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# Primary Health Care Matters

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## Barriers to diabetes and hypertension screening: Learnings from the West Garo Hills region of Meghalaya

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### Background

Globally, non-communicable diseases (NCDs) account for 41 million deaths annually with most occurring in low- and middle-income countries (1). In India, NCDs contribute to 63% of deaths (2). The North-East Region carries a disproportionate burden, with 66% of deaths due to NCDs (3). Prevalence of diabetes (13.6%) (4) and hypertension (31.6%) (5) in the region is higher than national averages (9.6% and 31.1%) respectively (6,7). In Meghalaya, diabetes affects 15.6% (8) and hypertension affects 24.3% (9) of the population.

In the state of Meghalaya, screening coverage among the adult population above 18 years is low - 22.2% for diabetes (10), and 42.5% for hypertension (10), despite the implementation of the National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS) (11). Further, the Health and Wellness Centre (HWC) initiative launched in 2018 expanded the services available at Sub-Health Centres and Primary Health Centres, starting with population-based screening of common NCDs, mainly hypertension, diabetes and common cancers (12). In this study we explore both community and health system factors influencing the uptake of diabetes and hypertension screening in a district of Meghalaya.

### Methods

This policy brief draws from 52 interviews and focus group discussions, including healthcare providers, frontline workers, community members, and Village Health Council (VHC) members across three blocks of West Garo Hills district, Meghalaya (Figure 1). Data were collected in June 2024, transcribed in Garo and subsequently translated to English. The data was initially coded, and the codes were further analysed into categories and themes.


Figure 1: Map of Meghalaya state with highlighted West Garo Hills district

### Findings

We organised the barriers to NCD screening using the Socio-Ecological Model that included individual, interpersonal, community, institutional and policy level factors. (Figure 2)

| Level | Barriers |
|---|---|
| Individual | Low awareness, fear of diagnosis, dietary misconceptions, work constraints |
| Interpersonal | Influence of elders, preference for traditional medicine |
| Community | VHCs prioritize maternal-child health, reliance on healers, low outreach |
| Institutional | Clinic scheduling conflicts, medicine stock-outs, poor connectivity, staff overload |
| Policy | Overextended HWC coverage, staff shortages, poor infrastructure, limited training |

Figure 2: Barriers for uptake of hypertension and diabetes screening services

***Individual Level:***

Community perceptions linked diabetes ("Chini") to eating sweets and hypertension ("Pressure") to diets such as high salt intake, fatty foods, eggs, broiler chicken, and chemically grown vegetables. Prevention was commonly described as diet control and physical exercise. Awareness of screening was limited. Opportunities for screening in the community during Village Health and Nutrition Days (VHND) were missed as VHNDs were perceived as services mainly for pregnant women and children. Many community members avoided screening due to work commitments, fear of tests, reluctance to know results, or the belief that they were healthy. *"If we maintain our diet and reduce the sugar intake, we can prevent it." – Community member*

***Interpersonal Level:***

Family decisions often influence health decisions, particularly from elders, who show preference for traditional medicine which often stemmed from prior positive experiences with traditional medicine. This influence was not only for NCD screening but even other ailments. *"If their mother says don't go, that means they won't come." – Healthcare provider*

***Community Level:***

The Village Health Councils (VHCs) were found to focus on improving maternal and child health, with limited attention to promoting NCD awareness or screening. In terms of their health seeking behaviour, in addition to formal healthcare services, community members often relied on a mix of traditional, self-managed, and over-the-counter treatment approaches. Locals use herbs known as *Dongam* and consume sour fruits such as pomelo fruit which was seen as beneficial for hypertension.

***Institutional Level:***

Screenings were available at HWCs and during VHNDs, with NCD clinic day often clashing with weekly markets. Occasional medicine shortages, poor internet compromised the use of telemedicine platforms, and staff workload further constrained provision of optimal services. *"It's a weekly market day actually, so we are not getting many patients." – Healthcare provider*

***Policy Level:***

The Health and Wellness Centres with large catchment areas, staff shortages, insufficient training, poor roads, and difficult terrain compounded the problems leading to provision of less-than-optimal services. *"Because we have 30 villages under our HWC, we cannot go for field visits, and the people, they don't come to the health centre." – Healthcare provider*

***Cross-Cutting Barriers & Opportunities for Action:***

Barriers across individual, family, community, institutional, and policy levels were interlinked. Limited awareness, cultural preferences, livelihood pressures, and system challenges reinforced each other, reducing uptake of screening. However, opportunities exist through stronger community engagement, targeted IEC, digital messaging, staff training, and improved outreach to build trust and participation in NCD services

## Recommendations

1. Addressing Individual & Household Barriers
    - Strengthen awareness through local approaches: Use storytelling, testimonials, community gatherings, and home-based visits to highlight the benefits of early detection.
    - Promote practical outreach: Use social media, health fairs, and local events to encourage participation.
    - Mobilize self-help groups and frontline workers: Support households by raising awareness, helping with disease surveillance, and linking people to services.
    - Encourage personalised invitations: Use reminders such as phone calls and scheduled appointments instead of general announcements.

2. Addressing Interpersonal & Cultural Barriers
    - Involve families and elders: Recognise their influence in health decisions and engage them to support screening.
    - Partner with traditional healers: Work with trusted traditional healers to endorse screening and connect people with biomedical care.
    - Promote family support systems: Encourage families to play a role in diet, treatment adherence, and follow-up care.

3. Addressing Community-Level Barriers
    - Train Village Health Councils (VHCs): Expand their focus beyond maternal and child health to include NCDs.
    - Leverage community leaders: Involve elders, headmen, and religious leaders and other opinion leaders to mobilise communities for screening.
    - Build on past successes: Adapt strategies that worked during malaria and COVID-19 campaigns to promote NCD awareness and participation.

4. Strengthening the Health System
    - Revisit HWC coverage: Reduce the burden on one centre covering many dispersed villages to improve accessibility.
    - Provide regular refresher training: Equip health workers with updated knowledge and skills for NCD detection and management.
    - Ensure consistent supplies: Maintain steady availability of medicines and diagnostic tools at health centres.

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