Human resources for health: How to increase workforce inputs to address noncommunicable diseases and mental health conditions?

Technical paper #6

Key messages

- WHO estimates a projected shortfall of 10 million health workers by 2030, mostly in low- and lower-middle income countries.
- Macro-fiscal constraints limit investment in education, training and employment of health and care workers, which is further challenged by workforce migration and "brain drain."
- Key health workforce challenges limit the ability of countries to adequately address the needs of people living with noncommunicable diseases (NCDs) and mental health conditions.
- A scale up of NCD and mental health services will require a paradigm shift in how health and are workers deliver essential services, including new models of care, revised licensing and regulations, strengthened institutional capacity to provide competency-based education and other key factors.
- NCDs and mental health conditions will require additional health workforce inputs to meet the projected demand, estimated to be XYZ with a global price tag of XYZ [estimates are forthcoming].
- Domestic and external financing is critical in closing the funding gap for the health and care workforce to be adequately trained, recruited, remunerated, supported and retained, to deliver quality NCD and mental health services in line with population needs.

Introduction

Noncommunicable diseases (NCDs) and mental health conditions account for 74% of all deaths and rank among the leading causes of disability worldwide. Alarmingly, 17 million people die from an NCD before the age of 70, and 86% of these premature deaths occur in low- and middle-income countries (LMICs). Most of these deaths and much of the disability could have been prevented by policy, legislative and regulatory measures to respond to the needs of people living with or at risk of NCDs and through preventive, curative, palliative, and specialized services through primary health care (PHC).

Health and care workers are at the crux of the global response to NCDs and mental health, and the key to attaining universal health coverage and achieving sustainable development goal (SDG) 3 on health. Accordingly, SDG target 3.c specifies the need to "substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing states."

WHO estimates a projected shortfall of 10 million health workers by 2030, mostly in low- and lower-middle income countries.[1] In Africa, a region which shoulders a quarter of the disease burden, only 4% of the global health workforce is available to serve the needs of over a billion people.[2] The global health workforce shortage is fueled by key challenges of underinvestment due to macro-fiscal constraints, a mismatch between workforce supply and demand and substandard working conditions. Workforce migration introduces the challenge of "brain drain," referring to the movement of skilled health

professionals usually from low-income to high-income countries, effectively depleting local capacity to address NCDs and mental health conditions.[3]

COVID-19 has aggravated these challenges, causing worker burnout and attrition. Low, and unequal remuneration may further hinder motivation and worker satisfaction, exposing key inequities in some countries. Data shows that although women make up 67% of the health workforce, they face a 24% pay gap as compared to men and are not represented equally in leadership roles. Additionally, estimates show that women perform about 76% of all unpaid care activities – negatively impacting the valuation of health and care work, perpetuating gender inequalities and harming women's empowerment.[4]

The ongoing and projected epidemiological and demographic shifts place even greater strain on an already fragile health and care workforce. The demand for qualified and competent workers to provide care for chronic conditions such as NCDs and mental health conditions is increasing. Chronic care is complex, demanding a broad range of preventive, curative, rehabilitative and palliative services. Specialists are needed to address complications which often arise due to delayed diagnoses, as public awareness about NCDs and mental health is often low. These factors implore the need for adequate planning and sustainable financing solutions to ensure that population needs are met.

The key objectives of this technical paper are:

- To delineate what actions are needed to scale up provision of NCD and mental health services by the health workforce.
- To provide an indication of the health workforce inputs needed to scale up essential NCD and mental health services.
- To estimate a global price tag for the health workforce needed of scaling up NCD and mental health services.

Section 1: Actions needed to scale up provision of NCD and mental health services by the health workforce

The increasing demand for NCD and mental health services requires a critical expansion of the health and care workforce with adequate investment. Optimizing how care is delivered is crucial, including how the workforce is trained, recruited, incentivized and deployed. The WHO 'Global Strategy on Human Resources for Health: Workforce 2030'[5] provides a vision for optimizing the health workforce, to be operationalized through the 'Working for Health 2022-2030 Action Plan'[6] which sets out three objectives, to: 1) optimize the existing health and care workforce, creating and distributing the skills and jobs needed to accelerate progress to UHC; 2) build the diversity, availability, and capacity of the health and care workforce, addressing critical shortages by 2030; and 3) strengthen the protection and performance of the health and care workforce to deliver health for all and respond to health emergencies.

The Action Plan delineates the critical need for investment in the *planning and financing, education and employment, and protection and performance* of the health and care workforce. These three areas include important strategies to accelerate action to meet the global shortage of health workers, while ensuring

adequate capacity and competency to address the key drivers of disease and disability worldwide, which are increasingly linked to NCDs and mental health conditions.

Workforce planning and financing

Scaling up NCD and mental health services requires comprehensive planning and sustained investment. Countries need to construct or revisit plans for workforce development and associated capacity-building that reflect the expected needs of the population, cover not only specialist but also non-specialist care providers, and enable different occupational categories to carry out specified roles and functions in the health system. Management capacities need to be strengthened to ensure optimal planning including hiring practices, managing absences, workloads, and competencies, as well as maintaining data on the available health workforce through effective information systems.

Governments also need to build labour market demand for health and care workers, mobilize sufficient and sustainable revenue, and produce, attract, develop and retain workers within the health system. As countries focus on data-driven planning of the workforce, they will need to consider key inputs to ensure NCD and mental health services are delivered to respond to epidemiological and demographic trends. Various tools, such as the health labour market analysis (HLMA), National Health Workforce Accounts (NHWA) and Workload Indicators of Staffing Need (WISN), can be used to provide a foundational view of the health workforce situation in countries. For example, countries have used the WISN tool to generate evidence on adequate staffing, role distribution and upgrading of health facilities.[7] However, further workforce assessments are needed to quantify the needs and gaps specific to NCD and mental health services. One global study of the workforce gap and needs for mental health undertaken in 2011 estimated that, across 58 LMICs, 239 000 full-time equivalent professionals would be needed to address the current shortfall.[8] Further research in this area will be needed to strengthen workforce planning measures to improve efficiency and equity in service coverage.

Granularity on the type of professional occupational groups required, and team composition, can form the basis for developing staffing norms linked to costing and budgeting processes. Analysis of the costs and benefits of employing dedicated professionals, such as cardiologists, psychiatrists, psychologists, nutritionists, or specialized nurses, can inform the ideal model of care that is context appropriate. If multidisciplinary teams and task-sharing models are employed, different costs will be associated with health worker training to ensure an adequate skill mix. Further testing of new models of care, and analysis of their effectiveness, can drive policy objectives, for example to establish the scope and scale of community health worker programmes and to inform resources needed compared with available fiscal space. These considerations need to be viewed within a country's health workforce makeup, which may include a mix of public and private providers within formal and informal health systems.

Education and employment

Caring for growing and ageing populations requires health and care workers to have specific competencies in addressing NCDs and mental health conditions, matched with viable employment opportunities.

Competency-based education (CBE) offers a foundation and vehicle for integrating population health needs with the core values of health professions. The WHO Global Competency Framework (GCF)[9] for UHC includes 24 competencies that are essential for all health workers to provide high-quality health services structured around enabling individual health, population health and management and organization.

To strengthen the effectiveness of CBE, skills to prevent and treat NCDs and mental health conditions should be adequately included in training programmes, in accordance with the epidemiological burden of the country or context. The training modality for specialty services for NCD and mental health will vary according to the availability of resources in countries. For example, countries may consider training programmes at the local or regional level, or at the international level – sending medical trainees abroad while accounting for the risks of migration. In addition, training programmes need to be *adaptable* to changing disease burdens, and new or revised treatment protocols, to ensure that management of NCDs and mental health conditions is based on the latest evidence and best practice.

Special attention is needed to train professionals in addressing stigma that deeply impacts people with lived experience of NCDs and mental health conditions. A key recommendation emerging from the Lancet Commission on ending stigma and discrimination in mental health calls on countries to ensure that all pre-qualifying courses should include mandatory training sessions on the needs and rights of people with mental health conditions, to be co-delivered by people with such conditions.[10]

Investment is needed to build institutional capacity for the education of the health and care workforce, ensuring that teaching curricula are updated as required. This support can be strengthened by harnessing global partnerships, financing, and technology, such as online training and other digital tools, to strengthen the delivery of CBE across the spectrum of the health and care workforce and through lifelong learning. E-learning can offer an avenue for individualized approaches to education, using online platforms and discussion forums to facilitate peer learning. In rural communities, health workers often have limited access to learning and development opportunities, particularly on mental health topics.[11] To bridge this gap, online programmes have been effective in delivering continuing education to increase awareness and confidence in mental health interventions.[12]

E-learning tools to strengthen psychological support by the health workforce

WHO's EQUIP (Ensuring Quality in Psychological Support) is a joint WHO/UNICEF project to improve the competence of helpers and the consistency and quality of training and service delivery. The EQUIP platform makes freely available competency assessment tools and e-learning courses to support governments, training institutions, and non-governmental organizations, both in humanitarian and development settings, to train and supervise the workforce to deliver effective psychological support to adults and children. The resources have been tested in Ethiopia, Jordan, Kenya, Lebanon, Nepal, Peru, Uganda and Zambia, showing improvements using this mode of e-learning.

Source: https://www.who.int/teams/mental-health-and-substance-use/treatment-care/equip-ensuring-quality-in-psychological-support

In addition to training, governments should work to expand employment opportunities and career pathways for the health and care workforce, including in both public and private sectors, accordingly. In some cases, revising licensing and regulatory requirements for different occupation groups, may be necessary. Once employed, health workers need to be encouraged to remain in their practice instead of seeking opportunities abroad, as is common in many countries, particularly in Small Island Developing States (SIDS). This issue of "brain drain" remains a key concern as health workers receive training in their home countries but seek employment elsewhere; moving between countries or regions, or from rural to urban areas, which deeply impacts the formation and sustainability of the health workforce. Provider-payment mechanisms that motivate and incentivize health workers, as well as non-financial incentives, can help to sustain a continuous performing workforce and reduce potential losses of investment in education and training. In addition, fair and ethical bilateral migration agreements that explicitly define the types and amounts of investments and support to benefit the countries of origin, can provide mutual benefits to involved countries as well as health workers.[13]

Protection and performance

Health and care workers must be protected and supported to realize the competencies acquired to address NCDs and mental health conditions. Governments should strive to ensure decent work in the health sector, protecting the physical and mental health and well-being of workers, the sustainability of the workforce, the quality of care and the capacity of the health system to deliver. Key measures are needed to optimize team-based roles across occupational groups to address the multiple dimensions of NCDs and mental health conditions considering a global workforce shortage, particularly in resource limited settings.

Safeguarding the rights of health and care workers is critical. Various legal instruments, labour laws and regulations can protect rights and ensure safe working environments and fair remuneration. The WHO Global Health and Care Worker Compact provides evidence and guidance to support governments in implementing key policy measures.[14,15] Certain considerations need to be made to ensure that all health and care workers are treated fairly. This includes addressing gender inequalities and closing the gender pay gap. It further demands accounting for unpaid caregiving, which is mostly undertaken by women, by identifying unpaid caregivers and providing support, credentialing and compensation, as appropriate.

Care beyond care: Preserving professional boundaries for health workers

Health and care workers are faced with daily decisions to protect the health of their patients through compassionate care. Maintaining professional boundaries allow health workers to maintain psychological safety. However, in some contexts, these boundaries are not upheld. Interviews conducted with a representative from the Mental Health Authority in Ghana revealed how caring for people with mental health conditions personally impacts health workers.

> "There is something about the mental health work in Ghana. It is very common to find our community mental health nurses or psychiatry nurses using their resources to purchase drugs and other consumables for clients. Oh yes, they use their funds to purchase drugs/antipsychotics for patients. The nature of the training as a psychiatry or mental health nurse or health worker makes you more compassionate and open to reaching out to protect the mental health of people in the community. So yes, this is a very common practice and I see this happen all the time despite the very meager resources at their disposal." – *Representative from the Mental Health Authority, Ghana, March 2024*

Shifting health systems towards a multidisciplinary team-based care approach has the potential to improve the response to population needs in a cost-effective way. The broad range of interventions required to prevent and treat NCDs, and mental health conditions demands a diverse skill set which not all health workers will be trained for. Designing a care pathway which involves nurses, community health workers, pharmacists, dentists, psychologists, psychiatrists, nutritionists and other health professionals as appropriate, can improve the rational scope of practice and lead to better health outcomes. Similarly, implementing task-sharing mechanisms can optimize the delivery of NCD and mental health services while enabling a more efficient use of human resources, with potential for cost savings. There is growing evidence about the benefits of using non-physician health workers, such as community health workers, in the prevention and treatment of NCDs and mental health conditions. A review and meta-analysis of task-sharing interventions involving non-physician health workers for hypertension control in LMICs found an overall reduction in systolic blood pressure of -4.85 mm Hg (−6.12, −3.57), and diastolic blood pressure of -2.92 mm Hg (–3.75 to −2.09).[16] Although high-quality research in this area is still limited, a few studies have noted improvements for mental health conditions, chronic respiratory disease, cardiovascular disease, and cancer when task-sharing mechanisms were implemented according to context.[17,18] In many countries, community health workers have been vital in addressing mental health needs by extending the reach of mental health services from the health center to where people live and work. In primary care systems where mental health services are not available, or in conflict-affected settings, these community approaches fill a critical gap to support people in need.[19]

Additional innovations in skills-mix optimization can advance the delivery of NCD and mental health services. For example, alleviating administrative burdens can grant health workers more time to spend on clinical care, including counseling to address NCD and mental health risk factors. In certain contexts, such as rural areas, different service designs can be adapted to optimize the use of staff time. This may include implementing a hub-and-spoke model, or tele-mentoring, to improve access to specialty services in hard-to-reach geographies.

Transforming the roles of specialists and non-specialists through new approaches including team-based care and task-sharing, will require additional resources, or a shift of resources, to transform the service delivery model accordingly. This includes strengthening in-service training provision, supervision and referral systems to ensure that health workers are empowered to deliver uninterrupted and quality care across the life course.

Empowering pharmacists as key members of multidisciplinary teams in Ethiopia

In Ethiopia, DAH by the Norwegian government supported the gradual decentralization of NCD services from hospitals to local health centres. A close collaboration between WHO, the Ministry of Health, and partners, directly supported 87 health facilities in eight regions to strengthen screening, care and treatment for NCDs with a focus on hypertension, diabetes and cervical cancer. Funding was used to train 2,309 health professionals, including 180 pharmacists, as integral members of multidisciplinary teams. Pharmacists are now empowered to counsel and monitor people on NCD treatment, while ensuring the selection, quantification and procurement of protocol-recommended medicines.

Source: World Health Organization. "Ethiopia: Transforming chronic disease care." https://www.afro.who.int/countries/ethiopia/news/transforming-chronic-disease-care

Section 2: Indication of the health workforce inputs needed to scale up essential NCD and mental health services [section under development]

Optimizing the health and care workforce to respond to epidemiological and demographic trends is essential for the progressive realization of universal health coverage. The burden of NCDs and mental health conditions requires significant inputs into effective planning, regulation, education, recruitment, employment, performance optimization and retention of health and care workers. Alternative models of care reliant on multidisciplinary teams and elements of task-sharing, provide cost-saving opportunities.

Defining the number and type of health workers needed to meet this growing demand in the next decades is crucial for effective domestic budgeting and financing processes. It can also provide vital insights into policy, regulatory and advocacy measures to ensure that remaining gaps are met. However, estimating health workforce inputs is a complex and imprecise exercise, reliant on accurate data sources which are often lacking particularly in low and middle-income countries and settings with unique vulnerabilities, such as Small Island Developing States (SIDS).

How many health workers are needed to scale up services?

- *Provide overview of the methodology used to define human resource needs, including key assumptions, health interventions used in the model, and occupational groups considered.*
- *Present the estimated human resource needs for scale-up.*

Estimating a global price tag

- *Present the global price tag according to realistic country scenario for scale up of health interventions based on progressive universal income*

[This section is currently under development and awaiting the finalization of the modelling exercise to estimate health workforce inputs, and a global price tag associated with scaling up NCD and mental health services in countries]

[Forthcoming]

Case study on the situation of the health and care workforce in Saint Vincent and the Grenadines

- The aim of this case study is to portray the specific context, and challenges and opportunities, for scaling up the health and care workforce to address NCDs and mental health conditions in the context of a Small Island Developing State (SIDS). A case study is under development to illustrate the unique challenges in sustaining human resources for health faced in the islands of Saint Vincent and the Grenadines.

Summary and recommendations

- Due to epidemiological trends and demographic shifts, addressing NCDs and mental health conditions will require **additional health workforce inputs to meet this demand, estimated to be XYZ with a global price tag of XYZ** [estimates are forthcoming].
- Any health financing plans need to fully consider this increase in health worker count and associated remuneration, training and education costs, among others. New or revised licensing and regulation may further be required to expand roles of certain occupational groups. Institutional capacity to provide competency-based education will also need to be scaled up.
- Specific attention and investment are needed to improve prevention and management of NCDs, mental health conditions and other chronic diseases in *pre-service training*.
- Sufficient *in-service training* and supervision is critical for developing skills, competencies and ensuring quality performance of the health workforce.
- **Domestic funding** should be made available to scale up and optimize the health workforce to provide NCD and mental health services, according to country needs and ability to scale-up services. These funds can be instrumental in resourcing training programmes to increase the supply of health workers, ensuring adequate salaries to attract and retain health workers, and recruiting specialists for NCDs and mental health conditions, as required.
- **DAH** can provide valuable resources to strengthen both **capital and some recurrent expenditure** for health and care workers. DAH can be used to strengthen institutional capacity for provision of competency-based education reflecting the epidemiological burden of NCDs and mental health conditions, with an aim to invest in long-term training and lifelong learning opportunities. DAH can also be a valuable source of investment to stimulate adequate staffing and retention of the health workforce. For example, DAH investment in physical infrastructure, technological infrastructure, management, and public administration, can contribute to creating an enabling environment to promote satisfactory working conditions.
- New investment or additional deployment of health and care workers in the context or aftermath of emergencies provides an opportunity to ensure that critical needs of people living with NCDs

and mental health conditions are addressed in situations of crisis, contributing to building resilient health systems.

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