POLICY BRIEF

IMPROVING THE PREVENTION AND MANAGEMENT OF NON-COMMUNICABLE DISEASES IN ETHIOPIA

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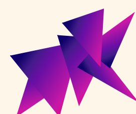
How this policy brief was developed:

This policy brief is based on the research project "*Integrated management and care for non-communicable diseases in resource-constrained settings: An empirical analysis of availability, readiness, and within- and cross-programme interaction in Ethiopia*". The research was conducted under the guidance of the University of New South Wales, Australia, and benefited from the incentive grant for young researchers provided by the World Health Organization Global NCD Platform and UNITAR's Defeat-NCD Partnership in collaboration with the Alliance for Health Policy and Systems Research.



What is this policy brief about?

This policy brief summarizes the findings of an empirical analysis of integrated management and care for non-communicable diseases in Ethiopia, specifically the availability, readiness, and within- and cross-programme interaction.

Who is this policy brief for?

This policy brief primarily targets national, regional and local health policy-makers in Ethiopia, however other decision-makers, practitioners and researchers interested in the prevention and management of non-communicable diseases in general, and in Ethiopia specifically, may find the content of this policy brief relevant.

This policy brief includes:

- Description of access to and provision of non-communicable disease services in Ethiopia
- Methodology and key findings of the analysis study that informed this policy brief
- General policy implications and recommendations

This policy brief does not include:

- Strategies to implement the provided recommendations
- Comparison of several viable policy options and recommendations on the best option

PROBLEM STATEMENT

- Access to and provision of NCD services in Ethiopia are limited, with only 8% of facilities offering all four essential NCD services. Chronic respiratory disease services are offered in 53% of facilities, cardiovascular disease services in 49%, diabetes mellitus services in 37% of facilities, and cervical cancer screening in less than 10% of facilities.
- NCD service readiness is strongly associated with readiness for communicable diseases services, which calls for further research of unintended consequences.
- Barriers to the provision of NCD services include:
  (i) gaps in the service delivery;
  (ii) low level of political commitment and limited intersectoral coordination;
  (iii) inadequate funding of NCD services;
  (iv) insufficient skills of PHC workforce;
  (v) inadequate supply of equipment and medicines.

IMPLICATIONS

- To effectively strengthen the delivery of integrated, people-centred NCD services in Ethiopia, efforts are required to intensify policy and practice interventions to enhance the core strategic levers of the WHO PHC framework. Additionally, there is a need to strengthen multi-sectoral coordination and engage communities, civil society, and the private sector to improve NCD prevention and care.
- To address the gaps in NCD services, disparities within communities, and the ongoing challenges of recovering from COVID-19 and conflicts, priority should be given to strengthening primary health care (PHC) to restore and improve the delivery of essential health services.
- To improve the access to and quality of NCD services, actions are required to empower, reskill and create a supportive environment for the workforce.

1. FRAMING THE PROBLEM

BACKGROUND

Health systems worldwide are under continuously increasing pressure from noncommunicable diseases (NCDs), aggravated by inadequate investment in health care, shortages of skilled health-care workers, and the COVID-19 pandemic [1]. Over the past three decades, NCD-related deaths in Ethiopia have doubled and now account for over 45% of all deaths. Projections suggest that this figure may rise to two-thirds of all deaths by 2040, leading to far-reaching social, economic, and family-level consequences [2].

To tackle the burden of NCDs and their associated consequences and resulting implications, Ethiopia has implemented a comprehensive National Strategy (2014–2016) in alignment with the WHO's global framework for addressing NCDs [3]. The national strategic plan primarily focused on addressing behavioural risk factors and strengthening the primary health care (PHC) system to address NCDs [3].

As part of this effort, the Health Extension Programme (HEP), Ethiopia's flagship community-based health strategy since 2003, has been adapted to include NCD prevention and promotion activities, expanding the scope of work for health extension workers (HEWs). By integrating NCD services into the HEP, Ethiopia aimed to leverage the programme's existing infrastructure and workforce and the success achieved in reducing maternal and child mortality, improving hygiene and sanitation, promoting health-seeking behaviour, and addressing infectious diseases [4, 5].

Despite the existence of a national plan of action for NCDs and a robust PHC system, access to and provision of NCD services in Ethiopia is still suboptimal [6-9]. Overcoming

this challenge requires a comprehensive understanding of the barriers and facilitators within Ethiopia's health system as well as the development of strategies to ensure equitable access to services for those in need.

This policy brief aims to contribute to these efforts by assessing progress achieved thus far, identifying gaps, and highlighting priority areas for enhancing integrated and people-centred NCD services within Ethiopia's health system. Four main groups of NCDs services considered in this analysis include diabetes mellitus

METHODS AND DATA SOURCES

The analysis project that served as a basis for this policy brief consisted of two distinct work packages (WPs) and employed a mixed-method approach.

The first WP focused on assessing service availability and readiness using data from the 2018 Ethiopian Service Availability and Readiness Assessment (SARA) Survey [8]. Health posts, that are not mandated to provide NCD care in the country [7, 9], were excluded from the analysis [8, 10]. Facility-level service availability and readiness were evaluated based on the WHO guidelines [11].

Furthermore, a secondary analysis of the Ethiopian Health Extension Programme (HEP) Assessment Survey was conducted to assess service availability at the community and primary health care (PHC) levels [12]. The data encompassed community residents, HEWs, health posts, and health centres in the nine regions of the country [13].

Under WP2, the capacity and readiness of the PHC system were evaluated using a qualitative approach [10]. This involved conducting 22 key informant interviews with national and regional policymakers, officials from a partner organization, district/woreda/health office managers and coordinators, and PHC workers [10].

The resulting data were coded and thematically analysed using the World Health Organization (WHO) Operational Framework for PHC [14]. Additionally, 27 interviews with similar categories of participants, including the HEWs, were conducted to explore their experiences [15].

The coding framework for this segment was informed by the broader CHW performance framework and built on our previous findings [16]. These qualitative studies were conducted in two regions (Tigray Regional State and South Nations, Nationalities and Peoples Region (SNNPR)) and with federal authorities in Addis Ababa, Ethiopia 2019.

The two separate work packages and their respective components, which were sourced from four separate papers [10, 13, 15, 17], have been integrated for this policy brief, and the findings were triangulated.

The subsequent section provides a summary of key enablers and barriers identified through the quantitative and qualitative studies. The policy implications and proposed priorities to address the gaps in delivering integrated NCD services in Ethiopia and beyond are outlined in the third and final section of the brief.

2. KEY FINDINGS

Limited NCD services and low readiness

A re-analysis of the national SARA survey revealed that only 8% of facilities provided all four essential NCD services. Availability varied for specific services, with cervical cancer screening being the least available service in the country: less than 10% of facilities, mostly higher-level hospitals, provided the service.

On the other hand, chronic respiratory disease services are available in 53% of facilities, cardiovascular disease services in 49% and diabetes mellitus services in 37% of facilities. None of the lower clinics and only 5% of health centres provided all four NCD services.

At the HEP level, NCD services were limited to prevention through health education. However, the study found that only 22% of the study population had accessed NCD prevention services through the HEP in the 12 months prior to the survey.

This finding was consistent with the qualitative result that highlighted the lack of structure and regularity in the provision of NCD preventive education by Health Extension Workers (HEWs).

Among the facilities providing NCD services, up to half had only 26% or fewer of the items required to provide comprehensive NCD care, indicating a low level of readiness for NCD services in designated facilities. Following the WHO guideline [11], service readiness scores were calculated based on the mean percentage availability of the tracer indicators for NCD services such as trained staff and guidelines, equipment, diagnostic capacity, and medicines and commodities.

Referral hospitals were more ready (72%) than other types of hospitals and higher clinics (47%). Additionally, significant disparities in the availability and readiness of NCD services were observed between lower-level geographic areas(districts).

This finding was supported by the qualitative study, with participants confirming that most

Photo: WHO

facilities were ill-prepared to provide NCD care. Services at health centres were limited to basic screening and diagnosis for hypertension and diabetes.

Interaction between NCD and non-NCD services

Overall, half of the facilities in the country had a readiness score of 26 % or less, ranging from 46 % for diagnosis and management of diabetes to 33 % for cardiovascular diseases, and less than 27 % for chronic respiratory diseases.

The readiness of health-care facilities for NCD services was found to be significantly associated with readiness for communicable diseases care (tuberculosis, malaria, and HIV/AIDS). The readiness of services for diabetes mellitus, chronic respiratory disease, and cervical cancer screening was also positively associated with the readiness for communicable diseases care, indicating a strong correlation between these programs.

However, at the Health Extension Programme level, the study revealed a negative association between HIV/AIDS and NCD prevention services. These findings caution that integrating NCD services with existing programmes may potentially be associated with unintended consequences, although more research is needed to determine if this is the case.

Barriers to the provision of NCD services

Despite the presence of NCD-specific strategies and interventions in Ethiopia, the studies have identified significant gaps in the delivery of NCD services, particularly at the PHC level.

The findings from the qualitative studies have identified gaps in political commitment and leadership, and limited inter-sectoral coordination and inadequate funding available for addressing the burden. Consequently, the costs of NCD care predominantly fall on patients, increasing the risk of catastrophic household expenditure.

The qualitative studies also found that high-level strategic gaps were further compounded by operational constraints, such as insufficiently skilled and supported PHC workforce, fragmented information systems, and inadequate availability of equipment and medicines were identified as key operational challenges.

Moreover, at the HEP level, there were variations in the quality of NCD training provided to HEWs and their supervisors. Supervisor skill gaps in NCDs, inconsistent supervision practices, and non-transparent performance appraisal systems were also identified, leading to demotivation among HEWs.

3. IMPLICATIONS AND RECOMMENDATIONS

Drawing on the analysis exercise, this policy brief proposes priority areas for strengthening the delivery of integrated, people-centred NCD services. Overall, the studies highlighted the need to address both strategic and operational barriers to effectively deliver NCD services in Ethiopia. This includes strengthening health system governance, improving inter-sectoral coordination, securing adequate funding, enhancing the skills and support for the PHC workforce, addressing information system fragmentation, ensuring the availability of necessary equipment and medicines, and improving the quality of NCD training, supervision, and performance appraisal for HEWs.

Photo: WHO

However, it is essential to acknowledge that achieving these results will require adapting to evolving circumstances, such as the ongoing global COVID-19 pandemic, which has significantly impacted access to essential health services, particularly for individuals living with NCDs. Additionally, the conflict in various regions of Ethiopia, particularly in Tigray region, poses an additional challenge to the health system. Other regions also face similar consequences, as the conflict may have shifted government priorities and reduced the fiscal space available for health.

Therefore, it is crucial to ensure a greater commitment to building health system resilience, capable of responding to current and future emergencies while continuing to deliver essential health services, including those for NCDs [18-20].

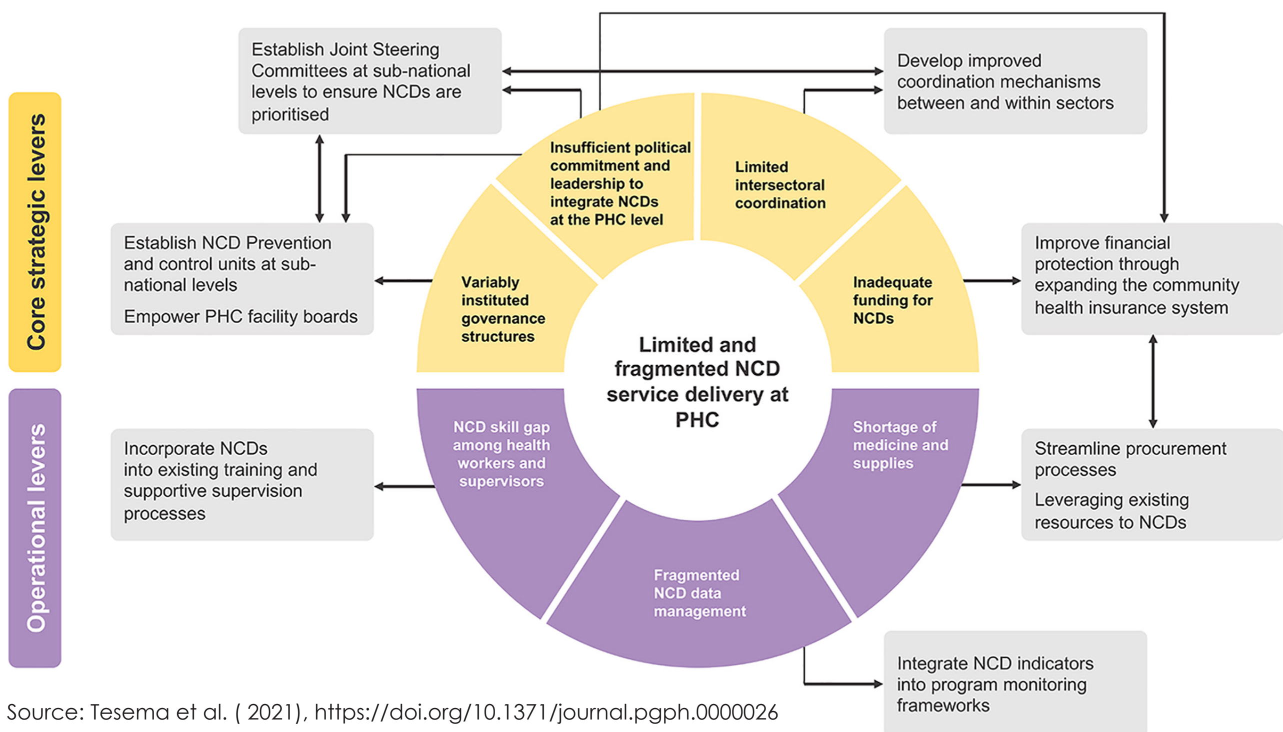
The recommendations are organized into three components: leadership, service delivery and workforce. By implementing these recommendations, Ethiopia can strengthen the provision of NCD services, particularly at the PHC level, and ensure that NCD services are available to all those in need. Additionally, supporting and incentivizing HEWs will contribute to the overall resilience and effectiveness of the health system.

I. REAFFIRM COMMITMENT TOWARDS CORE STRATEGIC LEVERS

To effectively strengthen the delivery of integrated, people-centred NCD services in Ethiopia, it is important to draw lessons from the country's prior successes in PHC reforms.

As shown in Figure 1 [10], this requires **intensifying policy and practice interventions to enhance the core strategic levers of the WHO PHC framework**. Additionally, there is a need to strengthen multi-sectoral coordination and engage communities, civil society, and the private sector to improve NCD prevention and care.

Figure 1. Integrated and people-centred NCD prevention and control through PHC in Ethiopia



Source: Tesema et al. (2021), https://doi.org/10.1371/journal.pgph.0000026

II. STRENGTHEN AND REORIENT THE MODEL OF CARE FOCUSING ON INTEGRATED PEOPLE-CENTRED PHC

Considering the gaps in NCD services, disparities within communities, and the ongoing challenges of recovering from COVID-19 and conflicts, priority should be given to **strengthening primary health care (PHC) to restore and improve the delivery of essential health services**. This can be achieved by addressing the operational levers adapted from the WHO PHC framework as shown in Figure 1.

Specific actions are recommended:

- Building a comprehensive model of care: Develop a model of care at the PHC level that incorporates prevention, screening, diagnosis, and management of NCDs. This model should include a strong referral and feedback system to ensure continuity of care and effective management of NCDs. Scaling up the implementation of WHO's Package of Essential Non-communicable Interventions (WHO PEN) to all PHC facilities is crucial to enhancing the quality of NCD care at the PHC level.
- Enhancing integrated service delivery: Improve the integration of NCD services within the PHC system. This requires monitoring the continuity of essential services, including real-time monitoring of mortality and morbidity data for NCDs and other priority areas. Explore the use of m-health and innovative technologies to

promote access to quality NCD services, where appropriate.
- Collective approach and coordination: Improve the availability and readiness of NCD services by addressing both general service readiness and NCD-specific readiness. This necessitates optimizing resources such as medicines, guidelines, workforce training, and strong leadership to ensure the delivery of quality NCD services. Additionally, it also requires effective coordination across the continuum of care and bringing care closer to where people live.
- Strengthening the Health Extension Program (HEP): Enhance the capacity of the HEP to provide NCD prevention and control services. Simplify protocols and guidelines, adopt standardized essential drug lists and diagnostic packages, and harmonize recording and reporting systems to facilitate the delivery of NCD services at the community level.
- Data-driven decision-making: Drive strategies and decisions on NCD service delivery based on disaggregated data, considering regional variations, geographic settings (urban/rural), socioeconomic groups, and other dimensions of inequality. This will help identify and address specific gaps and tailor interventions to meet the diverse needs of different populations.

III. EMPOWER, RESKILL AND CREATE A SUPPORTIVE ENVIRONMENT FOR THE WORKFORCE

- Ensure an adequate and well-distributed health workforce: Focus on establishing an adequate, motivated, and fairly distributed health workforce, particularly at the PHC level. This includes addressing skill mix imbalances and geographic disparities to ensure equitable access to health-care services.
- Support and invest in HEWs: Recognize the valuable contribution of HEWs as an essential part of the multidisciplinary PHC workforce. Provide support and resources to strengthen their role in NCD care and prevention through pre-service and in-service competency-based training. This should include specific training on NCDs, emergency preparedness, and response.
- Implement supportive supervision and administrative processes: Develop a supportive supervision system for HEWs to ensure their retention, motivation, and performance. Redefine and contextualize the HEP packages and overall system to accommodate the increasing demand for NCD care within the community.
- Prioritize mental health support for health-care workers: Recognize the impact of COVID-19 and the ongoing conflict on the mental health of health-care workers. Design effective mental health plans and provide incentives to enhance their motivation and performance. This will contribute to building a resilient health system.

Where can I find out more about NCDs globally?

The **Global Health Observatory**, a public health observatory established by the World Health Organization, monitors and shares data on global health, including statistics by country and information about specific diseases and health measures. It a dedicated has section on **Noncommunicable diseases** with further data and proposed actions for the prevention and management of noncommunicable diseases.

For information about high-level policy and action on NCDs, visit the **WHO Global Noncommunicable Diseases Platform (GNP)**, a department under the guidance of the WHO Deputy Director-General that brings together the Global Coordination Mechanism on NCDs and the UN Interagency Task Force on the Prevention and Control of NCDs, and oversees other multi-stakeholder cross-cutting initiatives on NCDs and related health challenges.

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