



OPEN ACCESS

EDITED BY

Franz Babl,
Royal Children's Hospital, Australia

REVIEWED BY

Kerem Kinik,
University of Health Sciences, Türkiye

*CORRESPONDENCE

Marcus Wootton
✉ woottonm@lsbu.ac.uk

RECEIVED 25 February 2024

ACCEPTED 27 August 2024

PUBLISHED 11 October 2024

CITATION

Wootton M, Le Geyt J and Maconochie I
(2024) Opinion—Developing the workforce in
conflict—Are we training the right people in
the right way for post-conflict rebuilding?
Front. Disaster Emerg. Med. 2:1391297.
doi: 10.3389/femer.2024.1391297

COPYRIGHT

© 2024 Wootton, Le Geyt and Maconochie.
This is an open-access article distributed
under the terms of the [Creative Commons
Attribution License \(CC BY\)](#). The use,
distribution or reproduction in other forums is
permitted, provided the original author(s) and
the copyright owner(s) are credited and that
the original publication in this journal is cited,
in accordance with accepted academic
practice. No use, distribution or reproduction
is permitted which does not comply with
these terms.

Opinion—Developing the workforce in conflict—Are we training the right people in the right way for post-conflict rebuilding?

Marcus Wootton^{1*}, Jacqueline Le Geyt² and Ian Maconochie³

¹London South Bank University, London, United Kingdom, ²Paediatric Emergency Medicine, St Marys Hospital, Imperial National Health Service (NHS) Trust, London, United Kingdom, ³Paediatric Emergency Medicine and Academic Emergency Medicine, London, United Kingdom

KEYWORDS

children, conflict, workforce, virtual training, security

The first half of 2024 has seen war continue to proliferate across many areas of the globe. Our media is filled with reports from conflicts across the world, beamed to our televisions and social media feeds by journalists and, increasingly, anyone with a camera phone.

Conflict, far from being a horrific aberration in small and far away countries of which we know little is now coming, if not to our actual doorstep, then certainly to our virtual ones. One-third of the world's population lives in a country affected by unrest (1)

There are evolving conflicts in many regions of the world leading, inevitably, to acute and then chronic population health crises. Some of those conflicts attract significant attention, political and public concern; Gaza, Ukraine and (once it spilled out beyond its borders and started to affect global trade routes) Yemen.

Other wars grind inexorably on with seemingly marginal concern from the outside world: Ethiopia, Sudan and Myanmar. Whilst these conflicts may ebb and flow in their impact on global public consciousness, they share one important element in common. War is universally catastrophic for health workforces and the systems in which they operate. Maternity and child health services are especially vulnerable.

As of 2022, there were 55 active conflicts across the world, with the average one lasting between 8 to 11 years (2) Aside from the societal and economic breakdown, no country is capable of surviving the impact of a conflict on its health workforce and system without significant support from the outside world. The question is less “if” international assistance is required but rather what its form should be.

Insecurity is a leading cause of health workers leaving their home country and going to work in a more peaceful setting (3). Therefore, countries in conflict are hit by the pull of high numbers of experienced staff leaving for work in safer places and the collapse of health education systems designed to produce the next generation of doctors and nurses.

The international community's response has been to try and plug the health worker gap with those trained over a short period, in many cases, Community Health Workers (CHWs). There is evidence that workers such as this fulfill their function and add value to initial health outcomes (4) Support for their training is often also convenient for donors as the training is for a limited period, commonly 9 months, which fits easily into even short-term donor finance windows of programmes that run for 1–2 year funding cycles.

Without a defined curriculum or common skill set, CHW roles can often be deployed on linear programmes including TB, reproductive health, or malnutrition (5) producing a health worker with skills in a narrow area of focus, but limited foundational clinical knowledge.

Children are especially vulnerable to this approach where physiological parameters change with age and signs of serious illness are often subtle. Developing a skilled health worker capable of holistic care for newborns and children in a war zone, from scratch, within a training window lasting a few months has an inevitably detrimental impact on quality.

It simply is not possible to base an entire health system that delivers care at high quality on a health workforce who have been trained for a few months.

Increasing evidence demonstrates the difficulties of integrating traditional birth attenders, (sometimes known as a lay -midwife and commonly trained in short-duration courses) into the existing health workforce (5) due to the misalignment of their training content compared to doctors and midwives.

It is now time to consider the value of sole training Community Health Workers, who have no obvious way of developing career pathways toward integrating into the health system, or to train as doctors and nurses without essentially having to start from the beginning.

Since the pandemic there is broad acceptance across most higher education disciplines including medicine and nursing that theoretical learning can be successfully led by a teacher who isn't physically present but perhaps thousands of miles away via any simple online platform (6). Even areas with limited road networks are increasingly becoming connected to high-speed internet. This, coupled with the increased acceptability around video call teaching could point toward viable virtual training, not just for short courses, but for entire undergraduate degrees. Whilst there are still significant gaps in knowledge around online learning effectiveness (7) evidence gathered during the pandemic appears to indicate a moderate positive impact on educational processes (8) for online learning at undergraduate level.

Indeed, there are numerous models of children in remote communities being taught remotely since the 1950s (9). Imaginative approaches, new technologies and integrations with virtual resources can all play a role in developing more expert health workers. Perhaps it is time to recognize that initial responses to health worker shortages caused by conflict should have an increased focus on the medium to longer-term.

Should we complement efforts to train CHWs and try, instead, to train doctors and nurses? This will require a significant shift in donor funding which would need to move toward multiyear guaranteed funding (six at a minimum in the case of doctors)

from its current common model based around 1 to 2 years per programme grant.

With ever-developing virtual capability, there is increasing evidence of effective postgraduate online learning for medics deployed during war and pandemic in Syria (10) and for developing surgical skills in conflict (11). These approaches are becoming well established at the post-graduate level, developing the existing workforce. We argue online/hybrid learning could now be extended to develop the next generation of health worker in wars and crisis, addressing crucial shortages in countries that need an increase in health workers the most.

All conflicts eventually end and rebuilding the health workforce is a vital cornerstone of developing civic society again. It is time to consider, from the outset, how more extensive health worker training can be supported toward better outcomes for newborns and children not only during the conflict phase but also toward the aim of an emerging higher-quality health system when the fighting ends.

Author contributions

MW: Conceptualization, Writing – original draft, Writing – review & editing. JL: Supervision, Writing – review & editing. IM: Supervision, Writing – review & editing.

Funding

The author(s) declare that no financial support was received for the research, authorship, and/or publication of this article.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Publisher's note

All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.

References

1. United Nations. *With Highest Number of Violent Conflicts Since Second World War, United Nations Must Rethink Efforts to Achieve, Sustain Peace, Speakers Tell Security Council.* (2023). Available at: <https://press.un.org/en/2023/sc15184.doc.htm> (accessed December 13, 2023).
2. Uppsala Conflict Data Programme. *UCDP - Uppsala Conflict Data Program.* (2024). Available at: <https://ucdp.uu.se/> (accessed February 14, 2024).
3. Toyin-Thomas P, Ikhurionan P, Omoyibo EE, Iwegim C, Ukueku AO, Okpere J, et al. Drivers of health workers' migration, intention to migrate and non-migration

from low/middle-income countries, 1970–2022: a systematic review. *BMJ Global Health*. (2023) 8:5. doi: 10.1136/bmjgh-2023-012338

4. Miller NP, Ardestani FB, Dini HS, Shafique F, Zunong N. Community health workers in humanitarian settings: scoping review. *J Global Health*. (2020) 10:20602. doi: 10.7189/jogh.10.020602
5. Kassie A, Wale A, Girma D, Amsalu H, Yechale M. The role of traditional birth attendants and problem of integration with health facilities in remote rural community of west omo zone 2021: exploratory qualitative study. *BMC Preg Childbirth*. (2022) 22:425. doi: 10.1186/s12884-022-04753-5
6. Hodges C, Moore S, Locke B, Trust T, Bond A. *The Difference Between Emergency Remote Teaching and Online Learnings*. EDUCAUSE Review (2020). Available at: <https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning>
7. Martin F, Sun T, Westine CD. A systematic review of research on online teaching and learning from 2009 to 2018, *Comp Educ*. (2020) 159:104009. doi: 10.1016/j.compedu.2020.104009
8. Tartavulea CV, Albu CN, Albu N, Dieaconescu RI, Petre S. Online teaching practices and the effectiveness of the educational process in the wake of the COVID-19 pandemic. *Amfiteatru Econ*. (2020) 22:920–36. doi: 10.24818/EA/2020/55/920
9. Buckingham J. Virtual schooling in australia: From “school of the air” to “distance education”. In: Fox RA, Buchanan NK, editors. *The Wiley Handbook of School Choice*. West Sussex: John Wiley & Sons, Inc. (2017). p. 441–9.
10. Mualla W, Mualla KJ. Higher education in Syria post-war and pandemic: challenges and opportunities. In: Badran A, et al. editors. *Higher Education in the Arab World*. Cham: Springer (2022). doi: 10.1007/978-3-031-07539-1_15
11. Fehervari M, Das B, Soleimani-Nouri P, Ahmad M, Fadel MG, Deputy M, et al. Can surgical skills be taught using technological advances online? A comparative study of online and face-to-face surgical skills training. *Surg Endosc*. (2022) 36:4631–4637. doi: 10.1007/s00464-022-09170-5