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SHORT COMMUNICATION

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The paradoxical surplus of health workers in Africa: The need for research and policy engagement

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Abstract

In many countries in Africa, there is a 'paradoxical surplus' of under and unemployed nurses, midwives, doctors and pharmacists which exists amidst a shortage of staff within the formal health system. By 2030, the World Health Organisation Africa Region may find itself with a shortage of 6.1 million health workers alongside 700,000 un- or underemployed health staff. The emphasis in policy debates about human resources for health at most national and global levels is on staff shortage and the need to train more health workers. In contrast, these 'surplus' health workers are both understudied and underacknowledged. Little time is given over to understand the economic, political and social factors that have driven their emergence; the ways in which they seek to make a living; the governance challenges that they raise; nor potential interventions that could be implemented to improve employment rates and leverage their expertise. This short communication reflects on current research findings and calls for improved quantitative and qualitative research to support policy engagement at national, regional and global levels.

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KEYWORDS
health-worker unemployment, informality, labour market, paradoxical surplus

Highlights

- In global health, debate on human resources and staffing focuses on a lack of trained staff.
- In many countries, there is also a paradoxical surplus of doctors, nurses, midwives and pharmacists.
- Research on the nature and consequences of this paradoxical surplus is rare.
- Both qualitative and quantitative data is necessary for policy makers to find effective solutions to the problem

1 | AIM

This paper addresses the often-unacknowledged surplus of health workers in some African countries and the broader implications of this phenomenon for global health systems. We highlight the paradox of having many trained health workers who are un- or underemployed, despite the acute shortage of staff in formal health systems. We argue that there is a need for comprehensive research to understand the scale, dynamics, and consequences of this issue, integrating both qualitative and quantitative approaches while considering the context of pluralistic health systems.

2 | CONTEXT

In 2023, 108,208 Ugandan nurses were registered by the country's Nurse and Midwives Council. Of these, 87,618 are formally employed in the health system.[1] In a country experiencing high levels of mortality from largely treatable infectious diseases (Malaria, HIV/AIDS, pneumonia), those not incorporated into the formal system represent a tragically underutilised resource. To date, no policy has been developed to support the integration of these trained nurses into the health system (either in Uganda or in other countries) and, other than two papers by members of this writing team, there is no research that describes in detail the circumstances that these 'surplus' health workers find themselves in, the informal or precarious work that they undertake within their communities, nor their potential to become active participants in Uganda's health system.

Uganda's situation is not unique. In high-, middle- and low-income countries, there are accounts of 'brain waste' which occurs when trained medical doctors, nurses, midwives, and pharmacists find themselves unable to secure decent, regular and regulated work and become 'surplus' to the absorption capacity of the health system.[2–4] The World Health Organization has recently recognised the existence of the 'paradoxical surplus' of nurses and midwives in Africa amidst a shortage of staff within the formal health system. It is predicted that by 2030, the World Health Organisation (WHO) Africa Region may find itself in the dire position of having a shortage of 6.1 million health workers alongside 700,000 un- or underemployed health staff.[5]

These 'surplus' health workers are both understudied and underacknowledged.[3,4] Across the world, policy makers, researchers and activists argue that the main workforce problem facing health systems is a lack of trained personnel,[4] a view which ignores 'historical patterns of underinvestment in health-care systems and structures.'[6] Nonetheless, this narrative underpins the international discourse, especially on health worker migration.[7] In part this reflects how, until recently, labour market economists disagreed about whether there was sufficient evidence of significant numbers of unemployed health workers.[8] Large-scale survey and well conducted case study data are

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missing for many countries, and yet concerns about 'wastage' of trained but un- or underemployed health workers in Africa have been voiced since at least 2005.[9]

3 | CURRENT KNOWLEDGE AND RESEARCH

The World Health Organization and International Labour Organization provide technical support to countries to conduct labour health market analyses to answer this question.[4] In those countries where health labour market analyses have been carried out, findings are stark and suggest that this has been a long-term problem. In Niger, one of the poorest countries in the world, between 2010 and 2014, 55% of health graduates were unable to find work in the health sector. Between 2010 and 2020 approximately 15,000 health workers (including physicians) were unemployed or in precarious jobs.[4] In Sudan, an 8-fold increase the number of places at medical colleges (between 1996 and 2012) was not accompanied by a commensurate investment in physician positions. Rather than improving the health system, it led to increased unemployment and subsequent brain drain.[10] Recent findings from Kenya suggest that 27, 243 health workers were un- or under-employed in 2021[11]; this includes 6683 clinical officers, 1831 doctors and 9300 nurses. Press reports and editorials in academic journals suggest that an inability to absorb health workers into the health system has been a considerable problem in many East, West and Southern African countries for at least the last 5–10 years.[4,12] A 2018 policy brief written for WHO reviews evidence of significant problems in several African countries, including the Democratic Republic of Congo, Malawi, and Ethiopia, as well as in India and Indonesia. This brief includes accounts of major protests by discontented health workers in some of these countries (Table 1).

Ethnographic and qualitative work on surplus health workers is rare but suggests that in places where there is a scarcity of formal healthcare provision, surplus health workers seek informal ways in which to put their professional skills to use. In Nigeria, they have become 'place-holder' physicians and nurses who cover shifts for formally employed but absent professionals, a practice that enables the latter to moonlight in the private sector.[13] In Uganda, trained nurses and midwives are increasingly found as employees in retail medicine outlets including drug shops, private clinics and pharmacies operating in the *shadows* of the public health system, where they sell medicines and provide care that goes far beyond the licence of the medicine outlet in which they work.[14,15] In both cases, this informality puts them at higher risk of exploitation and leaves them with a lack of access to decent jobs, social protection, rights at work and equal pay.

4 | THE NEED FOR HIGH QUALITY MIXED-METHODS RESEARCH

Beyond these descriptions, however, we know little of what it is that these trained professionals do, how they make decisions, secure a living, or survive in harsh economic climates. Work on informal healthcare providers does not consider the activities of these surplus health workers.[16] Research on their individual and collective responses to

TABLE 1 Numbers of unemployed or underemployed health workers in selected countries.

Country	Date	Number	Cadre
Uganda[1]	2023	20,590	Nurses and midwives
Niger[4]	2010–2014	15,000	Health workers (including physicians)
Kenya[12]	2021	6683	Clinical officer
		1831	Medical doctors
		9300	Nurses
		9429	Unspecified cadres of health workers

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the lack of opportunity for formal employment within the health system is critical for three reasons. First, it can have grave consequences for quality within health systems. Those who provide services and care on an informal basis are ungoverned and unprotected. While they are trained professionals, it is impossible for governments to ensure that they have decent work, that they are providing good quality services, that they continue to stay up to date with developments in their fields, and that they keep patients safe and well cared for. Second, their incorporation into the health system as informal or unofficial 'place-holder staff' or 'volunteers' can have a negative impact on equity by driving informal payments. Informal payments can occur when those providing care within the formal health system are unpaid through official channels, so novel ways of raising income in health centres to pay these informal providers must be found.[13,17] Third, those who leave nursing, medical and pharmacy professions entirely, represent a deeply inefficient and unproductive use of resources (both time and money) at individual, national and global levels. Their failure to find secure work can be a tragedy not only for themselves but for extended families who often come together to pay their school and university fees, and who benefit from having formally employed family members. Lastly, the *paradoxical surplus* of health workers' phenomenon adds complexity to available policy options to address emerging and evolving health threats. Powered by demographic and epidemiological transitions, today's health threats require a focus on the numbers, skill mix and distribution of the current and future health workforce if our progress towards achieving SDGs is to continue.

5 | THE NEED FOR RESEARCH ON THE POLITICAL ECONOMY

This qualitative research must be combined with political economy analysis to understand what policies underpin their emergence and what shapes the current (dis)interest in their situation at the national and global levels. Except for the analysis of the unemployment crisis among nurses in Ghana,[18] the extent to which policymakers, professional organisations, unions and educational establishments recognise the problem and are seeking pathways through which surplus health workers can be absorbed into the formal system is largely unknown. Policymakers whom we have consulted (and who are part of this writing team) recognise the urgency of the problem and the need to find an effective response to the current situation, but their hands are tied by a lack of research on the scale and nature of the problem. Debates that should be occurring across and between countries and within regions that set out best practices to enable the absorption of these health workers into health systems must be bolstered by high-quality qualitative and quantitative research that enables us to understand the phenomenon, its dynamics, and consequences.

6 | SEEING THE WHOLE PICTURE

As the health workforce rises even higher on the international agenda, we urgently need research that combines qualitative and quantitative findings. These must provide insights into the political economy driving the emergence of these surplus workers and the potential for different solutions to be taken up by governments. Qualitative research needs to map their everyday lives, the paid and unpaid work that they undertake, the economic opportunities that they pursue, the visions they have of themselves and their future professional lives. It must also incorporate political economy analysis, with a focus the power, interest and capabilities of different policy actors who could be involved in addressing this paradoxical surplus. Quantitative work will be necessary and will include labour market workforce analysis to identify which cadres are most at risk. This research can also gain insights from work on the widespread underemployment in other sectors in African economies[19] and on insights from high income countries where appropriate, where the dominant discourse has focused on recruitment rather than what is now, belatedly being recognised as the main problem, retention.[20] Even though the circumstances are very different, some of these countries are also facing a situation in which large numbers of trained health workers are outside the formal health workforce, either to pursue an improved work-life balance or to find alternative employment, offering better remuneration of working

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conditions elsewhere. Research in those countries has revealed how, although a career as a health worker has many attractions, there are also significant downsides, including poor working conditions and lack of family friendly policies.

Only a comprehensive, multidisciplinary research agenda can provide the holistic picture of what is happening in different regions, countries and contexts. This is a prerequisite for new policies and approaches that could incorporate much needed, but presently underused, expertise and labour into health systems that need them and can help shift the narrative on the global health workforce to one that is more aligned with reality.

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CONFLICT OF INTEREST STATEMENT

We have no conflicts of interest to declare.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

ETHICS STATEMENT

No previously unpublished data was used in this short communication. It stems from narrative literature review combined with findings from three research projects approved by the London School of Hygiene and Tropical Medicine (22907, 21901 and 14595).

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