants of health on a global level.

Andrew C.K. Lee, Clinical Lecturer in Public Health
Jennifer A. Hall, Public Health Specialty Registrar
Kate L. Mandeville, NIHR Academic Clinical Fellow in Public Health
Box 1 Definitions of international health and global health

Definitions

‘International health’ is a term that predates global health and tends to be used either to refer to health work in low- and middle-income countries, particularly with an infectious disease focus, or to an approach that stresses more the differences between countries than their commonalities.26

‘Global health’ is an area for study, research and practice that places a priority on improving health and achieving equity in health for all people worldwide. Global health emphasizes transnational health issues, determinants and solutions; involves many disciplines within and beyond the health sciences and promotes interdisciplinary collaboration; and is a synthesis of population-based prevention with individual-level clinical care.27

Although there has been a dramatic increase in interest in global health in recent years, current training opportunities are lacking for both UK postgraduates abroad or conversely for non-UK graduates in the UK.7,8 Increasing numbers of health professionals will work abroad at some point and some will choose a career in international work. In addition, the UK is an increasingly multi-cultural society with its attendant issues, thus making an understanding of global health essential.8 Health professionals with international experience gain from personal development, better cultural awareness, improved interdisciplinary teamwork and communication and the ability to think laterally and function in diverse circumstances.9–12 In addition they are better able to appreciate the global factors that are relevant to their own settings and are thus better equipped to serve their multicultural and/or marginalized populations.11,13

Unfortunately, it has been claimed that the global public health workforce is unprepared to confront the challenges posed by globalization.14 Public health specialists need to be able to work across borders, interact with policy-makers at the highest level and appreciate the root causes of ill-health in order to protect both national and global health. Therefore, the key question is whether, in an increasingly globalized world, the current UK postgraduate public health training programme adequately prepares its graduates to apply global health perspectives to their local context, wherever this may be.

Method

We used a mixed-method approach in order to examine the global health content of UK postgraduate public health training. We assessed three aspects of the training programme: the Faculty of Public Health (FPH) written examination (Part A); the FPH 2007 training curriculum and the receptiveness of training deaneries to international placements.

Registrar survey on the Part A examination

In the UK, public health registrars are required to undertake two examinations administered by the FPH as part of the training process.15 We explored public health registrars’ opinions of the international content of the written examination and its applicability to non-UK contexts through a cross-sectional online survey. This consisted of nine structured questions with a final open-ended question for any further comments. The survey was pre-tested by a small number of registrars and amended accordingly before the national survey was conducted using the online survey facility SurveyMonkey. Responses were collected between 15 December 2009 and 28 February 2010.

As public health registrars in the UK are substantially dispersed both geographically and in terms of work locations, we had to employ a mixture of convenience and snowball sampling to try to reach as many of them as possible. The survey was circulated through registrar networks, including regional registrar email groups, the national Trainee Members’ Committee and the International Health Trainees Group. It was hoped that public health registrar networks abroad would also be engaged; however we were unable to establish contact with these.

Survey of deaneries

We also composed a short questionnaire consisting of four key questions that was sent to the Heads of the Specialty Schools of Public Health in all 10 postgraduate deaneries in England between August and November 2009. The survey was extended in April 2010 to the National Schools in Northern Ireland and Wales, and the lead deanery for Public Health in Scotland (which co-ordinates the Public Health Training Programme in Scotland). The responses to both surveys were collated and are descriptively presented in the following section.

Curriculum review

All three authors conducted a qualitative analysis of the current (2007) FPH training curriculum. We coded each learning outcome (LO) as to whether it could be achieved in the UK, internationally, or either (generic). LOs were assessed as UK if they included UK-specific terminology such as ‘commissioner’.
We piloted our coding frame on five LOs, confirmed our definitions, and coded the remaining LOs independently. The results were collated and any discrepancies were discussed until consensus agreement was reached. We used a multi-rater variation of Brennan and Prediger's\textsuperscript{16,17} free-marginal kappa to calculate inter-rater agreement for our initial results.

Results

Registrar survey on the Part A examination

Of the 350 registrars registered with the FPH at the beginning of 2010, we received 80 responses to the survey. This suggests a minimum response rate of \(\sim 23\%\). However, due to the limitations of the methodology used we were unable to verify the true coverage of the survey. Most of the respondents were from the UK (94\%) and were on a public health training programme (91\%). More than half (54\%) had previously worked abroad and many (61\%) intended to do so in the future; only 9.2\% had no such intentions.

Of those respondents who had taken the Part A examination previously (81\%), the majority (87\%) had done so within the last 3 years (2008–2010). Fifty-seven per cent had found it to be substantially UK centric and 58\% thought the examination content covered generic knowledge and skills ‘a lot’. Just 4.8\% thought the topics covered had no international relevance and an equally small proportion (6.3\%) thought the examination had significant international relevance. Only 15\% thought it was substantially recognized internationally as a qualification (Fig. 1).

When asked about their expectations of the Part A examination, the majority clearly wanted both an examination with content that substantially covered generic knowledge and skills (91\%) and one with considerable international reputation (57\%) (Fig. 2). Sixty-six per cent wanted the examination to have ‘somewhat’ or ‘a lot’ of international relevance (Fig. 2), whereas only 49\% felt that this was currently the case (Fig. 1) indicating a desire for more international relevance.

There were 18 written comments expressing a range of viewpoints. Some of the common issues raised were the following: whether the Part A examination should be generic and internationally relevant versus one fit for purpose in the UK context (Box 2); that the examination is not only UK centric, but England centric (Box 3); and that non-UK public health practitioners were disadvantaged by the format of the examination (Box 4).

Box 2 The place of international issues in the Part A examination

Arguments for a UK focus

This exam is designed for training in the UK and membership of the relevant faculty/royal college. Whilst an international context is important, it should not be the purpose of this exam.

Most if not all who take the Part A exam want to work in the UK and therefore need to demonstrate UK specific knowledge.

Arguments for the place of international issues

I think there should be more international issues in the scope of the exam because of the impacts they have on the UK and the potential for the UK to take action . . . [The Part A] syllabus bears little resemblance to the skills and knowledge required to practice public health in resource poor environments.

It is very short sighted to focus solely on the UK, when public health is by its very nature a global discipline.
Box 3 The Anglo-centricity of the exam
As a Wales trainee, I already felt at a slight disadvantage as the language and emphasis were unconsciously England-centric.

The MFPH exam seems to be more England-centric than UK centric. Perhaps expanding the curriculum to adequately cover Wales and Scotland would be a good first step before going international?

The exam is Anglo-centric (not UK centric). The most recent Paper 1A was very confusing if you were sitting it in Scotland.

Box 4 Difficulties for non-UK public health practitioners
Non-UK practitioners could be disadvantaged due to the answers expected in the exam, rather than the questions themselves. If it was clear the candidate was from abroad, this may be taken into consideration, though maintaining standards would still clearly be important.

Curriculum review
The three authors coded all 121 LOs. Kappa was 0.79 indicating good inter-rater agreement. There were coding disagreements on 25 LOs, which were resolved through discussion. Overall, 107 LOs were assessed as generic, 14 as UK and 0 as international (Fig. 3).

Deanery survey
Nine out of the 10 Specialist Schools in England and all the devolved nations responded to our survey. Their responses show a spectrum of attitudes to international placements.

Oxford, South-West, West Midlands, Wales and Northern Ireland generally approved international placements, if appropriate educational supervision was in place. London, Hampshire, North-East and East of England stated that they would consider requests in light of the registrar’s educational requirements. Yorkshire and the Humber had supported previous placements and future placements were under discussion. Scotland did not actively discourage such placements and East Midlands School did not generally approve such placements and ‘would need to be convinced that there was a training aspect which could not be provided in this country’.

All Schools encouraged placements abroad to be taken in Phase 3 (generally the final 2 years of training and post-membership examinations). However, there was not a consistent approach to the approval and funding of these placements. Several Schools generally approved placements as part of core training and would fund them, whilst others were more likely to see them as time out of the training programme and so withhold funding. In Scotland, international placements may be recognized towards training but the placements would not usually be funded. For those Schools who did not generally provide funding, their reasons centred on the use of public money for training which could be provided nationally (Box 5).

Box 5 Reasons for not providing funding for international placements
One reason... is the argument that UK public money for training should support UK training/service. However, during a previous discussion of this issue within the Deanery, willingness was expressed to consider support for one or more funded international placements (subject to them being appropriate).

(London)
All clinical specialties are treated in the same way. The curriculum does not require experience abroad and indeed the curriculum can be delivered in entirety within programme. It is difficult to justify expenditure of scarce public resource on something that is not a requirement.

(East of England)
We have not yet been convinced that this is a good use of public funds. As ever, we have to be conscious of opportunity costs.

(East Midlands)
One of the purposes of StRs is to provide a service to the NHS, which they clearly cannot do whilst abroad. [The deanery] are also concerned that it sets a precedent [for] other medical specialities.

(Scotland)
Discussion

Main findings

The Part A survey showed that most respondents found this examination to be UK centric. However, only a small proportion thought the topics covered had no international relevance. This may be due to the high perception that the examination focused on generic skills and knowledge, which could be applied to international contexts to some extent. However, the difference in the perceptions and expectations of the examination with regards to its international relevance suggests a desire for the inclusion of more such topics. The survey also demonstrated a high level of interest in working abroad at some point in the future, with only 10% of registrars having no intention to work overseas. This reinforces the need for greater global health content in training.

There was a mix of opinions as to how much ‘international’ content the examination should have with both extremes of viewpoints expressed. The counter-argument to greater global health coverage is that Part A is a membership examination leading to specialty registration in the UK, and as such must test professional competence in the UK context. Part of the problem may be the perception that global health is only the study of diseases of low- and middle-income countries, an understanding that fits with our earlier definition of international health, and therefore not relevant in high-income countries. On the contrary, global health simply address health issues across borders, and, as we have argued, is relevant to all those living and working in a globalized world.

The UK centricity and format of the examination results in the impression that non-UK candidates are considerably disadvantaged. This may limit the ability of the Part A examination to become internationally recognized as a qualification, which has legitimate reputational and financial benefits for the FPH. The pursuit of international recognition and the expectations of UK centricity appear to be schizoid aspirations for the examination.

For several years various groups have been championing for more globally relevant curriculums. The vast majority of LOs in the current public health curriculum can be achieved in either a UK or international context meaning international placements would be as appropriate for training needs as UK placements. No LOs had an international focus, reinforcing the lack of global relevance in UK training.

The deanery survey revealed that there is not a consistent approach to the approval of international placements by training deaneries. Whilst registrars in some regions will generally have these placements approved and funded, others will have to make a very convincing argument for this. Public health registrars have a unique position amongst the specialties as they are supernumerary; therefore no additional funding will be consumed during an international placement other than normal remuneration. However, it could be argued that they are still funded by the NHS using UK taxpayers’ money and as such should only provide service within the UK. This view ignores the previously described benefits to the UK of its employees gaining experience in other health systems, the value of an awareness of global health issues and different cultural beliefs, and the fact that some modern public health practice requires skills that are best gained on an international stage. All these factors combined enable registrars who have international experience to better protect the nation’s health. We believe that international placements in public health training are not a misuse of public funding, but a long-sighted investment into high-quality health care.

What is already known on this topic

The educational legitimacy of overseas work for obtaining a different training experience or for undertaking research is recognized by key stakeholders such as the Department of Health (DH) Director of Medical Education, medical Royal Colleges and Deaneries. Similarly, the General Medical Council in its document ‘Tomorrow’s doctors’ states that medical graduates are expected to be able to ‘apply to medical practice the principles, method and knowledge of population health and the improvement of health and health care’, including an understanding ‘from a global perspective the determinants of health and disease and variations in health care delivery and medical practice’.

Recent policy developments also indicate strong support for global health at high levels in the UK. The DHs ‘Health is Global’ strategy paper acknowledged the value of global health experience, as well as the considerable untapped potential that the health service and its workforce has for tackling global health issues. This is reiterated in the DH framework for NHS Involvement in International Development that aims to use the expertise in the NHS to support the government’s Global Health Strategy. It should also be recognized that health systems in high-income countries can learn from low- and middle-income countries. Examples include Mexico’s Oportunidades programme of conditional cash transfers or the rediscovery of the benefits of the Ponseti method of treating club foot.

Observers have noted that public health training needs ‘revitalization in keeping with international best practices’ in medical education and public health specialists in training...
need to be systematically exposed to relevant opportunities as part of their curriculum.\(^2\) Public health training programmes and curricula need to be re-assessed for their global health relevance to ensure that new graduates are equipped to deal with growing global and national health challenges.\(^1\)  

**What this study adds**

This work has shown an insufficient level of global health in the FPH curriculum and Part A examination, as well as the difficulties registrars have in securing international work. Although there has been increasing global health teaching in undergraduate medical education this has not been matched in post-graduate public health training. This in part reflects the ongoing debate as to the place of global health teaching in medical education. We believe that public health training in its current form does not prepare registrars to work in the globalized world of public health whether they work exclusively in the UK or more globally. If we are to appropriately address key global health challenges, the prevailing anachronistic practice of public health needs to change\(^1\) and the training programme with it.

The British government has recently proposed significant re-organization of public health in England that would lead to significant variations even within the UK.\(^25\) It is unclear what training arrangements and priorities will be within the new health structures. That said it is clear that UK public health specialists will need to be able to work across national boundaries.

As an international organization with a focus on education, the FPH must provide strong leadership to champion global health education. It could do so by increasing the global health component of the Part A examination and introducing specific learning objectives for global health into its training curriculum. Global health learning objectives could cover, for example, an understanding of the roles of global organizations such as the World Health Organization, an awareness of current global health policies and the ability to respond to a disaster. The FPH should actively encourage postgraduate deaneries to adopt a consistent and supportive stance on international placements. Public health registrars undertaking global health placements also need to evaluate them in order to contribute to the evidence base of the value of international experience.\(^7\) The possibilities of a sub-specialization training path in global health and of a formal global health training component for all senior registrars also warrant serious consideration.

**Limitations of this study**

There are several limitations to our methods. Firstly, the main weakness is the uncertainty as to the representativeness of the Part A survey. As we did not have a sampling frame of current public health registrars and used snowball sampling, we cannot calculate an accurate response rate. Our results may also reflect a response bias to those who have worked or wish to work internationally. However, with this caveat in mind, the number who expressed a desire to work abroad does highlight considerable interest within the public health registrars’ fraternity. Whilst good inter-rater agreement was achieved for the curriculum review, it is possible that different conclusions may have been drawn by coders without an interest in global health. Finally, we addressed the deanery survey to the current head of the public health specialty school (or equivalent). This may not reflect previous treatments of request for international placements, or the opinion of the overall Postgraduate Dean.

**Conclusion**

The pace of globalization is ever increasing and we cannot isolate ourselves from the international forces and issues that affect health.\(^10\) As the health workforce and policy-makers of the future, we need to ensure that public health training in the UK prepares its graduates not just for today’s challenges but tomorrow’s problems too.\(^1\)\(^12\) The lack of global health content in UK public health training highlighted by this study needs to be addressed and global health education urgently incorporated into the training of all public health specialists. Failure to do so risks perpetuating a generation of UK-centric public health specialists who are inadequately prepared to address the global determinants of health and their impacts.

**Acknowledgements**

With thanks to all those registrars and deanery representatives who took part in the surveys.

**References**


