Decolonisation of Health in East Africa: Opinion Piece

Sanaa Said, Nateiya Yongolo, Sanjura Biswaro, Richard Walker[1], Clive Kelly[2]

1 Northumbria Healthcare NHS Foundation Trust

2 Newcastle University

Funding: An NIHR Grant was awarded to University of Glasgow and has supported some of the academic work described in this article. Additionally, Health Education England (NE) provided funding for some of the teaching referenced in the paper.

Potential competing interests: No potential competing interests to declare.

Abstract

Access to healthcare largely depends on where you live and how much money you have. It is far from equally accessible to all. The National Health Service (NHS) was established in 1948 to address this inequality and improve access to reasonable standards of healthcare to all United Kingdom (UK) residents and to ensure that this was free at the point of delivery. The NHS has been described as ‘the envy of the world’ despite its well-documented challenges. The NHS has driven quality and consistency of clinical care within the UK for decades, and along with universities and many other organisations, it has also fostered a reputation for excellent academic research and teaching. However, the long shadow of the UK’s colonial past on health care provision elsewhere is increasingly recognised. Far from producing and sharing its ‘commonwealth’ equally with people inhabiting the countries it colonised, the UK has been accused of exploiting them in a variety of ways. This opinion piece describes and discusses the past and present influence of the UK in Tanzanian healthcare and offers some examples of practices that might facilitate improved clinical and academic outcomes for all marginalised people in the future.

Sanaa Said MRCP, PhD Candidate

Consultant Physician at Manazi Mmoja Referral Hospital, Stonetown, Zanzibar, Tanzania.sanaasaid@yahoo.com

Nateiya Yongolo MRCP, PhD Candidate

Physician at Kilimanjaro Christian Medical Centre, Moshi, Tanzania.violetnate29@gmail.com

Sanjura Biswaro MRCP, MBBS

Physician at Kilimanjaro Christian Medical Centre, Moshi, Tanzania.a.biswaro@kcri.ac.tz

Professor Richard Walker, FRCP, PhD

Consultant Physician at Northumbria Healthcare NHS Hospitals Trust and Newcastle University, UK.

Richard.Walker@northumbria-healthcare.nhs.uk

Clive Kelly FRCP, MD*

Consultant Physician at James Cook University Hospital, Middlesbrough and Newcastle University, UK.

cliveryton@gmail.com

**Corresponding author: Dr Clive Kelly.*

Keywords: Decolonisation; East Africa; Healthcare; Collaboration.

Introduction

It is the ultimate irony that indigenous peoples experience higher morbidity and mortality than those who arrived later in the same lands. Although these differences cannot be entirely attributed to the actions of the colonisers, inevitably they play a significant part. Understanding and reversing this trend has proved challenging. The potential for settler colonialists to propose that these differences are inevitable, or even normal, constitutes a form of racism in its own right. The decolonisation of global health has attracted much publicity but is yet to achieve a globally acceptable definition [1]. Its concept developed from the twin fields of tropical medicine and colonial health, which have been described as 'designed to control colonised populations and make political and economic exploitation by European and North American powers easier' [2]. The danger for physicians from the Global North of becoming involved in health care initiatives in previously colonised countries is of inadvertently perpetuating this inequity [3], or at least in being perceived as doing so. However, this is now beginning to change as recent articles have highlighted the opportunities to develop pathways for improving clinical care and research initiatives towards achieving equity and true decolonisation of healthcare [4].

Khan et al. proposed a 'roadmap' to guide decolonisation efforts and called for an integrated 'Action to Decolonise Global Health' [1]. A recent review found that few 'clear norms exist in conceptualizing the definitions and processes of decolonization' but that recent articles were starting to 'articulate decolonial processes in manners that are consistent, cohesive and attentive to the goals of decolonization' [5]. In Australia, native art and storytelling have been used to

express the adverse effects of colonisation on indigenous health [6]. A Botswana-based paradigm proposed a postcolonial research framework for all [7] and cited song and proverb as important sources of indigenous African wisdom. A practical 'framework … that integrates decolonial processes into health promotion practice' has been proposed and is being more widely adopted [8]. In this opinion piece, we define how physicians from Tanzania and the United Kingdom (UK) are working together to develop and apply an integrated approach towards the decolonisation of health in East Africa.

Workforce

The NHS has traditionally relied on international medical graduates (IMGs) and overseas nurses, and this trend is accelerating. In 2019, 20% of registered General Practitioners (GPs) in England had qualified outside of the UK, with 80% of these coming from Africa and Asia [9]. Three years later, in 2022, that percentage had doubled to over 40%, with Africa contributing the greatest number. That same year overseas doctors accounted for 63% of the 23,838 new additions to the UK medical workforce [10]. This amounts to an accelerating brain drain, with many African medics leaving their own countries after completing their medical training to support the ailing NHS, often replacing UK medical graduates who have elected to move overseas to work in Australia, New Zealand, Europe or North America. Concerns about exploitation and discrimination have also been voiced over the experiences of African nurses working in the UK [11]. This feels grossly unfair to many Africans whose access to health care in their own country remains diminished because of these trends. Attempts to regulate this trend were agreed between the governments of the UK and both Kenya and the Philippines in November 2021 Bilateral agreement between the UK and Kenya on healthcare workforce collaboration - GOV.UK (www.gov.uk). However, the present attitude of the UK Government towards immigrants and refugees has become increasingly aggressive and negative. Only those with qualifications deemed to be useful to the UK are welcomed. This selective approach applies especially to those with health care qualifications who are treated as 'persona grata', unlike many of their less favoured fellows. However, recent announcements by the UK government that overseas health care workers will no longer necessarily be able to bring their families with them suggests a complete lack of insight into the challenges and sacrifices made by these workers. Overseas health care workers will also see their surcharge for accessing the service they help to provide nearly doubled, despite paying income tax and national insurance. This is undisguised exploitation and demonstrates that epistemic injustice remains alive and well in the UK at least.

Politics

The situation was not helped by the UK's decision to reduce its support for developing countries in the wake of its own financial challenges following the Covid-19 pandemic [12], and Africa bore the brunt of these cuts. Having already lost so many people to the AIDS epidemic a generation earlier, this has threatened the gradual recovery evident across much of the continent. However, Rishi Sunak, who was responsible for this decision as Chancellor, has now announced that he will host a UK / Africa investment summit conference in April 2024 as Prime Minister [13]. This could conceivably presage a return to previous levels of support for Africa. The reduction in UK government- sponsored expert medical staff to former colonies to help with education and staffing left several initiatives incomplete and greatly diminished the value of their

legacy. Despite acknowledging the atrocities perpetrated in Africa, the British government has been intransigent in not apologising (as Germany did). Such an attitude may indicate reluctance to engage in decolonisation efforts in the health sector. Given the UK's political intransigence, how can we begin to redress the global imbalance within healthcare access and delivery? Such a task needs to be undertaken with collaboration across many organisations. The British Medical Association (BMA) must reassess its policies and priorities from a decolonising perspective [14], whilst the British Broadcasting Company (BBC) needs to change its focus away from a UK-centric to a more global interest in healthcare [15]. A fundamental change in approach is required in the relationship between the Global North and Africa as the present mechanisms of support risk potentiating the tendency to maintain the present power base in 'coloniser countries' [16].

Changing Clinical Priorities and Practice

A recent British Medical Journal (BMJ) editorial encouraged us all to be "brave, hopeful and essential" in decolonising health [17] and we would like to share our experiences in that endeavour. Over the last 5 years we have worked together in Tanzania to design, develop and deliver clinical services for patients with non-communicable disease (NCD). We agree that "efforts must begin with medical education and training" [18], as our Tanzanian medical curriculum previously focussed largely on infectious disorders. With tropical diseases like malaria [19], and even leishmaniasis [20], likely to gradually diminish with vaccination programs, and access to free retro-viral and anti-tuberculosis therapy proving highly effective in reducing deaths from infectious disease, NCDs already account for nearly half of all deaths [21] and much morbidity across East Africa. We facilitated a program on NCDs to combine medical education, clinical research and service development, and replicated this across several sites. African and European hospitals and universities have worked in tandem to exchange knowledge within an equitable partnership to provide and sustain evidence-based clinical practices. The rapid changes in the patterns of disease in Africa have implications for the training and responsibilities of all health care workers across the continent. There is a huge need to develop and staff screening programs for the detection and treatment of hypertension and diabetes which requires investment in teaching and training in these areas. Likewise, there is increasing recognition of the importance of auto-immune disorders [22] and musculoskeletal disease [23] across all age groups [24] in East Africa, although the present provision of rheumatological services remains woefully behind that available for the rest of the continent [25]. Evidence exists that an increasing burden of systemic complications of these chronic disorders is recognised [26], and that mental health issues are becoming a bigger issue among younger Africans [27]. Together these carry a growing clinical, economic and societal burden for East Africa[28]. Perhaps the previous poor emphasis on NCDs is another legacy of the former colonial administrators?

Much rhetoric has been expressed over the principles of decolonising medicine, but less has been written about the practical aspects of how to achieve this at a clinical level. Following the recognition that there is a gross lack of darker skin tones among clinical learning resources [29], we have developed medical educational videos of African doctors examining Africans with Swahili commentary, along with a photo library to show disorders present in patients with dark skin. These will soon be freely accessible to all African clinicians. The Tanzanian medical curriculum has been expanded

to incorporate the increasing burden of NCDs for all staff and consolidated in a series of open access PowerPoint presentations. Clinical services have been established with ongoing input from self-funding UK clinicians during sabbaticals and study leave, who continue to facilitate online seminars, case discussions and advice via regular virtual meetings and WhatsApp consultations. These sessions are attended by clinicians from several different regions of Tanzania. However, we have been requested to expand the discussion into neighbouring countries. The Tanzanian Ministry of Health has engaged with further efforts to improve care for people with musculoskeletal (MSK) disease in Tanzania. It is essential that these initiatives are not just directed towards doctors but extend to all health care workers who play a huge part in providing clinical care, especially in the community. We presented our findings and experiences at the first East African regional non-communicable diseases conference, which enabled us to sensitise stakeholders beyond Tanzania.

The provision of MSK care is worse in East Africa than anywhere else on the continent. Although educational courses in rheumatology are available online, they are very focussed on presentations of patients from the Global North and are not context specific. Many of the investigations and therapeutic interventions described and proposed, although scientifically sound, are simply not appropriate for, or indeed available within, an East African setting. Tanzanian clinicians request advice and support from clinicians working in the Global North who respond to the needs we identify locally. We are best placed to define the deficiencies in our clinical service and which patients we need help with. Hence, we can seek targeted and patient-specific support from our northern colleagues as and when required, and we control the clinical agenda. It is very much a case of quality, not quantity, when it comes to requesting clinical support, and the dynamics of the collaboration feel both constructive and appropriate.

Our colleagues from the north share our vision of developing an independent sustainable clinical service in East Africa. There are several other programs designed and developed to support knowledge exchange between the Global North and East Africa. This includes the International Postgraduate Medical Training Scheme (IPGMTS) which focuses largely on physical health and ‘enables overseas doctors, by arrangement with international governments, to undertake full speciality training to UK standards. This takes doctors from entry to the Certificate of Completion of Training (CCT) and recognition in the GMC specialty register, in England, before returning home to practice as consultants in their chosen field.’ Another initiative, this time in the field of mental health, is the Mental Health Gap Action Programme (mhGAP) which supports scaling up services for mental, neurological and substance use disorders mainly in low- and middle-income countries (LMIC), an area which was adjudged as low priority by the former colonial administration.

The Royal College of Physicians (RCP) in London facilitated the establishment of the East, Central and Southern African College of Physicians (ECSACoP) in 2015, bearing in mind that the West African College of Physicians (WACP) has been in existence for several decades. ECSACoP includes 6 countries, Kenya, Malawi, Tanzania, Uganda, Zambia and Zimbabwe and one of the main aims is to improve, and harmonise, postgraduate medical training in these countries. The RCP with east African colleagues also supported the medical training and fellowship (METAF) programme with funding support from the east African development bank to provide training in neurology and oncology in Kenya, Rwanda, Tanzania and Uganda from 2016 to 2020 [30]. Courses were jointly developed between UK and African colleagues with most of the faculty being African and with sustainability in mind, using methods such as train the trainer approach.

We African physicians who helped to coordinate this joint venture, would say that our experience with this collaboration has been great. We managed to get support to attend training for research methods and management of MSK conditions for more than 20 staff members in total. We also managed to start a clinic for these patients because our capacity and confidence in identifying, diagnosing and treating patients was enhanced by working in tandem with our Global North collaborators. We came up with recommendations for what is needed to improve MSK care in Tanzania by conducting several in country multistakeholder meetings from which emanated the training videos concept. Our Global North collaborators sought to understand us and our needs, offering clinical and personal developmental support whenever necessary and feasible. All activities were initiated and supervised by African healthcare providers and have had a great capacity building effect on our part.

Volunteering abroad can also provide real benefits for NHS staff. Health Education England (HEE), who provided this opportunity, state ‘It can give them a fresh perspective, new skills and approaches that can be applied to their work in the health service and help them and the wider health service improve the quality of care we provide.’ We have been involved in the HEE initiative and can confirm the benefits experienced by UK trainees in learning from local culture and customs and reflecting on the colonial biases which everyone must overcome when partnering with Africa. Change only comes about when individuals shift their mindsets, and learning from the experiences of local healthcare providers offered much insight into how care might be improved elsewhere. Specific examples related to learning of the healing properties of banana leaves in the treatment of burns, and the use of fava beans in the treatment of Parkinson’s disease.

Academic Challenges

The situation in academic medicine has placed Africans at a distinct disadvantage for decades. Not only does it take non-native English speakers longer to read and write scientific papers [31], but preprints from the African continent are over 50% less likely to be published as full peer-reviewed papers [32]. This is consistent with reduced resources and editorial bias. One African author had a paper rejected from a prominent journal when he gave an African address, but the same paper was accepted with minimal corrections when it was submitted from the UK [15]. Whilst academic output was never our priority, we have published eight articles which document our collaboration spanning several clinical domains. With the equality, diversity, inclusivity and justice (EDIJ) agenda visibly linked to decolonisation, it is worth noting that 60% of our authors are African, while 57% are female. Furthermore, the majority of the first authors are African and the last authors are female. Publishing such work in African journals needs to be more actively encouraged by increasing their value and visibility. As stated in the BMJ podcast series, Journal editors have a huge influence in this area. Developing a 'global health' BMJ and Lancet is an acknowledgement “that you give equal weight to the quality of life and to the rights of all populations” [15], but all true "partnerships must be built on humility, a willingness to learn, and a shift of power to individuals and institutions" in the global south [9], and this philosophy should extend to academic as well as to clinical arenas. A reduction in the often-excessive author processing charge (APC) levied by many journals has been widely adopted recently for LMIC authors, which is a welcome move in the right direction.

The majority of funders for research in LMICs are based in higher income countries (HICs) and, up until recently, a lot of the funders required grants to be led from the HIC partner. This necessitated LMIC partners to be approached by HIC partners or else to find out which HIC partners might be interested in submitting a bid. Submitting such bids requires a lot of experience and support which are often lacking in LMICs. However, recently several grant calls have specifically stated that bids can be led by LMICs, and don't necessarily require an HIC partner. For example, there are now 6 National Institute of Health Research (NIHR) Global Health Research Groups (GHRG) which are led by LMIC partners and, while this is only a small proportion of the overall GHRGs, this is certainly a step in the right direction. Furthermore, two of the authors of this paper are presently undertaking PhDs with the direct support of academic institutions in the Global North. This has already led to several publications that will help signpost and sustain the development of clinical services in East Africa.

However, too many publications using data from Africa are still published in Global Northern journals by researchers without inclusion of those who collected the data or to whom the data relates. In addition to placing Africans at an academic disadvantage, this approach reduces the likelihood of a change in approach as a result of the study as those most affected are less likely to receive appropriate feedback. A recent paper on the microbiome of hunter-gatherers in Tanzania excluded those who collected the data and offered no feedback to the tribe who had agreed to produce the samples in exchange for scientific advice [33]. However, equitable access to grant funding and authorship for Africans is entirely feasible and should be the rule rather than the exception. A cross-sectional multi-centre study is underway to investigate sickle cell disease mutational burden across Uganda and Tanzania, with ethnically matched controls in the USA and UK, and has the potential to unlock gene therapy for this devastating condition [34]. It is self-evident, in an academic environment where success is judged on the quality and quantity of published papers in tandem with grant funding achieved, that African researchers should have equitable access to grant funding and should be encouraged to seek greater representation on the editorial boards of influential journals. Indeed, not only editorial support, but positive discrimination should be considered [17][35].

The difficulties caused for academics during the recent Covid-19 pandemic were felt more keenly in Africa than in the Global North [36]. Community involvement, an essential element of clinical research, was particularly affected in Africa, where survival in the absence of protective equipment or vaccination was the priority [37]. This led to an inevitable dependency on remote access which was often impractical in the absence of reliable internet access [38] or appropriate electronic devices [39]. Colonialism still influences the structure and function of health care systems in East Africa, long after other legacies have left [40]. Covid-19 was only the latest in a series of African epidemics, following hot on the heels of the Ebola crisis, which was related to chronic underfunding of the healthcare system because of funds being previously prioritised for profitable mining operations [41]. This hints at the heart of the issue. European guidelines for maternity and ante-natal services recommend access to hospital support services for all [42], whereas global guidelines in Africa accept a much more basic level of care with the attendant difficulties in transportation to the hospital if complications arise [43]. As Yanful et al state 'Highlighting such double standards may push health systems to change course, develop innovative solutions to facilitate access to comprehensive services before labour begins, and help achieve more equitable and effective systems' [40]. Most African countries, including Tanzania, can only spend about US$100-200 per person per year

on health, while the UK invests US$ 4-5000 per person per year into their healthcare [44]. A global and common health care standard may appear fanciful at present, but a hard-hitting article on racism in maternal care argues otherwise. Catalao et al suggest that new approaches are needed to tackle the root causes of race inequalities in this area, and that these are a direct consequence of both historic and current colonial policies [45].

Although this paper focusses chiefly on decolonisation and its specific application to healthcare, it seems appropriate to reference the EDIJ agenda and other disadvantaged groups. Disability can be associated with reduced representation in academic circles [46], and diversity may be under-represented among senior academics[47]. The parallel with the challenges faced by many people of colour is apparent. It seems self-evident that the motto 'nothing about us without us' [48] should be applied equally to all minority groups under the EDIJ banner, and that academic proposals should invite, involve, and include those on whom the research focusses and without whom there would be no story to tell. However, it is well-documented that this is not always the case. As recently as 2021, the proposed Spectrum-10K study came under heavy criticism for not including sufficient input from the autistic community within its construct, leading to a 2-year voluntary pause for detailed consultation [49]. The invited involvement of patients and academics to help design and complete studies relevant to them is surely self-evident. Such an approach is essential if the work is to be relevant and credible, and this approach facilitates a wider distribution of relevant information among those to whom the study recommendations apply. This principle is commended wherever possible for all people-based research as required by patient and public involvement (PPI) [50]. Recent practical resources facilitating the widespread adoption of these principles are now published [51].

Future Priorities

A change in the balance of power is required with the evolution of an 'equal access to healthcare for all' philosophy[52]. The Global North must learn to work in partnership with Africans on their terms and in their own environment [53]. Clear outcome measures must be discussed and agreed, with an expectation of mutual knowledge exchange [54]. Practical, affordable, and culturally acceptable change must be considered in the context of a sound evidence-base, with lessons learned shared with the population from whence the data were derived [55]. Indeed, given that PPI has become engrained into the philosophy adopted by clinical researchers in the Global North, why should Africans accept anything less? At a teaching level too, a change in approach is overdue. Perhaps the curriculum should include a reflection on the nature of colonialism and its effects on present day societal structures and related healthcare priorities [56]? On a positive note, the introduction of newer technologies such as point of care ultrasonography into the Emergency Department, does save lives, and is now being taught in several LMICs in East Africa [57].

Another example of improving care in LMIC is the recently established African Network of Medical Excellence (ANME), which is an initiative to develop an integrated network of medical centres of excellence across the continent, affirming the right of every human being to access free, high-quality medical care. Their aims as stated in May 2022, include: promoting the ANME model inside our own countries to build a deeper knowledge of the system and to foster a higher level of political endorsement; Identifying relevant health priorities that can be addressed by a cooperative and comprehensive

response, and that allow for the referral of patients from across the region; Improving regional cooperation amongst ANME countries and partners in order to reinforce the network and all its components; Strengthening efforts to mobilise resources from governments, international institutions, and donors to guarantee the long-term financial sustainability of the ANME.

The ultimate aim of decolonisation must be to provide parity across every domain to all people independent of who they are and where they live. Whilst gross inequality remains evident even within the UK, we must not let this distract us from trying to level the playing field elsewhere, especially as the global north was responsible for marking out the pitch as well as inventing the rules. As a bard once famously wrote "All the world's a stage and all the men and women merely players" [58]. Given the UK's recent political and financial disinvestment in Africa, we have a lot of ground to make up. We like to think that the development of equitable partnerships facilitates sustainable independence and that those willing to invest their time and experience in catalysing this process will be galvanised by the prospect of shared success.

Statements and Declarations

Conflicts of Interest

None of the authors have any conflicts of interest to declare

Funding

No funding was sought or obtained in the production of this paper

Authors Contributions

- Conceptualization: Clive Kelly, Sanaa Said, Richard Walker
- Writing – original draft: Clive Kelly, Sanaa Said, Nateiya Yongolo
- Writing – review & editing: Richard Walker, Sanjura Biswaro

Ethics

Not applicable

Data Availability

Not applicable

Acknowledgements

We would like to acknowledge the essential parts played by the University of Glasgow, Kilimanjaro Clinical Research Unit, Newcastle University, Northumbria Healthcare NHS Foundation Trust, Kilimanjaro Christian Medical Centre, Health Education England (NE), the University of Bergen, and Mnazi Mmoja Hospital on Zanzibar, in addition to the contributions made by many individuals both from these Institutions and independently. Without their support, none of this could have happened.

References

1. [a, b]*Khan M, Abimbola S, Aloudat T, et al. Decolonising global health in 2021: a roadmap to move from rhetoric to reform. BMJ Global Health 2021;6:e005604. doi:10.1136/ bmjgh-2021-00560*
2. [^]*Hirsch LA. Is it possible to decolonise global health institutions? Lancet 2021; 397:189–90.*
3. [^]*Abimbola S. On the meaning of global health and the role of global health journals. Int Health 2018;10:63–5.*
4. [^]*Wispelwey B, Tanous O, Asi Y, Hammoudeh W, Mills D. Because its power remains naturalized: introducing the settler colonial determinants of health. Front Public Health. 2023 Jul 11;11:1137428. doi: 10.3389/fpubh.2023.1137428.*
5. [^]*Narasimhan S, Chandanabhumma PP. A Scoping Review of Decolonization in Indigenous-Focused Health Education and Behavior Research. Health Education & Behavior. 2021;48(3):306-319. doi:10.1177/10901981211010095*
6. [^]*Quayle A. F., Sonn C. C. (2019). Amplifying the voices of Indigenous elders through community arts and narrative inquiry: Stories of Oppression, psychosocial suffering, and survival. American Journal of Community Psychology, 64(1–2), 46–58. https://doi.org/10.1002/ajcp.12367*
7. [^]*Chilisa B, Major T, Khudu-Petersen K. Community engagement with a postcolonial, African-based relational paradigm. Qualitative Research 2017, 17(3):326-339. Doi;10.1177/1468794117696176%20(pp.%201-14)*
8. [^]*Chandanabhumma PP, Narasimhan S. Towards health equity and social justice: an applied framework of decolonization in health promotion. Health Promot Int. 2020 Aug 1;35(4):831-840. doi: 10.1093/heapro/daz053.*
9. [a, b]*International migration and the healthcare workforce - Office for National Statistics (ons.gov.uk)*
10. [^]*Rimmer A. GMC: Let doctors work more flexibly. BMJ 2023 18th November, p258. doi: BMJ2023;383:p2650*
11. [^]*Likupe G. Experiences of African nurses in the UK National Health Service: a literature review. J Clin Nurs. 2006 Oct;15(10):1213-20. doi: 10.1111/j.1365-2702.2006.*
12. [^]*Cameron-Chileshe J. Overseas aid cuts make Britain an outlier among G7. Financial Times. July 15th 2021. Overseas aid cuts make UK an outlier among G7 (ft.com)*
13. [^]*UK-Africa Investment Summit announced for April 2024 - The Africa Report.com*
14. [^]*Akinnawonu L. Student activism drives decolonisation in medicine. BMJ 2023; 383 doi: https://doi.org/10.1136/bmj.p2337 (Published 16 October 2023)*
15. [a, b, c]*Looi M-K. What should decolonisation of medical institutions look like? BMJ 2023; 383 doi: https://doi.org/10.1136/bmj.p2257 (Published 16 October 2023)*
16. [^]*Rasheed M. The case for a Global South centred model in global health. BMJ 2023; 383 doi: https://doi.org/10.1136/bmj.p2256 (Published 16 October 2023)*

17. [a, b]*Abbasi K. Decolonising medicine and health: brave, hopeful, and essential. BMJ 2023; 383 doi: https://doi.org/10.1136/bmj.p2414 (Published 19 October 2023)*
18. ^*Naidu T. Coloniality lives on through medical education. BMJ 2023; 383 doi: https://doi.org/10.1136/bmj.p2294 (Published 16 October 2023)*
19. ^*Datoo M, Dicko A, Tinto H et al. A Phase III Randomised Controlled Trial Evaluating the Malaria Vaccine Candidate R21/Matrix-M™ in African Children. Lancet preprint at SSRN http://doi.org/10.2139/ssrn.4584076 (2023).*
20. ^*King A. In search of a vaccine for leishmaniasis. Nature Outlook. 17 August 2023*
21. ^*Kraef C, Juma PA, Mucumbitsi J, et al. Fighting non-communicable diseases in East Africa: assessing progress and identifying the next steps. BMJ Global Health 2020;5:e003325.*
22. ^*Krauth S, Yongolo N, Biswaro S, Kelly C, Walker R, Siebert S, et al. Prevalence and associated factors of musculoskeletal joint disease in the community setting in Hai district, northern Tanzania, Rheumatology, Volume 61, Issue Supplement_1, May 2022, keac133.104, https://doi.org/10.1093/rheumatology/keac133.104*
23. ^*Kuo C, Black L, Barber S and Kelly CA. Arthritis in East Africa. African Journal Rheumatol 28 Feb 2023 Vol. 11;1 (2023), pages 3 – 9.*
24. ^*Walsh R, Mwingwa A, Yongolo N, Biswaro S, Mwanswila M, Kelly C et al. (2022) The spectrum and burden of in-patient paediatric musculoskeletal diseases in Northern Tanzania, Paediatrics and International Child Health, DOI: 10.1080/20469047.2022.2062561*
25. ^*Mody G, Tikly M, Hajjaj-Hassouni N. Global excellence in rheumatology: Africa. Front. Med., 28 April 2023 Rheumatology 10 - 2023 https://doi.org/10.3389/fmed.2023.1201020*
26. ^*Said S, Omar N, Juma F, and Kelly CA. Clinical, serological and radiological findings in patients with rheumatoid arthritis from Zanzibar comparing those with and without interstitial lung disease: 'Trends in Immunotherapy' October 2023*
27. ^*Elinisa M, Lugata S, Doshi B, Kelly CA, Ngocho JS. Journal of Mental Health. Symptoms and predictors of depression among university students in the Kilimanjaro region of Tanzania: a cross-sectional study. J Mental Health 2020 https://www.tandfonline.com/eprint/J42TTPRHBG6FJ4KEIG8K/full?target=10.1080/09638237.2020.1793129*
28. ^*Mmbaga, B. T. et al. (2023) Musculoskeletal (MSK) disorders with arthritis screening in Tanzania: new insights into the growing clinical, economic and societal burden of non-communicable disease. Tanzania Public Health Bulletin, 10(1), pp. 8-14.*
29. ^*Abduelmula A, Akuffo-Addo E, Joseph M. The progression of skin color diversity and representation in dermatology textbooks. J Cutan Med Surg 2022; 26:523-5.*
30. ^*Walker R, Eastin J. Addressing the burden of cancer and neurological disorders in East Africa: East African Development Bank Medical Training and Fellowship (METAF) programme, Royal College of Physicians, commentary, January 2021: 22;24-26*
31. ^*Amano T, Ramírez-Castañeda V, Berdejo-Espinola V, Borokini I, Chowdhury S, Golivets M, et al. (2023) The manifold costs of being a non-native English speaker in science. PLoS Biol 21(7): e3002184. https://doi.org/10.1371/journal.pbio.3002184*
32. ^*Eckmann P, Bandrowski A (2023) A tool for preprint to publication detection shows global inequities in scientific*

publication. PLoS ONE 18(3): e0281659. https://doi.org/10.1371/journal.pone.0281659

33. ^*Carter M, Olm M, Merrill B, Jha A, Sonnenburg E, Sonnenburg J. Ultra-deep sequencing of Hadza hunter-gatherers recovers vanishing gut microbes. Cell. 2023 VOLUME 186, ISSUE 14, P3111-3124.E13, JULY 06, 2023 https://doi.org/10.1016/j.cell.2023.05.046*
34. ^*Igbineweka N, Okoli S, Sohal M et al. Understanding genome-wide mutational burden in patients with sickle cell disease: experience in the United Kingdom.*
35. ^*Clark J, Hurley R, Ladher N, Jarvies D. What next for decolonising health and medicine? BMJ2023;383:p2302. doi:10.1136/bmj.p2302 pmid:37844958*
36. ^*Rose ES, Rabin TL, Samaan J, et al. COVID-19 pandemic impact on academic global health programs: results of a large International survey. Ann Glob Health 2022;88:84. doi:10.5334/aogh.3843Google Scholar*
37. ^*Nembaware V, Munung NS, Matimba A, et al. Patient-centric research in the time of COVID-19: conducting ethical COVID-19 research in Africa. BMJ Glob Health 2020;5:e003035. doi:10.1136/bmjgh-2020-003035Google Scholar*
38. ^*Tremblay S, Castiglione S, Audet L-A, et al. Conducting qualitative research to respond to COVID-19 challenges: reflections for the present and beyond. International Journal of Qualitative Methods 2021;20. doi:10.1177/16094069211009679Google Scholar*
39. ^*Makri A. Bridging the digital divide in health care. The Lancet Digital Health 2019;1:e204–5. doi:10.1016/S2589-7500(19)30111-6Google Scholar*
40. [a, b]*Yanful B, Kumar M, Elorrio E, Atim C, Roder-DeWan S. Decolonisation and quality of care. BMJ 2023; 380 doi: https://doi.org/10.1136/bmj-2022-071585 (Published 13 March 2023),*
41. ^*Frankfurter R, Kardas-Nelson M, Benton A, et al. Indirect rule redux: the political economy of diamond mining and its relation to the Ebola outbreak in Kono District, Sierra Leone. Rev Afr Polit Econ2019; 45:522-40. doi:10.1080/03056244.2018.1547188 pmid:31772418CrossRefPubMedGoogle Scholar*
42. ^*European Foundation for Care of Newborn Infants. European standards of care for newborn health: birth and transfer. 2018. https://newborn-health-standards.org/wp-content/uploads/2022/08/2022_09_01_TEG_Birth_Transfer_all.pdf*
43. ^*World Health Organization, UN Population Fund, Mailman School of Public Health Averting Maternal Health and Disability, Unicef. Monitoring emergency obstetric care: a handbook. 2009. https://apps.who.int/iris/handle/10665/44121*
44. ^*Wirtz V, Hogerzeil H, Gray A, Bigdeli M, de Joncheere C, Ewen M et al. Essential medicines for universal health coverage. The Lancet, Vol. 389, No. 10067. Published: November 7, 2016*
45. ^*Catalao R, Hatch S, Zephyrin L, Richardson S, Coghill Y and Smylie J. Tackling racism in maternal health. BMJ 4th November 2022, p195-197. doi: BMJ2023;383:e076092*
46. ^*Lewis, N.A. What universities say versus do about diversity, equity and inclusion. Nat Hum Behav 6, 610 (2022). https://doi.org/10.1038/s41562-022-01339-1*
47. ^*von Below R, Spaeth E and Horlin C. (2021) Autism in Higher Education: dissonance between educators' perceived knowledge and reported teaching behaviour, International Journal of Inclusive Education, DOI: 10.1080/13603116.2021.1988159*
48. ^*Charlton JI. Nothing about us without us. In. Nothing About Us Without Us: University of California Press; 1998.*

49. ^*Sanderson K. High-profile autism genetics project paused amid backlash. Nature 598, 17-18 (2021) doi: https://doi.org/10.1038/d41586-021-02602-7*
50. ^*Jackson, T., Pinnock, H., Liew, S.M. et al. Patient and public involvement in research: from tokenistic box ticking to valued team members. BMC Med 18, 79 (2020). https://doi.org/10.1186/s12916-020-01544-7*
51. ^*Arumugam A, Phillips L, Moore A et al. Patient and public involvement in research: a review of practical resources for young investigators. BMC Rheumatol 7,2 (2023) https://doi.org/10.1186/s41927-023-00327-w*
52. ^*Basu L, Pronovost P, Molello NE, Syed SB, Wu AW. The role of South-North partnerships in promoting shared learning and knowledge transfer. Global Health2017;13:64. doi:10.1186/s12992-017-0289-6 pmid:28830489CrossRefPubMedGoogle Scholar*
53. ^*Victora CG and Moreira CB. North–south relations in scientific publications: editorial racism? Rev Saude Publica. 2006; 40 (in Portuguese): 36-42*
54. ^*Hedt-Gauthier BL, Jeufack HM, Neufeld NH, et al. Stuck in the middle: a systematic review of authorship in collaborative health research in Africa, 2014–2016. BMJ Glob Health. 2019; 4e001853*
55. ^*Bhakuni H, Abimbola S. Epistemic injustice in academic global health. Lancet Global Health: August 09, 2021 DOI: https://doi.org/10.1016/S2214-109X (21)00301-6*
56. ^*Skopec M, Issa H, Reed J, Harris M The role of geographic bias in knowledge diffusion: a systematic review and narrative synthesis. Res Integr Peer Rev. 2020; 5: 2*
57. ^*Trovato FM, Catalano D, Trovato GM. Thoracic ultrasound: An adjunctive and valuable imaging tool in emergency, resource-limited settings and for asustainable monitoring of patients. World J Radiol. 2016 Sep 28;8(9):775-784. doi: 10.4329/wjr.v8.i9.775.*
58. ^*Shakespeare W. 'As you like it' 1623: Act 2, scene 7.*