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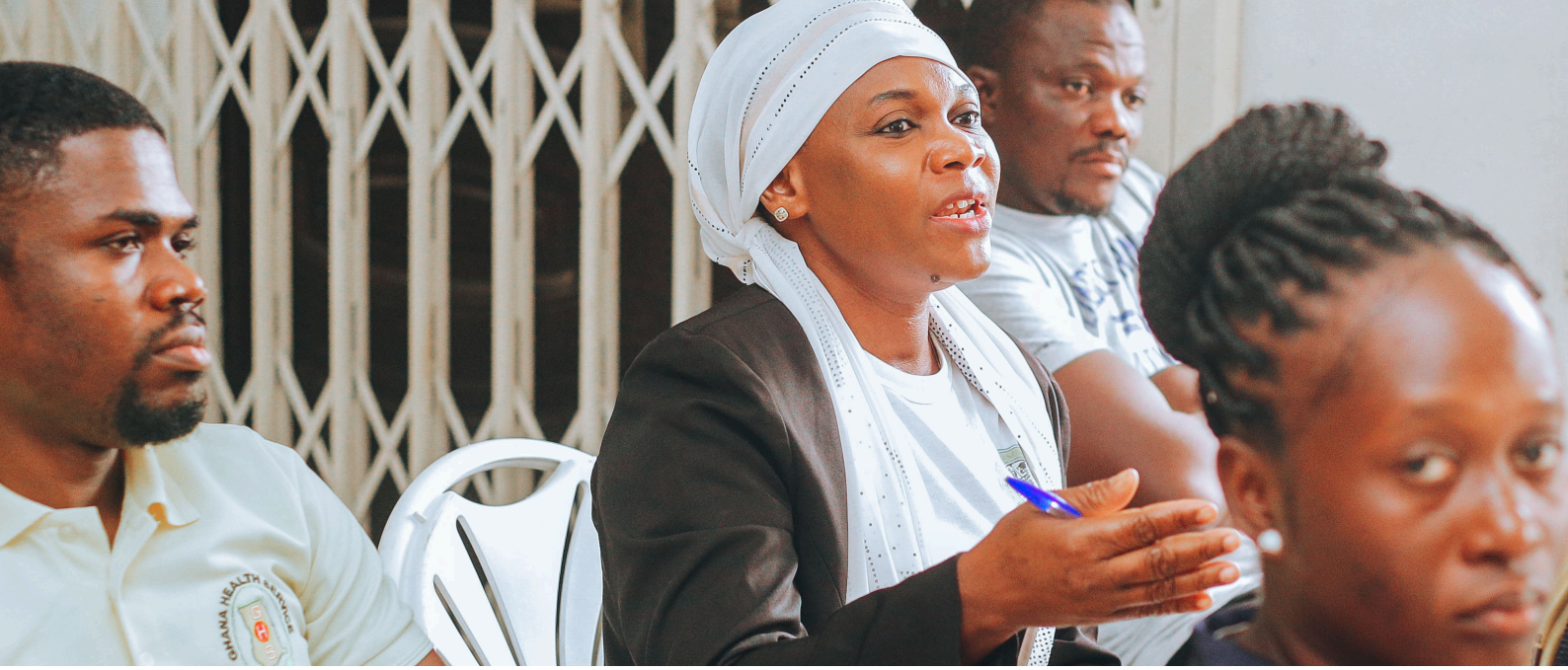
Urban Health Systems: Research Evidence to Inform Urban Health Policy and Systems in West Africa

West African Genetic Medicine Centre, College of Health Sciences, University of Ghana, 29th-30th January 2026

Abstract Book



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This book presents the abstracts of the 23 oral presentations delivered, and 24 posters displayed during the **'Urban Health Systems: Research Evidence to Inform Urban Health Policy and Systems in West Africa'** held in Accra, Ghana 29th to 30th January 2026.

The event aimed to share and debate research evidence generated by the CHORUS research consortium in cities in Ghana, Nigeria, Nepal and Bangladesh and urban health researchers from across West Africa. The event was structured around four challenges facing urban areas in low and middle income countries: i) responding to the plurality of public, private and informal health providers; ii) working across sectors to improve urban health; iii) responding to both communicable and non-communicable diseases and iv) engaging and working with marginalised urban communities and key urban stakeholders.
More details on the event can be found on the CHORUS website: https://chorusurbanhealth.org/

The event was co-hosted by the College of Public Health, University of Ghana, the CHORUS Research Programme Consortium, and in collaboration with the International Society for Urban Health.

Watch the opening video from the International Society for Urban Health here.

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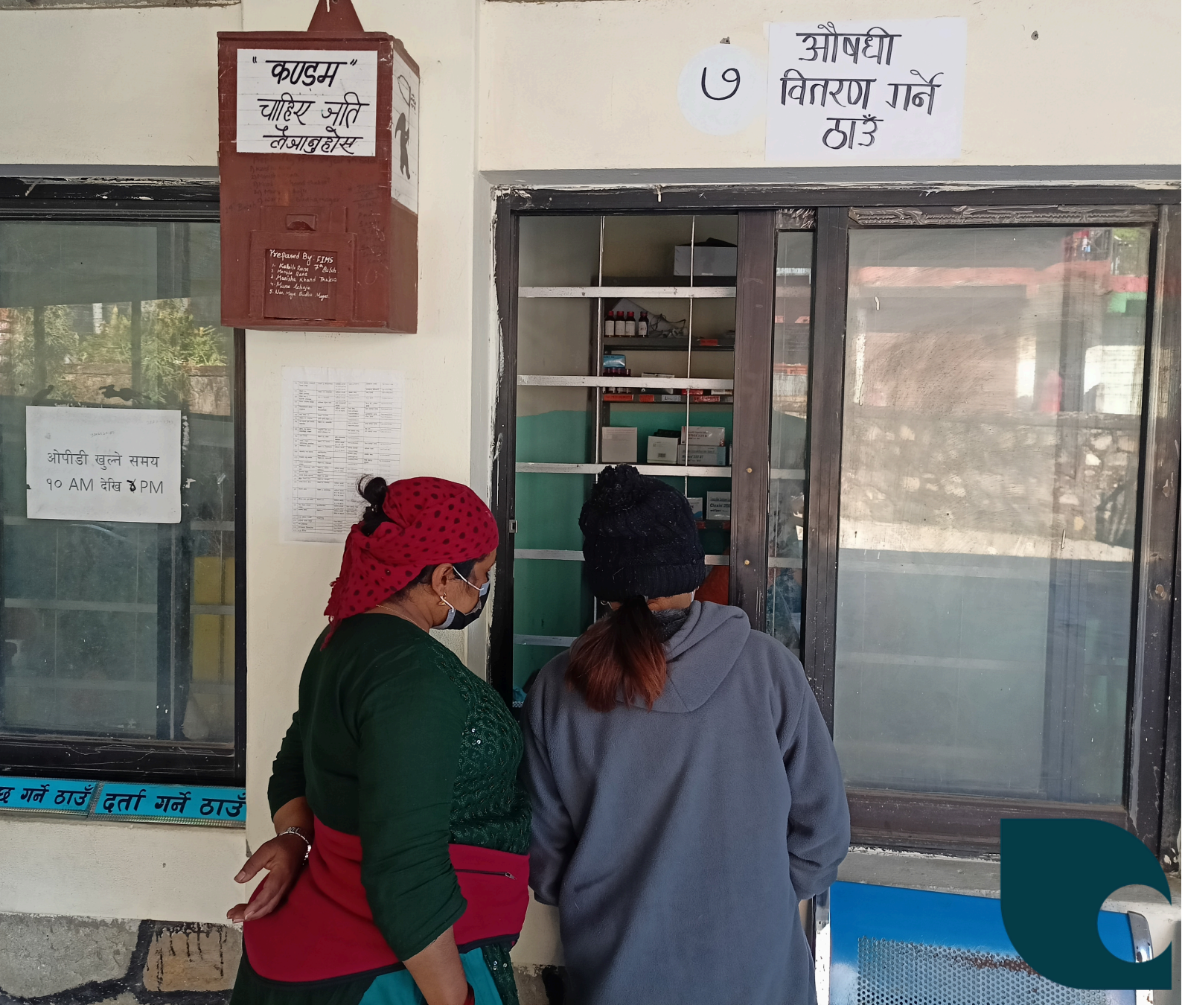
Poster Presentations: Responding to the Double Burden of Communicable and Non-Communicable Diseases in Cities



Session 1: Understanding, Linking and Working with the Plurality of Public, Private, Informal and NGO Health Services Providers in the Urban Context

Urban residents depend on a diverse mix of public and private facilities including pharmacies, NGOs and informal providers for healthcare services. This fragmented landscape is often uncoordinated, with variable quality and limited continuity of care. Strengthening urban health therefore requires actively understanding, linking and working with this plurality of providers to create one coherent, functional system.

Evidence from cities across West Africa and South Asia show that informal, private and NGO providers can be successfully connected to public systems, through referrals, reporting systems, data sharing, supervision and regulation, and these can improve access to quality services and to better manage the growing burden of chronic conditions.

Panel Moderator: Professor Helen Elsey, University of York
Panel Members: Dr. Ken Abeku Simmons, Director Accra West, Pharmacy Council; Dr. Winfred Baah, HEFRA Director; Dr Andrew Ayim, Ghana Health Services; Dr. S.K. Djokoto, NHIA; Dr. Ifeyinwa Ani-Osheku, Enugu State Primary Healthcare Development Agency

1 Linking the Private Sector and Wider Health Systems- NCD Management in Pokhara Metropolitan City, Nepal: Findings from Evaluation

Abhigyna Bhattarai, Grishu Shrestha, Parash Sapkota, Sampurna Kakchapati, Sujan Poudel, Raju Raman Neupane, Shreeman Sharma, **Sushil Chandra Baral** (HERD International, Nepal); Subas Bastola (Pokhara Metropolitan City); Helen Elsey (University of York); Joseph Hicks, Bassey Ebenso, Bryony Dawkins (University of Leeds)

Background: Noncommunicable diseases, especially hypertension and diabetes, are an increasing public health problem in Nepal and places growing pressure on the health system. Strengthening public private collaboration could improve access, continuity, and quality of NCD care, particularly in urban areas. Thus, this study aims to evaluate strategies adopted to linking private pharmacies with public health facilities (PHFs) to improve diabetes and hypertension care in Pokhara Metropolitan City, using the RE-AIM framework.

Method: The evaluation used a concurrent mixed-methods approach design informed by RE-AIM framework. A customized PEN protocol and pharmacy staff training were implemented to link public health facilities and private pharmacies for strengthened NCD service delivery. The study covered five wards, enrolling 11 pharmacies, 6 public health facilities, and 1 basic service hospital. For evaluation of outcomes, at least 20 clients per facility were recruited at baseline, midline (6 months), and endline (12 months) for client surveys. KIIs with healthcare providers, pharmacy staff, and government stakeholders explored implementation experiences, barriers and facilitators and sustainability. Quantitative data were analyzed using difference-in-difference linear models, and qualitative data through inductive thematic analysis in NVivo. Findings were triangulated using a meta-inference table across RE-AIM dimensions.

Results: Under reach, screening of clients aged ≥40 years was higher in pharmacies than PHFs for hypertension (males: 16.4% vs 9.2%; females: 15.5% vs 10.5%) and diabetes (males: 4.2% vs 1.4%; females: 3.9% vs 2.1%). Hypertension referral rates ranged from 28% to 33% and diabetes from 23% to 30% across both facility types. Both facilities adopted the PEN package, although two pharmacies dropped out after three months of intervention. Over one year, pharmacies screened 3,524 clients compared with 1,888 in PHFs. Appropriate management of hypertension and diabetes increased by 11 percentage points at six months (95% CI: 7–14) and remained higher at 12 months by 5 percentage points (95% CI: 0.6–8). However, improvements declined, with no significant differences between pharmacies and PHFs from six to twelve months. Behavioral and clinical outcomes showed little sustained change. The intervention improved NCD management, client health behaviors, follow-up visits, and satisfaction but challenges persisted, including limited counseling time, continued tobacco and alcohol use, incomplete referrals, lifestyle non-adherence, and human resource constraints in both public and private settings.

Conclusion: Linking private pharmacies with public health facilities improved hypertension and diabetes management and enhanced screening and counselling, particularly in pharmacies. Thus, the findings suggest that public–private collaboration is a feasible approach to strengthening NCD care in urban Nepal. However, improved referral quality, diabetes detection, and long-term sustainability through policy reform, strong municipal leadership, and reliable supply chain are still needed.

Read more on this study here on the CHORUS Website

Publication: Shrestha G et al: Building linkages between private pharmacies and public facilities to improve diabetes and hypertension care in urban areas of Nepal: a protocol for implementation research. Arch Public Health. 2025 Jun 19;83(1):160. doi: 10.1186/s13690-025-01586-4.

2

Integrating Informal Health Providers into the Formal Health System: Lessons from Engaging Patent Medicine Vendors and Traditional Bone Setters in Nigerian Slums

Dr. Aloysius Odii, Iheomimichineke Orjoakor, Onochie Eze, Chinyere Mbachu, Obinna Onwujekwe (University of Nigeria)

Background: Informal health providers (IHPs) often serve as the first point of care for urban poor populations because they are accessible, affordable, culturally acceptable and close to communities. However, their relationship to the formal health system needs to be properly institutionalised to improve the quality of service they provide. In this study, IHPs like patent medicine vendors (PMVs) and traditional bonesetters (TBSs) were trained, and the quality of service they provided was assessed after six months of the intervention.

Method: The study was conducted in four urban slum communities located in Enugu State, Nigeria. A four-day training centring on referrals, service delivery practices, hygiene/infection prevention, and documentation was provided to PMVs and TBSs. Alongside, they were provided with resources like first aid and hygiene materials. Following the training, community leaders were engaged through supportive supervision and follow-up assessment. The study is a mixed-methods implementation study assessing progress and fidelity of the outcome using quantitative checklist-based assessments complemented with qualitative interviews.

Results: Some TBS made referrals, but referral feedback remained a weak point proved by the lack of returned detached slips. Hygiene improved as expected (availability of handwashing items: 50% to 100%; safe/clean environment: 66.7% to 100%). However, on service delivery, there was continued handling of complex fractures, against the teachings provided. Finally, documentation quality improved in some areas (duplicate entries: 16.7% to 0%; obvious errors: 50% to 0%; missing data: 83.3% to 40%), with chronological entries increasing from 66.7% to 100%. For PMVs, referral form availability remained consistently high (92.6% to 93.3%), with modest improvements in completing referral forms (48.1% to 60.0%) and referring patients as required (40.7% to 53.3%). Service delivery practices were harder to shift. This is because malaria treatment without testing persisted. Hygiene showed the clearest gains with increased materials and supervision. Finally, documentation improved slightly, but errors and missing data continued, and this was linked to workload.

Conclusions: Training, supportive supervision, and basic commodities can improve hygiene and modestly strengthen referral processes among IHPs like PMVs and TBSs in slum settings. However, there is need for more work in core clinical decision-making areas like testing for and treatment of malaria, as well as documentation. Future implementation should involve referral feedback loops, improve access to diagnostics, and provide support for documentation.

Read more on this study here on the CHORUS website.

Publications: Onwujekwe O et al. Institutionalizing linkages between informal healthcare providers and the formal health system in Nigeria: what are the facilitating and constraining contextual influences? Health Policy Plan. 2025 Apr 9;40(4):471-482. doi: 10.1093/heapol/czaf009.

3

What Factors Influence Informal Health Providers' Decisions to Refer Patients to Health Facilities or Resort to Traditional Medicine in urban slums? Implications for improved well-being for slum dwellers

Okechukwu Ozor, Aloysius Odii, Chinyere Mbachu, Obinna Onwujekwe (University of Nigeria)

Objective: This study explored the factors that influence the decisions of informal health providers (IHPs) in urban slums to refer their patients to formal health facilities (FHFs) when first treatment fails. The goal is to generate evidence that informs strategies for improving referral pathways and enhancing quality of care in underserved urban slums.

Methods: The cross-sectional study was undertaken in 8 urban slums in Enugu State, Nigeria. Participants (n=135) responded to a structured, pre-tested instrument on healthcare service provision. Univariate, bivariate, and regression analyses were used to assess factors predicting referral decisions among the IHPs.

Result: Bivariate analysis indicated that facility type (p<.001), training (p= .001), gender (p= .001), registration with a government body (p= .001), and inspection by a government body (p<.001) are all positively related to an IHP referring a patient to a FHF when first treatment fails. Training (p=.001), facility type (p<.001), and inspection by government (p=.039) were also found to be negatively related to an IHP resorting to giving traditional medicine when the first treatment fails. Binary logistic regression indicated that training is the key factor influencing IHPs to refer a patient to a FHF (B = 1.72, OR = 5.59, p >.01). The IHPs' diagnosing illness was a key factor discouraging them from referring patients to FHFs (B = -.88, OR = 0.41, p =.04). Training was also a key factor influencing IHPs to avoid resorting to traditional medicine (B = -2.37, OR = 0.09, p =.04).

Conclusion: Our findings highlight the impact of training and IHPs' diagnosing illnesses play in influencing the decisions of IHPs in urban slums to make referrals to FHFs. Policymakers' strengthening of structured training and regulatory oversight among IHPs in urban slums is crucial for improving referral practices, which inadvertently ensures quality health service provision and improved well-being for all in urban slums.

Keywords: Informal Health Provider (IHP), Urban slum, Healthcare, Informal settlements, Well-being

Read more on this study on the CHORUS website.
Publications: Obi C et al. (2025) Referral experiences of healthcare consumers: results from a cross-sectional study in urban slums in southeast Nigeria. Front. Public Health 13:1561158. doi: 10.3389/fpubh.2025.1561158

4

Barriers and Enablers to Implementing a multi-linkage Intervention for Patent and Proprietary Medicine Vendors with Formal Health System in Urban Slums, Nigeria: A Qualitative Process Evaluation

Pamela Adaobi Ogbozor, Iheomimichineke Ojiakor, Chinazom Ekwueme, Joy Ozoghalu, Eunice Enabulele, Chinyere Mbachu, Obinna Onwujekwe (University of Nigeria)

Background: In urban slums across Nigeria, the Patent and Proprietary Medicine Vendors (PPMVs) are among the major recognized informal healthcare providers because of their significant role in healthcare delivery, offering convenient access, affordable and flexible payment options for clients. Integrating PPMVs into the formal health system has been implemented as a strategy to improve service quality, referrals, and continuity of care in urban settings with plural providers. We examined the contextual barriers and enablers during implementation.

Method: A qualitative process evaluation to assess the implementation of a multi-component linkage intervention in 4 urban slums in Enugu, southeast Nigeria. In-depth interviews were conducted with 22 PPMVs (10 female and 12 male). Interviews were translated verbatim, transcribed into English and analyzed thematically with NVivo 14.0.

Findings: Barriers to the linkage intervention were observed across key health system functions. Service delivery was limited by lack of funds to diagnostic test kits and instruments for blood pressure and patient reluctance to undergo tests before treatment. Referral processes were weakened by patients' inability to afford transport and hospital facility fees, poor feedback from receiving facilities, negative attitudes of some health workers, fear of client loss, and low patient's health literacy. Record keeping was constrained by increased workload and patients' hesitation to share personal information. Enablers of the intervention include availability of job aids and posters that serve as reminders, supportive supervision from project implementers and Primary healthcare facility staff, involvement of community leaders as accountability actors, functional primary healthcare facilities, and PPMVs' recognition of the benefits of record keeping for accountability and stock management.

Conclusion: Integrating informal providers into urban health systems can improve service delivery for underserved urban populations; however, effectiveness depends on addressing financial, behavioural, and institutional constraints. Policy efforts should prioritize subsidised diagnostics, strengthened referral feedback systems, positive provider–provider relationships in formal health system and sustained supervision and mentorship. Leveraging community structures alongside formal system supports can enhance accountability, continuity of care, and health system resilience in urban slum contexts.

Read more on this study here on the CHORUS website.

Publication: Onwujekwe O et al. Institutionalizing linkages between informal healthcare providers and the formal health system in Nigeria: what are the facilitating and constraining contextual influences? Health Policy Plan. 2025 Apr 9;40(4):471-482. doi: 10.1093/heapol/czaf009.
Okeke, C et al. Assessing demand and supply-side enabling and constraining factors on the provision and use of health services in urban slums of Southeast Nigeria. BMC Health Serv Res 26, 101 (2026). https://doi.org/10.1186/s12913-025-13914-z

5 Exploring Policy Gaps and Regulatory Challenges in Antimicrobial Dispensing among Patent Medicine Vendors in Urban Slums of Eboni State, Nigeria: A Qualitative Study

Chimdimma Obiobasi, **Chibuike Innocent Agu**, Ifunanya Clara Agu, (University of Nigeria); Mahua Das, Rebecca King (University of Leeds); Chinyere Mbachu, Obinna Onwujekwe (University of Nigeria)

Background: In Nigeria, particularly in underserved urban slum settings, antibiotic sale and use remain weakly regulated and poorly monitored. Within this loosely enforced regulatory environment, Patent Medicine Vendors (PMVs) play a central role in shaping patterns of self-medication and antibiotic use. Guided by institutional theory, this study explored how PMVs and policymakers perceive regulatory gaps, barriers to compliance, and the factors influencing adherence to antibiotic dispensing rules.
Methods: A qualitative study informed by institutional theory was conducted in three urban slum communities in Ebonyi State, southeast Nigeria. Data were collected through 10 key informant interviews with regulatory and health officials and community leaders, and 12 in-depth interviews with PMVs. Transcripts were thematically analysed using NVivo 15, with findings organised across the regulative, normative, and cultural-cognitive pillars.

Results: Findings show that PMV compliance with antibiotic dispensing regulations was shaped by interacting regulative, normative, and cultural-cognitive institutional forces. Under the regulative pillar, participants described a fragmented regulatory environment involving multiple agencies—PCN, NAFDAC, and NDLEA—with overlapping mandates, limited coordination, weak sanctions, and constrained capacity for routine monitoring and enforcement. Regulatory restrictions on antibiotic sales were inconsistently enforced, while capacity-building activities for PMVs were sporadic and insufficient. The normative pillar reflected how professional expectations were initially introduced during PMV registration and intermittently reinforced through guidelines, supervisory visits, and informational materials. However, these norms were frequently undermined by client poverty, pressure to meet community expectations, and the need to maintain livelihoods, resulting in tensions between professional standards and everyday dispensing practices. Within the cultural-cognitive pillar, antibiotic dispensing practices were shaped by entrenched cultural norms, economic realities, and social networks. Practices such as “drug mixing,” reliance on open drug markets, and collective resistance within PMV associations had become normalized, particularly in the context of weak sanctions. Compliance was mainly motivated by fear of enforcement during occasional regulatory visits and experiential learning following adverse patient outcomes, rather than sustained institutional accountability.

Conclusion: PMV compliance with antibiotic dispensing regulations in urban slum settings is shaped by interacting regulative, normative, and cultural-cognitive forces. Weak enforcement, fragmented regulation, economic pressures, and normalized informal practices collectively undermine adherence. Addressing inappropriate antibiotic use requires integrated strategies that extend beyond enforcement to include sustained capacity building, improved regulatory coordination, community engagement, and governance reforms that recognize the realities of informal healthcare provision.

Read more on this study here on the CHORUS website.

6 Strengthening Urban Primary Healthcare in Bangladesh: A Strategic Purchasing Policy Pathway

Zahidul Quayyum (BRAC JPG); Rumana Huque, Fatema Kashfi (ARK Foundation); Baby Naznin (BRAC JPG); Bryony Dawkins (University of Leeds); Helen Elsey (University of York)

Background: Urban primary health care (PHC) in Bangladesh is delivered through a complex, pluralistic system encompassing public, private, non-governmental, and informal providers. While this diversity expands service availability, it has resulted in significant challenges including fragmented financing, weak accountability, high out-of-pocket expenditure, and persistent inequities, particularly affecting the urban poor. Current purchasing arrangements are largely passive, failing to strategically align public funds with population health needs. As Bangladesh strives for universal health coverage (UHC), reforming urban PHC purchasing mechanisms has become a critical policy priority.

Methods: This exploratory study utilized a mixed-methods approach including key informant interviews with a diverse group of stakeholders (government officials, development partners, service providers), multi-stakeholder consultation workshops, community engagement through In-depth Interviews, Focus Group Discussions and a discrete choice experiment. Data collection focused on existing purchasing arrangements, funding modalities, governance structures, provider payment mechanisms, and community expectations for PHC services. The analysis was guided by established strategic purchasing frameworks, emphasizing feasibility, equity, and policy relevance. The DCE specifically explored the preferences, needs, and priorities of urban residents for PHC, including factors like affordability, service availability, and quality of care.

Findings: Findings indicate a strong policy consensus regarding the potential of strategic purchasing to enhance efficiency, equity, and responsiveness in urban PHC. However, implementation faces substantial constraints, such as fragmented institutional mandates between the Ministry of Health and Family Welfare and local government, limited purchasing capacity, and inadequate monitoring and accountability systems. While projects like the Urban Primary Health Care Service Delivery Project demonstrate the feasibility of contracting non-government providers, they also highlight limitations such as rigid procurement rules, insufficient performance incentives, and weak integration within the broader health system. Crucially, urban residents prioritize affordability, consistent medicine availability, respectful care, reduced waiting times, and access to a broader scope of services beyond maternal and child health, underscoring the need for people-centered and equity-oriented purchasing decisions.

Conclusion: The study identifies a timely policy window for reform, supported by recent changes to public procurement regulations and renewed government interest in health financing reform. It proposes a strategic purchasing policy pathway for urban PHC centered on developing national guidelines, clarifying institutional roles and purchasing authority, explicitly defining an equity-oriented urban PHC service package, aligning provider payment mechanisms with quality and performance, and strengthening data, monitoring, and citizen feedback systems. Efforts are currently underway to develop a national strategic purchasing guideline collaboratively with key stakeholders which is expected to support policymakers in transitioning from fragmented financing toward a coherent, strategic purchasing approach.

Read more on this study here on the CHORUS website.

Publication: Naznin B, et al. Designing a strategic purchasing framework for urban primary healthcare services in Bangladesh: a protocol for a mixed-method study with a discrete choice experiment
BMJ Open 2025;15:e102053. doi: 10.1136/bmjopen-2025-102053

7

Co-design of Public-Private Primary Health Care Networks to Improve Coverage and Quality of Health Services in Complex Urban Settings: Insights from Ghana

Dominic Dormenyo Gadeka, Genevieve Aryeetey; Henry Okudzeto, Duah Dwomoh (University of Ghana) Bassey Ebenso (University of Leeds), Helen Elsey (University of York); Irene Agyepong (Ghana College of Physicians and Surgeons)

Background: Networks of providers that bring together different levels of public and private primary care providers show promise in improving quality of care. Ghana adopted a Network of Practice (NoP) initiative in 2020 to advance Universal Health Coverage (UHC); however, it is unclear how such networks would function in complex urban environments with a diverse mix of public and private providers. This study aims to co-design functional public-private primary healthcare (PHC) network models to improve the coverage and quality of health services in a complex urban setting.

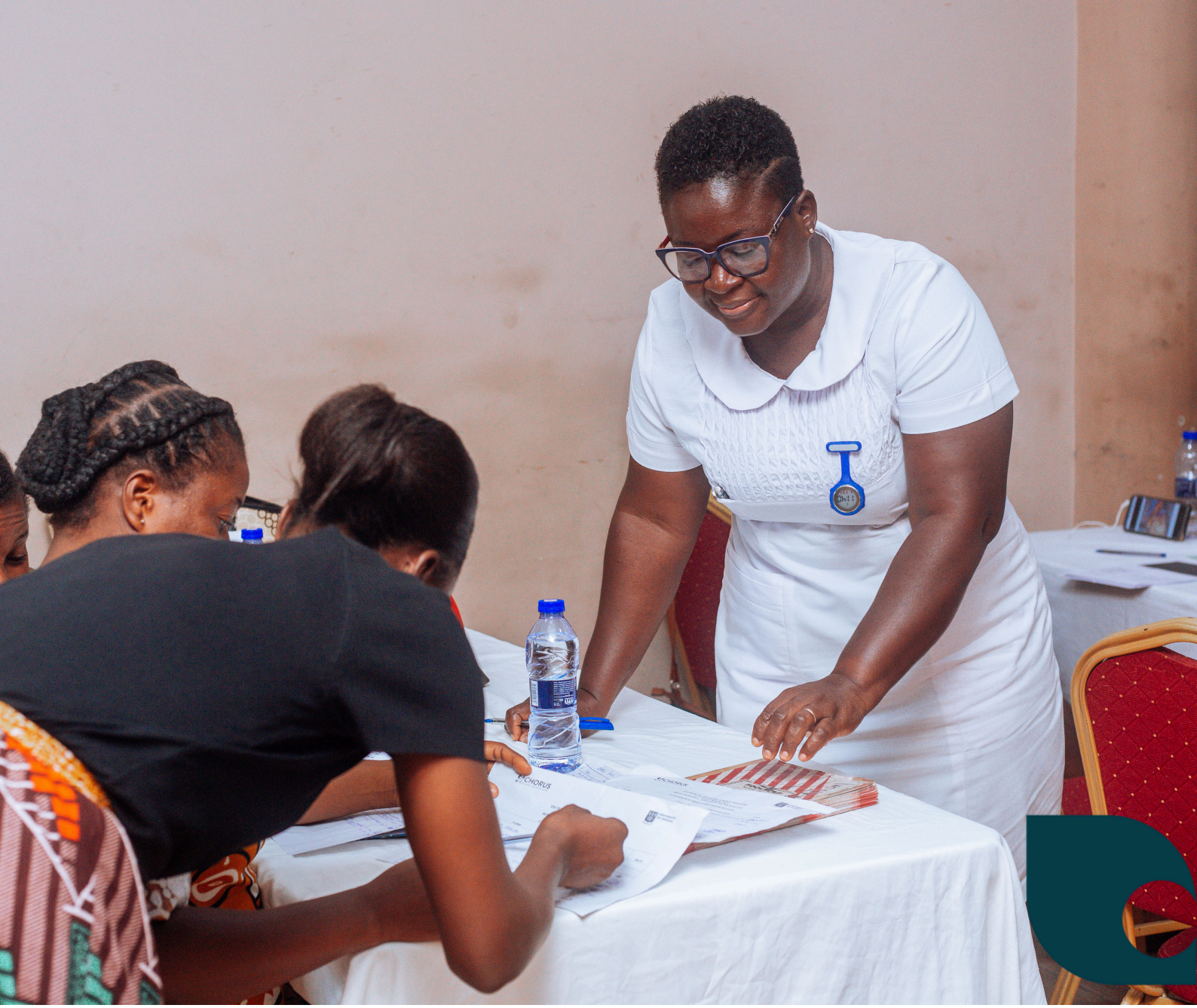
Methods: We conducted quantitative [household survey (n=1683) and facility survey (n=267)], a qualitative [in-depth interviews (n=66) and focus group discussions (n=24: 12 community female and 10 male groups and 2 facility staff groups), and a systematic review of PHC networks. Building on these findings and in addition to a stakeholder consultation workshop with health facility managers/in-charges and health authorities at the Municipal and national levels, we co-designed the network models following a five-phase co-design process: empathize, define, ideate, create, and test. We used a six-step feasibility assessment approach to evaluate their viability based on technical, economic, legal, operational, and environmental requirements within the urban context.

Findings: Our analysis of the primary data revealed a plurality of providers with limited linkages. The results further showed low utilization of PHC, which was influenced by personal values and perceptions, cultural norms, the health system environment, and broader societal factors. The systematic review showed that the different types of PHC networks (whether public, private, or a mix of public and private facility ownership) across diverse contexts, including rural and urban areas, contribute to improvement in process outcomes of health services (access to care, coverage of health services, quality of care and services, and safety of care) and clinical outcomes by helping to reduce maternal, neonatal, and perinatal mortalities and stillbirths. Based on our co-design process and feasibility assessment, we proposed four feasible public-private urban network models to include a well-resourced 1) health center, 2) polyclinic, 3) public hospital, or 4) private hospital/clinic, each with a responsive facility leader serving as a hub, with all other facilities and service delivery points within the catchment area acting as spokes.

Conclusion: Our study suggests feasible urban PHC network models through a multifaceted collaborative approach, demonstrating a more integrative approach to health service delivery. The study provides a foundation for future design and appraisal of PHC network models and their adoption.

Read more on this study here on the CHORUS website.

Publication: Dominic Gadeka et al. Primary health care networks and impacts in low-and middle-income countries: a systematic review, Health Policy and Planning, 2026;, czag003, https://doi.org/10.1093/heapol/czag003



Session 2: Responding to the double burden of communicable and non-communicable diseases

CHORUS research highlights that urban-specific approaches are frequently needed to address the increasing prevalence of NCDs associated with rapid urbanisation, particularly to respond to the vulnerabilities faced by the poorest urban residents. Prevalence of common NCDs such as hypertension, diabetes and mental ill-health are growing among urban populations. Yet primary care - characterised by a plurality of providers - is struggling to meet the needs of NCD patients.

Many patients go undiognosed and those that are aware of their condition are poorly managed leading to complications and premature death.There is an urgent need to strengthen the capacity, structures and functions across the pluralistic health system to appropriately screen, diagnose and manage common NCDs among all urban residents, irrespective of gender, disability, social and economic marginalisation.

We will hear from policy makers and NCD experts on improving access and quality of NCD service delivery, particularly for marginalised urban populations.

Panel Moderator: Dr. Sushil Baral, HERD International

Panel Members: Mr Labram Musah, Ghana NCD Alliance; Dr. Ollenu Wallace, Ghana Health Service; Dr. William Bosu, NCD Specialist; Professor Ernest Kenu, University of Ghana; Dr. Amma Ampomah Boadu; Ghana Health Service; Professor George Ugwu, Nigeria Commissioner for Health

1 Syncretic Health Seeking Practices for Non-Communicable Diseases within Informal Settlements in Freetown, Sierra Leonne

Abu Conteh (Sierra Leone Urban Research Centre)

Background: NCDs constitute a growing public health concern in Low- and Middle-Income Countries (LMICs). NCDs are amplified by rapid urbanisation and urban inequality, which profoundly impact people living in informal settlements, through poor health outcomes and constrained access to healthcare. Syncretic health seeking practices in informal settlements is an outcome of the historical ostracization of people living in these spaces, as a consequence of social drivers such as poverty, gender and disease. Syncretic health seeking involves the concurrent use of multiple treatment regimens, including traditional, religious, and biomedical services, with the hope of attaining satisfactory outcomes. However, there is limited understanding of the health seeking drivers for people living with NCDs in these spaces, impeding advocacy toward, and the ability of policy makers to design people centered responses that meet the needs of people affected. This presentation draws on findings from my recently examined doctoral thesis at the Liverpool School of Tropical Medicine, drawing on intersectional analysis to understand the multiple axes of vulnerabilities that amplify NCD outcomes and shape health seeking pathways.

Methods: This study employed qualitative methods including 15 narrative interviews, with purposively sampled people living with diabetes, hypertension, and disability related to stroke through three repeat household visits for a period of 12 weeks: 8 key informant interviews (KIIs) and 3 focus group discussions (FGDs) with formal and informal healthcare providers, and community chiefs. This analysis was informed by Intersectional Gender Analysis Framework for Infectious Diseases of Poverty Research alongside an adapted health belief model.

Findings: Gender differences and patriarchal norms influenced household and healthcare decision making, which reflected the division of roles and access to resources by men and women, different care seeking pathways and treatment outcomes. Syncretic seeking practices were observed among women due to severity of illness, financial barriers, and uncertainties about diagnosis leading to the internalisation of therapy management through selfcare. Negotiations with diverse providers based on symptomatic care, checkups and health advice were also frequently described. For men, temporality of care seeking, informed by financial limitations, health beliefs and proximity with alternative care systems signaled a strong agency to respond to diverse symptoms to help them respond to multiple episodes of health crises, although this frequently drew heavily on informal and traditional health actors.

Conclusion: People living with NCDs depend on syncretic health seeking practices to navigate structural inequities in healthcare access. Such inequities, health beliefs and disease severity also drive the ongoing utilisation of the highly pluralistic health system within urban informal spaces. Understanding the contextual factors shaping health seeking can help to improve access to NCD services in marginalised urban areas, through improved communication with patients, health provider collaboration and efficient referrals.

Watch the video presentation here.

2 Strengthening Bangladesh's Urban Primary Healthcare System to Manage NCDs

Rumana Huque, Deepa Barua, Marhouba Khan, Nabila Binth Jahan, Umme Salma Anee (ARK Foundation); Bassey Ebenso (University of Leeds); Helen Elsey (University of York)

Background: Rapid urbanisation in Bangladesh has challenged the development of urban primary health care (PHC) systems, resulting in fragmented delivery of non-communicable disease (NCD) services for the urban poor. Urban populations have a higher prevalence of key NCD risk factors than rural populations, yet national NCD programmes have largely focused on rural PHC. This study aimed to assess the strengthening of urban PHC for essential NCD care using the RE-AIM framework.

Methods: An implementation research study was conducted during 2024–2025 across selected government outdoor dispensaries and NGO-run urban PHC clinics across Dhaka North City Corporation (DNCC). The intervention integrated the Nationally Adapted Package of Essential Noncommunicable Disease Interventions (PEN) protocol for hypertension and diabetes with a digital health management information system called "Simple App". The study followed a quasi-experimental Difference-In-Difference (DID) design with embedded process evaluation. NCD management of 2600 patients, visiting 20 (10 intervention, 10 control) facilities were observed to evaluate the primary outcome of appropriate NCD management and recording among patients aged 40 and above. This was coupled with in-depth interviews among health care providers and patients with a focus on. While providers were interviewed on the facilitators and barriers of implementing the intervention, patients were asked about their experience.

Findings: While 0.79% of DNCC's population aged 40 and above was reached through CHORUS facilities, this rose to 16% following the local government's initiative to scale up the CHORUS intervention across 100 urban PHC facilities in DNCC. The intervention was also scaled up in another city corporation namely Khulna City Corporation (KCC), where it reached around 2% of the population. DID estimates showed a significant 33.34% increase in appropriate management among intervention facilities, with significant improvement in screening, diagnosis and prescribing. Additionally, NCD recording increased significantly by 41.57%. Implementation fidelity varied across facilities with best-performing centres showing strong adherence to national protocols and digital recording, while challenges included workforce shortages, inconsistent medication availability, and high patient load.

Conclusion: The study revealed that strengthening urban PHC for NCD care in Bangladesh is feasible, and effective, but requires system-level reforms. Improved interministerial coordination, inclusion of urban PHC providers in national capacity-building, increased access to essential medicines, dedicated budget allocation, and routine digital integration are critical for sustain impact. These findings offer scalable policy-relevant evidence to guide national expansion of NCD services within urban PHC systems.

Read more on this study here on the CHORUS website.

Publication: Salauddin M, et al. How prepared are urban primary care facilities to manage hypertension and type 2 diabetes in Dhaka, Bangladesh? A cross-sectional descriptive study of government urban dispensaries and NGO clinics. BMC Prim Care. 2026 Jan 8;27(1):67. doi: 10.1186/s12875-025-03144-x.

3

Scoping Review of Multisectoral Actions and Priorities for Enhanced Prevention and Control of Communicable and Non-Communicable Diseases in Anglophone Africa

Maureen Nwokorie, Ugenyi Iloabachie, Kingsley Ude, Chinyere Mbachu, Obinna Onwujekwe (University of Nigeria)

Background: The social, economic, and environmental determinants of communicable and non-communicable diseases (CDs and NCDs) are shaped by policies and activities of non-health sectors. Hence, effective prevention and control of these diseases will require the actions of non-health sectors. This review synthesizes evidence from Anglophone Africa on multisectoral actions and priorities of three key non-health sectors (education, environment, and agriculture) that have contributed to the prevention and control of CDs and NCDs.

Methods: The scoping review was guided by the methodological framework developed by Arksey and O'Malley. A systematic search for articles was performed in PubMed, Scopus, Hinari, Google Scholar, and Web of Science. Search terms were customized for each database to account for differences in controlled vocabulary and search syntax. Articles that were published from 2004 to 2024 and available in English language were retrieved and screened. A total of 26 articles were included in the review. Data was extracted and synthesized thematically.

Findings: The review identified different types of actions that have been implemented by non-health sectors for the prevention and control of CDs and NCDs. These actions cut across development of policies and plans, design of programs and activities, implementation of promotive and preventive interventions, funding, supervision, coordination, data and information management, etc. Recurrent interventions were policy development and implementation of promotive and preventive interventions.

Conclusion: Multisectoral efforts across education, agriculture, and environmental sectors have become increasingly important to the prevention and control of communicable and non-communicable diseases in Anglophone Africa. This review highlights a range of priorities and actions that have been used to address these challenges. Despite these promising efforts, limited coordination, weak institutional capacity, and inconsistent monitoring continue to hinder progress. The findings emphasize the need for stronger collaboration across sectors, better-aligned policies, and long-term investment to ensure more effective and sustainable health outcomes across the region.

Read more on this study here on the CHORUS website.
Publication: Iloabachie UV, et al. (2025) A scoping review of current trends of multisectoral collaborations for health within the education, agriculture, and environment sectors in Anglophone Africa. Front. Public Health 13:1717941. doi: 10.3389/fpubh.2025.1717941

4 Addressing Hypertension Among the Urban Poor: Findings from a Population-Based Study in Greater Accra

Kofi Adjabeng, **Henry Okudzeto,** Duah Dwomoh, Selase Odopey, Lauren Wallace, Adanna Nwameme, Delali Kumapley, Ivy Agbenu, Patience Mamattah, Priscilla Anima-Poku, Justice Nonvignon, Genevieve Aryeetey (University of Ghana); Bassey Ebenso, Mahua Das (University of Leeds); Irene Agyepong (Ghana College of Physicians and Surgeons); Helen Elsey (University of York)

Background: Hypertension is a leading contributor to cardiovascular morbidity and premature mortality in Ghana, with disproportionate impacts in rapidly urbanising and economically disadvantaged communities. Urban poor populations face compounded risks arising from lifestyle transitions, constrained access to preventive care, and social vulnerability. However, evidence to guide targeted policy interventions in these settings remains limited. This study aims to model correlates and estimate risk factors of hypertension among residents in selected urban poor communities in Ghana's Greater Accra Region to inform targeted policy interventions.

Methods: A community-based analytic cross-sectional study was conducted from February to April 2023. A multi-stage cluster sampling approach was employed to recruit 3,543 adults aged 18 years or older from four urban poor communities. Blood pressure was measured following standard protocols, and hypertension was defined as systolic BP ≥130 mmHg or diastolic BP ≥80 mmHg or prior diagnosis. Data on sociodemographic, behavioural, and socioeconomic factors were collected. Modified Poisson regression with robust variance was used to identify factors associated with hypertension, reported as adjusted prevalence ratios (aPR).

Findings: The overall hypertension prevalence was 29.8% (95% CI: 28.3–31.4). Prevalence increased markedly with age, from 4.4% among those under 25 to 60.4% among those 50 and above. In adjusted analysis, significant risk factors included older age (aPR=5.85 for ≥50 years, 95% CI: 3.32–10.29), obesity (aPR=1.38, 95% CI: 1.21–1.58), cigarette smoking (aPR=1.17, 95% CI: 1.04–1.33), alcohol consumption (aPR=1.12, 95% CI: 1.01–1.24), and having a valid National Health Insurance card (aPR=1.14, 95% CI: 1.01–1.28). Employment was associated with reduced prevalence (aPR=0.87, 95% CI: 0.76–0.98).

Conclusion: Hypertension is highly prevalent among urban poor populations in Greater Accra and is driven by modifiable behavioral and structural factors. Findings underscore the urgent need for integrated urban health policies that prioritise routine blood pressure screening, obesity prevention, and risk-reduction strategies within primary healthcare and community-based platforms. Strengthening NHIS-linked preventive services and tailoring interventions for older adults and economically inactive populations could substantially reduce the burden of hypertension in similar urban settings.

Read more on this study here on the CHORUS website.

5

Spatial Distribution of NCD Service Availability in Primary Healthcare Facilities in Urban Poor Settings in Ghana

Patrick Addo, Henry Okudzeto, Helen Bour (University of Ghana)

Background: Non-communicable diseases (NCDs) are increasing rapidly in sub-Saharan Africa, with significant inequalities in access to prevention, screening, and treatment services in urban poor settings. In Ghana, these disparities are amplified by rapid urbanisation, uneven distribution of health facilities, and reliance on private sector service delivery. This study assessed the geographic distribution and availability of NCD services in primary healthcare facilities within the La-Nkwantanang Madina Municipality (LaNMM), an urban poor district in the Greater Accra Region.

Methods: A cross-sectional study using geographic information systems was conducted to map all health facilities in LaNMM and assess the availability of services for diabetes, cardiovascular diseases, chronic respiratory diseases, cervical cancer, and breast cancer. Spatial data (geographic coordinates) and aspatial data (facility characteristics and NCD service availability) were collected from 267 participating facilities. Descriptive analysis was performed in Stata 17, and spatial visualisation was conducted using QGIS 3.40.4.

Results: A total of 339 facilities were identified, of which 267 participated. Private pharmacies (38.6 percent), chemical shops, and private clinics dominated the service environment. Diabetes screening and management were available in 52.8 percent and 57.3 percent of facilities, respectively, while cardiovascular disease screening (62.2 percent) and management (58.1 percent) were also common. Chronic respiratory disease screening was limited (14.2 percent), despite higher levels of reported management. Cervical cancer screening was very low (6 percent), and only half of the facilities offering screening also offered treatment. Breast cancer screening was available in 16.9 percent of facilities, with 20 percent of these providing treatment. Spatial mapping revealed strong clustering of NCD services in the southern sub-municipalities (La-Nkwantanang, Social Welfare, Tatanaa), with a sparse distribution in northern areas such as Danfa.

Conclusion: The availability of NCD services in LaNMM is uneven, heavily dependent on private providers, and geographically concentrated in the more urbanised southern zones. Critical gaps in cervical and breast cancer services, as well as chronic respiratory disease screening, limit early detection and equitable access to care. Strengthening public primary healthcare capacity and improving the spatial distribution of essential NCD services are necessary to reduce health inequities in rapidly urbanising, resource-constrained settings.

Read more on this study here on the CHORUS website.

6 Strengthening Urban Primary Health Care Through Co-Creation and Systems Thinking: Lessons from Ghana's Community-Based Planning and Services (CHPS) Programme

Selase Odopey, Lauren Wallace, Adanna Nwameme, Delali Kumapley, Ivy Agbenu, Kofi Adjabeng, Duah Dwomoh (University of Ghana); Patience Mamattah, Priscilla Anima-Poku (Ghana Health Service), Bassey Ebenso, Mahua Das (University of Leeds); Irene Agyepong (Ghana College of Physicians and Surgeons); Helen Elsey (University of York); Genevieve Aryeetey (University of Ghana)

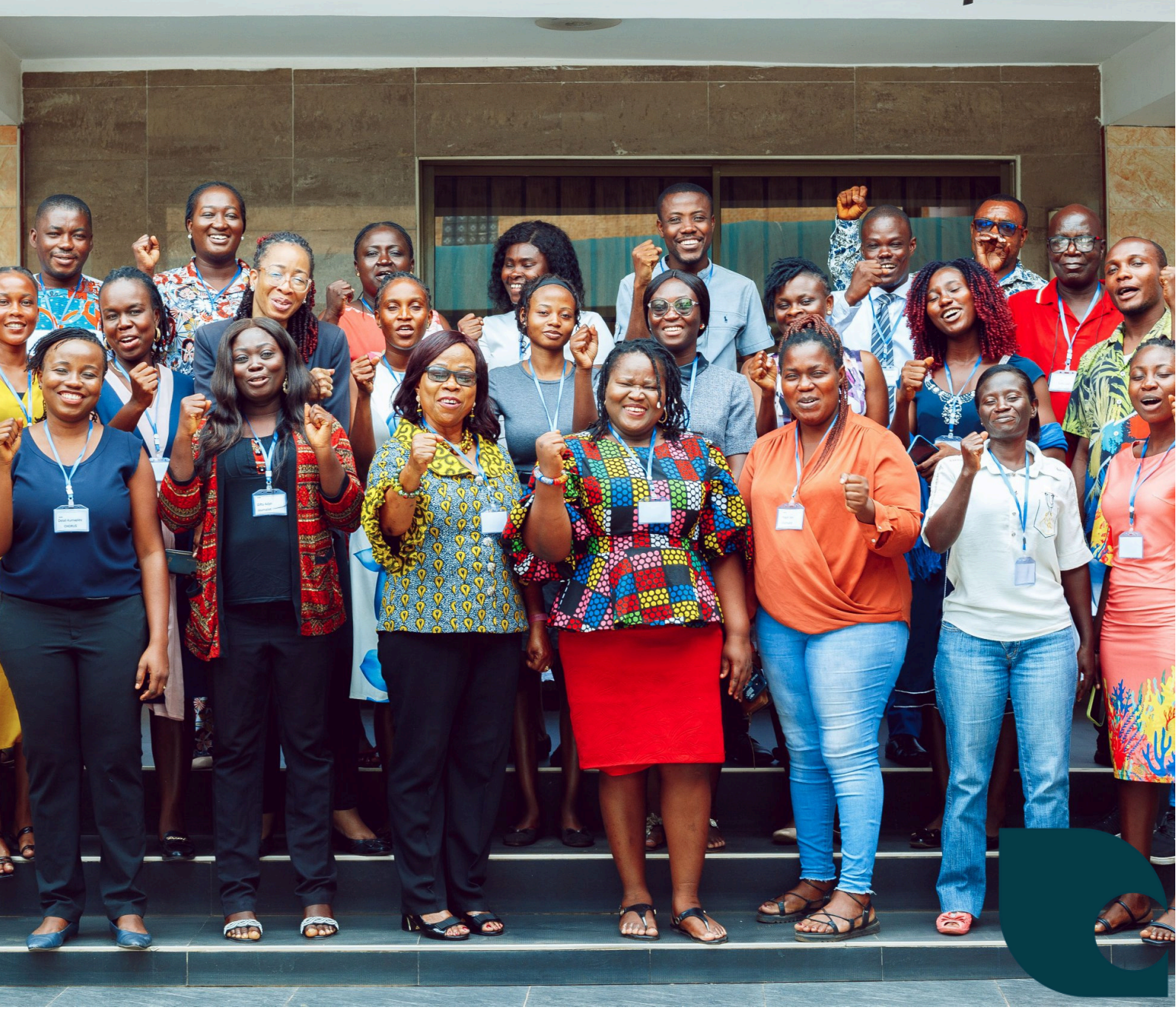
Background: Rapid urbanisation in sub-Saharan Africa poses significant challenges for primary health care (PHC), particularly in deprived urban settings where populations face a high burden of communicable and non-communicable diseases alongside unmet preventive health needs. In Ghana, the Community-based Health Planning and Services (CHPS) programme has improved access to care in rural areas but has been less effective in urban contexts due to complex political, socioeconomic, organisational, and epidemiological factors. This study combines a systems diagnosis of urban CHPS with a co-creation process to inform the adaptation of PHC services for urban poor populations under the Community-led Responsive and Effective Urban Health Project (CHORUS).

Methods: A qualitative case study was conducted in low-income urban communities in the Greater Accra Region, including Ashaiman and La-Nkwatanang Madina Municipalities. Data were collected through rich pictures, transect walks, focus group discussions, and key informant interviews with community members, Community Health Officers (CHOs), Community Health Volunteers (CHVs), and local health system actors. Data were analysed inductively using NVivo, complemented by complex adaptive systems analysis and causal loop modelling. Findings from this diagnostic phase informed a participatory action research process in which community-and health system-level stakeholders jointly co-created an adapted PHC intervention.

Results: The systems analysis identified key barriers to effective urban CHPS delivery, including low community awareness and acceptance of CHPS, weak CHO motivation due to inadequate supervision, logistics and safety concerns, limited collaboration with other healthcare providers, weak engagement with local government, and challenges in retaining CHVs. Building on these findings, stakeholders co-developed the Enabling Enhanced Life-Cycle Health Promotion and Preventive Services (Enhanced CHPS) intervention —an urban-adapted CHPS model prioritised using multi-criteria assessment of feasibility, acceptability, resource availability, and potential health system impact. The co-creation process strengthened stakeholder ownership and ensured that the intervention was culturally relevant, contextually appropriate, and aligned with existing health system structures.

Conclusion: This study demonstrates how combining systems thinking with co-creation can support the adaptation of community-based PHC programmes for urban poor settings. The findings provide policy-relevant evidence to inform the redesign and scale-up of urban CHPS and similar PHC models in Ghana as well as other rapidly urbanising contexts.

Read more on this study here on the CHORUS website.



Session 3: Multi-Sectoral Collaboration to Address the Wider Determinants of Health

The factors driving urban health lie beyond the health-care systems; factors like our transport sytsems, housing availability, access to green and blue spaces, availability of employment and safety are all key to creating healthy urban areas. These environmental, social, economic, commercial and behavioural determinants of urban health make multisectoral action key. Multisectoral responses are often mediated through local governments, providing opportunities for strengthening the response to the wider determinants of health.

However challenges of capacity and silo working are common.This session shares experiences of people living in informal settlements, and how they deal with multiple challenges such as crime, water and sanitation and the impact of climate change. It also examines policy options for multisectoral action for improved health outcomes; shared data initiatives to address silo working, and insights on how health can become part of urban housing, transport and development planning.

Panel Moderator: Prof. Chinyere Mbachu, Health Policy Research Group, University of Nigeria
Panel Members: Mr Uche Ezema, Enugu State Primary Health Care Development Agency; Dr. Sushil Baral, HERD International, Nepal; Prof. Peter Elias, Centre for Housing and Sustainable Development, University of Lagos

1 Examining the Influence of Urban Crime on the Health System in Southeast Nigeria

Chizoba B. Ugwuoke, Tochuckwu C. Orjiakor, Chibuike I. Agu, Pamela A. Ogbozor, Ethelbert C. Agu, Izuchukwu Okeke, John E. Eze, and Obinna Onwujekwe (University of Nigeria)

Background: Urban crime is an escalating challenge with far-reaching consequences for health systems, particularly in rapidly growing cities of low and middle-income countries. This cross-sectional qualitative study examines the influence of urban crime on the functioning of health system in Southeast Nigeria using the World Health Organization (WHO) health system building block framework as the analytical lens.

Method: Data were collected through fifty-two in-depth interviews of key health stakeholders and eight focus group discussions with urban dwellers. The interview transcripts were coded in NVivo 15 using a pre-defined coding framework, while a thematic analysis of data was performed.

Findings: The findings indicate that urban crime undermines the stability and performance of all six health system building blocks. Crime affects service delivery by limiting physical access to healthcare facilities, reducing workforce performance through fear, stress, and attrition, and disrupting information flow due to underreporting and data insecurity. In addition, criminal activities compromise the supply chain of medicines, exacerbate financial barriers to care, and weaken governance through corruption and erosion of public confidence in the state institutions

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Conclusion: Addressing urban crime is therefore not only a security imperative but also a public health priority essential to strengthen health system and achieve health goals. Integrated policies that strengthen health system resilience, and also improve urban security are needed.

Keywords: Urban health, Health system, Community, Health system building blocks, Urban crime.

Read more on this study here on the CHORUS website.
Publication: Orjiakor TC, et al. (2026) "Doctors are targeted and kidnapped": crimes and insecurity contribute to health problems and constrain the delivery of health services in urban settings in Nigeria. Front. Public Health 13:1671252. doi: 10.3389/fpubh.2025.1671252

2

Designing Implementable Policy Options for Mainstreaming Health In all Sectors for Prevention and Control of CDs and NCDs in Nigeria: A Demand Side Analysis

Chukwudi Nwokolo, Kingsley Ude, Ugenyi Iloabachie, Chinyere Mbachu, Obinna Onwujekwe (University of Nigeria)

Background: Rapid urbanization in Nigeria has increased the burden of communicable and non-communicable diseases, driven largely by factors outside the health sector. However, health considerations remain weakly integrated across key development sectors. This study looked at policy preferences for mainstreaming health in all sectors focusing on Agricultural, Education and Environmental sectors from the lenses of households.

Methods: A discrete choice experiment was conducted among 824 households from 4 urban local government areas of Enugu state, Nigeria. We focused on 5 attributes; health education, vector management, involvement in WASH, service delivery and community involvement. Mixed multinomial logit and latent class models were used to estimate preferences and heterogeneity. Policy simulations assessed predicted uptake of alternative integrated policy bundles.

Findings: Community involvement, integrated health education, and fully integrated WASH emerged as the strongest drivers of household support. Predicted uptake increased from 28% under minimal integration to 83% under full integration. Preference heterogeneity was observed, with a class 2 group favoring community-driven multisectoral interventions.

Conclusion: Households strongly prefer comprehensive and community-centered integration over fragmented sectoral actions. Prioritizing community leadership, joint health education and WASH offers the most implementable pathway for mainstreaming health in all sectors for the control of communicable and non-communicable diseases in urban Nigeria.

Read more on this study here on the CHORUS website.

3 Is it Worth the While? Assessing the Costs and Gains of Mainstreaming CDs and NCDs Prevention and Control Strategies in Other Non-Health Sectors in Anglophone Sub-Saharan Africa

Paul Onuh, Enyi Etiaba, Chinyere Mbachu, Obinna Onwujekwe (University of Nigeria)

Background: Significant improvements in health outcomes require actions outside the health sector, considering the importance of the social determinants of health (SDH). This has led to the promotion of the concept of Health-in all policies, which is a multi-sectoral approach that involves the mainstreaming of health policies and programmes in non-health sectors for the prevention and control of both communicable diseases (CDs) and non-communicable diseases (NCDs). However, the political and economic worth of such multi-sectoral involvement in health remains underexplored and there is paucity of evidence on whether it is worth the while to mainstream health in all sectors in Anglophone Sub-Saharan Africa (SSA).

Methods: This scoping review explores literature on the political and economic worth of mainstreaming the prevention and control of CDs and NCDs into non-health sectors in urban settings. This scoping review, which applied the five-stage framework by Arksey and O'Malley (2005) involved a comprehensive search of peer-reviewed and grey literature across major databases and institutional websites (PubMed, Medline, Google Scholar, Scopus, ECONLIT, Directory of Open Access Journals, and Cochrane Library), as well as websites of government ministries and international organizations.

The search yielded 171 records. However, after removing duplicates, 131 records were screened, with 89 full texts assessed. Following eligibility checks, 23 articles were included for full review. Data were charted using a structured extraction template capturing study context, sectoral focus, and political/economic themes.

Findings: Findings reveal that mainstreaming HiAP for CDs and NCDs in SSA non-health sectors yields political gains such as enhanced legitimacy, policy coherence, coalition-building, and increased revenue from taxes. Economic gains include reduced out-of-pocket spending (OOPS), productivity boosts, and high return on investments (ROI) from fiscal measures. However, costs involve turf wars, jurisdictional ambiguities, coordination expenses, and resource diversion. Overall, there are more gains than costs in HiAP, making it worthwhile for urban SSA health equity.

Keywords: Health in All Policies; HiAP; Communicable diseases; Non-Communicable Diseases; Political Economy; Urban Health; Sub-Saharan Africa; Multi-sectoral; Mainstreaming health; Social determinants of health

4 Exploring Facilitators and Barriers to Multisectoral Collaboration for Population Health Improvement in Ashaiman Municipality, Ghana

Patience Ami Mamattah, Augustine Adomah-Afari, Paulina Tindana, Leonard Baatiema, Genevieve Aryeetey (University of Ghana); Lauren Wallace (Dodowa Health Research Centre); Noemia Teixeira de Siqueira Filha, Helen Elsey (University of York)

Background: Rapid and uncontrolled urbanization poses a significant threat to population health in low-and middle-income countries. While multisectoral collaboration has been identified as an important strategy for enhancing population health, its influence on health improvement in Ghana has received limited attention. This study explored multisectoral collaboration and its relevance for population health in the Ashaiman Municipality of Ghana.

Methods: The study adopted a descriptive cross-sectional study design. We conducted document reviews (n=50) of strategic plans, medium-term development plans, action plans, reports, policy documents and minutes of proceedings and key informant interviews (n=20) and conducted a stakeholder workshop with 27 participants from civil society organizations, assembly and community members, clergies, traditional authorities and technocrats from both health and non-health sectors. Data were analysed thematically and verbatim quotes from participants were used to support the views of participants. The findings were explained within a harmonized theoretical framework of Health in All Policies.

Findings: The analysis revealed barriers to multisectoral collaboration, including a lack of understanding of multisectoral collaboration, an apparent deficiency in essential technical and leadership capacities, and perceived issues of corruption, politicization, and political party interference within governance structures as barriers to multisectoral collaboration aimed at improving population health. Additional challenges include a lack of transparency, disjointed and parallel policies, non-harmonized approaches, policy incongruence, and insufficient resources, including funding for enhancing multisectoral collaborative activities. However, we
identified a strong sense of accountability as a facilitator for effective multisectoral collaboration for health improvement.

Conclusion: The study highlights weak multisectoral collaboration, which undermines actions towards health improvement. Enhanced awareness creation, stakeholder engagement and capacity building while tackling corruption may help to improve multisectoral collaboration and improve the health of the urban population.

Keywords: Multi-sectoral collaboration, Urban health, Population health, Ghana,

Read more on this study here on the CHORUS website.
Read the WHO Case Study on Strategic Action for Urban Health: Exploring Multisectoral Collaboration for Health Improvement in Ashaiman Municipality, Ghana

5 Designing an Urban Data Hub for Improved Multisectoral Collaboration and Evidence-Based Decision Making

Sampurna Kakchapati, Shirish Maharjan, Sabina Marasini, Shreeman Sharma, Abhigyna Bhattarai, Grishu Shrestha (HERD International); Helen Elsey (University of York); Bassey Ebenso, Joseph Hicks, Bryony Dawkins (University of Leeds); Kumar Prasad Dahal, Anita Lama (Budhanikantha Municipality); **Sushil Chandra Baral** (HERD International)

Introduction: Urbanization in Nepal, especially in municipalities like Budhanilkantha, is advancing rapidly and presenting significant health challenges. Population growth, environmental pressures, and expanding informal settlements have strained health and social services, contributing to a rising burden of communicable and non-communicable diseases, maternal and child health concerns, and environmental risks. However, effective urban health planning is hindered by fragmented, outdated, and unintegrated data across multiple departments. Closing these data gaps is crucial for informed decision-making and targeted interventions.

Methods: This implementation study begins with a comprehensive review of multi-sectoral data in urban municipalities through secondary data analysis and document reviews to identify gaps. Household censuses were conducted in Wards 7 and 4, collecting information on demographics, socio-economic status, health service access, disease burden, maternal and child health, environmental awareness, and anthropometric and blood pressure measurements to support family health folders. Public health facility assessments evaluated service availability and quality. Data from these sources were compiled and analyzed to develop a centralized Urban Health Data Hub using a co-design approach with municipal officials and stakeholders.

Results: Routine multi-sectoral data from various departments including health, environment, education, agricultural and civil registration were integrated and visualized within the Urban Health Data Portal. Social mapping data identified key landmarks and accurately positioned them on GIS maps, enhancing spatial understanding. Household census data provided a detailed overview of socio-demographic profiles, housing characteristics, animal husbandry, health facility accessibility, disease burden, maternal and child health outcomes, and environmental issues. Health facility assessments highlighted the readiness and availability of services in public health facilities. Embedded within the municipality's website, this co-designed platform fostered municipal ownership and ensured the sustainability and long-term impact of urban health governance.

Conclusion: This study represents a significant step forward in applying digital tools to improve evidence-based decision-making and health outcomes in Nepal's urban municipalities. The Urban Health Data Hub effectively addresses data fragmentation by integrating multi-sectoral routine data into a single, accessible platform, fostering collaboration across departments. Its design and implementation demonstrate strong potential for replication in other municipalities, supporting sustainable, data-driven urban health planning and governance aligned with local needs.

Read more on this study here on the CHORUS website.

Publication: Kakchapati, S et al (2025) Study protocol for developing an urban deprivation index in Nepal: Data review, measurement, visualization and real-world application in urban poverty alleviation PLOS One, June 2025 https://doi.org/10.1371/journal.pone.0324837

Session 4: Urban Poverty & Engaging Communities, Policy Makers and the Media to Strengthen Urban Health Systems

Addressing the challenges in urban areas require concerted effort and engagement of a wide range of stakeholders. Policy and decision makers at national, regional and local government level are vital in driving change, and urban residents have to be at the centre of decisions on how to improve cities and neighbourhoods. However, many marginalised urban communities, particularly those living in informal housing are excluded from formal governance processes and have little say in how to improve their lives. The media also plays a key role in sharing real-life experiences of diverse urban communities and overcoming misinformation to translate urban health research evidence for a wide audience. Given dynamic migration patterns, transient living arrangements and the diversity of urban communities, it is hard to identify the locations and numbers of urban residents and to define urban poverty and marginalisation. Presenters in this session share evidence of approaches to increase the reach of primary care to urban marginalised communities, map urban deprivation and engage the media and communities to improve health in urban areas.

Panel Moderator: Prof. Zahidul Quayyum, BRAC James P Grant School of Public Health, Bangladesh
Panel Members: Dr. Sophia Quist, Ashaiman Municipal Health Directorate; Dr.Felix Amaykye, Local Government Institute; Madam Phyllis Lamsi Atiah, Ashaiman Municipal Assembly; Prof. Peter Elias, Centre for Housing and Sustainable Development; Mr Ayogu Ikedi, Urban Health Unit, Enugu Nigeria;, Victoria Bamas, Editor, International Centre for Investigative Reporting

1 Coupling disjointed insights in urban health evidence translation within a developing context: lessons from initiating the revision of Nigeria's school health policy after 19 years

P**rince Agwu**, Ifunanya Agu, Chinelo Obi, Uzoma Okoye, Chinyere Mbachu1, Obinna Onwujekwe ((University of Nigeria); Adaeze Oreh (Rivers Sate Ministry of Health, Nigeria)

Background: Nigeria ranks poorly in child health outcomes, sitting at 174th out of 180 countries on the 2020 Child Flourishing Index. Children living in poverty, urban slums, and attending under-resourced schools face the greatest challenges. In response, Nigeria introduced the School Health Policy in 2006, emphasising that schools are optimal venues for delivering integrated health, education, and child protection services. However, this policy hasn't been updated in nearly twenty years, which undermines its potential impact. The Protect Urban Schoolchildren Health (PUSH) Project, part of the CHORUS Urban Health Consortium, aimed at advancing the health rights of school-aged children (5-17 years), has now prompted Nigeria's first effort to update this policy, drawing on both evidence and expert insights.

Method: The revision process employs reflexive practice and collaborative problem solving within the Action Learning framework, aligning with the Eight Standards of the WHO and UNESCO's Health Promoting School Initiative. It also incorporates the developmental governance package, which highlights the political economy of policymaking in environments heavily reliant on informal transactions. These frameworks have guided stakeholder organisation, data collection, and analysis, which were developed through a non-linear process involving fieldwork, two policy dialogues, one policy iteration meeting, and multiple vertical and horizontal interactions.

Results: Concerns about schoolchildren in precarious conditions have taken a whole-of-urban approach and are not restricted to those in poverty or living and schooling in deprived locations. Addressing this involves considering the 'Big Ps' of Policy and Politics, as well as the 'small Ps' of practice and peer-to-peer relationships. By understanding the dynamics of these Ps and integrating them, we are constructing our non-linear experiences into a coherent knowledge base that covers: (a) compatibility between government's development agenda and research objectives, (b) power brokering in researcher-policymaker relationships, (c) the feeling of belongingness among policymakers, (d) researchers' attitude of humility yet firm, (e) the use of media for balancing benefits between policymakers and researchers, and (f) ego management among policymakers and researchers' competitors (development partners).

Conclusion: The body of research-to-policy knowledge we are developing extends beyond the corridors of health and education for schoolchildren. It offers crucial insights into the functioning of "policy-politics" for urban health, which is still gaining traction in developing societies. It also holds significance for health systems and policy research in contexts where informal transactions continue to dominate.

Read more on this study here on the CHORUS website.
Publication: Agu, I. C.et al. (2026). Is the Health Security of Children Assured in Nigerian Schools? Assessment of Urban Schools' Responses to the Health Needs of Schoolchildren. Child: Care, Health and Development 52, no. 2: e70247. https://doi.org/10.1111/cch.70247.

2 Health Journalism Practices and News Influence on Health Policy Decisions: Evidence from Nepal and Bangladesh

Shreeman Sharma, Sulata Karki (HERD Inernational); Sabrina Mustabin Jaigirdar (BRAC JPGSPC); Badruddin Saify, Abdullah Muhammed Rafi (ARK Foundation); Sampurna Kakchapati (HERD International); Sabina Marasini, Shumia Islam (HERD International) Rumpa Akter (ARK Foundation); Zahidul Quayyum (BRAC JPGSPH); Rumana Huque (ARK Foundation); Sushil Chandra Baral (HERD International)

Background: Rapid urbanization in Nepal and Bangladesh has increased the burden of non-communicable diseases (NCDs), calling for timely, evidence-informed policy responses from health systems. Media plays a pivotal role in shaping public discourse, raising awareness, and influencing policy agendas. However, limited evidence exists on the practices of health journalism and the pathways through which health news affects policy decisions in South Asia. This study examines health journalism practices and challenges faced by journalists, and the influence of health reporting on policy-making in Nepal and Bangladesh.

Methods: A cross-country, mixed-methods design was employed. Data included online surveys with 526 journalists in Nepal and 232 journalists in Bangladesh, plus 30 key informant interviews with journalists, policymakers, and public health advocates in both countries. Quantitative survey data were analyzed descriptively, and qualitative interview data were analyzed thematically using NVivo.

Findings: Findings show that health reporting is hardly recognized as a dedicated beat within mainstream media, though dedicated health portals are emerging in both countries. In Bangladesh, media coverage focused on visible and immediate public concerns such as traffic accidents, waste management, and air pollution, whereas reporting in Nepal emphasized healthcare access, infectious diseases, NCDs, and environmental health. Journalists primarily relied on government sources in both countries, with Bangladeshi reporters drawing more on research and expert opinion than their Nepali counterparts. Both countries faced significant barriers to effective reporting. In Bangladesh, challenges included limited health knowledge, political and commercial influence, restricted access to credible sources, and threats to journalist security. In Nepal, financial constraints, limited reporting experience, and insufficient human resources in newsrooms and low wage were notable. Across both contexts, journalists identified the need for enhancing skills in health terminology, interpreting research, and using scientific evidence to improve reporting credibility. Media were perceived to influence health policy both directly and indirectly. In Nepal, examples included shaping decisions during the COVID-19 response and implementation of the tobacco product act. While media reporting influenced public discourse and created pressure for policy action, policymakers primarily relied on government data and research, with engagement with journalists often limited to crisis response and policy dissemination.

Conclusion: The study highlights the potential of health journalism to contribute to evidence-informed policy but underscores gaps in journalistic capacity, access to credible information, and sustained engagement with policymakers. Strengthening access to information, building journalist capacity, and fostering ongoing media–policy collaboration are critical to enhancing the role of media in health governance.

Read more on this study here on the CHORUS website.

3 Intersecting Vulnerabilities and Care-Seeking Pathways Among the Urban Poor in Informal Settlements in Nepal: An Ethnographic Study

Abriti Arjyal, Sulata Karki, Srijana Bhattari, Bamdev Subedi, Madhusudan Subedi, Sushil Chandra Baral (HERD International, Nepal)

Background: Unplanned urban growth has pushed many low-income and migrant populations into informal settlements, with poor housing, overcrowding, insecure tenure, and limited access to safe water, sanitation, and basic health services in Nepal. Existing literature insufficiently captures how overlapping social positions such as gender, age, occupation, migration and legal status, and social networks influence care-seeking practices. This study aims to understand characteristics of urban poor and their care-seeking pathways shaped by intersecting social, economic, and structural factors.

Methods: We conducted an ethnographic study in informal settlements along the Bishnumati corridor in Kathmandu. We selected the study site through field exploration, mapping exercises and consultation with local stakeholders. Data were collected over eight months (January-August 2025), using multiple ethnographic methods – social mapping, transect walks, non-participant observation, in-depth interviews, key informant interviews, and informal interactions. Through prolonged field engagement, we observed informal settlements and interacted with diverse participants to capture lived realities of care-seeking practices. Fieldnotes and reflections were documented and formal interviews were audio-recorded. Data were coded and thematically analysed using an intersectional framework.

Results: People living in informal settlements are shaped by intersecting social identities and structural conditions rather than a single defining characteristic. These include migration status, land tenure insecurity and legal marginalisation, engagement in informal and often hidden livelihoods, income inequality, poor housing and environmental conditions, and gendered roles within male-dominated decision-making structures. Participants experienced a high burden of non-communicable diseases particularly hypertension, diabetes, and multi-morbidity alongside seasonal illnesses such as dengue, fever, and diarrhoea. Symptoms were frequently normalised, especially among migrant workers and daily wage laborers, contributing to delayed care-seeking. Care-seeking pathways were non-linear and fragmented, typically beginning with self-care or pharmacies and progressing to private clinics or public hospitals as conditions worsened. Care-related decision-making was strongly gendered; women commonly postponed seeking care for themselves, prioritising household needs and depending on male members for financial decisions. Cultural and religious beliefs influenced preferences for home remedies, pharmacies, and traditional healers. Legal marginalisation, including lack of citizenship, further constrained access to formal health services, particularly for mobile workers, elderly individuals, and widowed women.

Conclusion: Urban informal settlements are diverse, characterised by multiple intersecting vulnerabilities. Care-seeking pathways are not linear, shaped by a complex interplay of social identities, structural barriers, and contextual realities. Factors like migration, gender, ethnicity, economics, legal status, and social support influence healthcare decisions. Tackling urban health inequities requires intersectionality-informed interventions addressing structural barriers and gendered decision-making to ensure equitable access to care.

Read more on this study here on the CHORUS website.

4 Impact of CHORUS-led Intervention on Utilisation of Healthcare Services Provided by CHOs in Selected Urban Poor Communities in Ghana: A Mixed Method Evaluation Study

Duah Dwomoh, **Ada Nwameme**, Genevieve Cecilia Aryeetey, Ada Nwameme, Kofi Agyabeng, Lauren Wallace, , Selase Adjoa Odopey, Delali Kumapley, Ivy Akushika Agbenu (University of Ghana); Irene Agyepong (Ghana College of Physicians and Surgeons); Bryony Dawkins, Joseph Hicks, Bassey Ebenso (University of Leeds); Helen Elsey (University of York)

Background: Urban poor dwellers face several socioeconomic and health challenges, including access to quality Primary Health Care (PHC) services and a higher prevalence of communicable and non-communicable diseases. The government of Ghana, through its agencies, has made PHC services available in urban poor communities. However, the utilization of CHPS services in urban areas is very low compared to similar PHC services in public and private health facilities, including pharmacies.

Methods: Using a mixed-method evaluation design embedded in the RE-AIM evaluation framework and employing Generalized Linear Models with Differences in Differences analytic approach, this study assessed the impact of the CHORUS-led intervention on increasing awareness of CHPS/Outreach points for service delivery, intention to use services provided by CHOs, and actual utilization of healthcare services provided by CHOs in selected urban poor communities in Ghana. We applied the Activity-Based Costing (ABC) approach to estimate the cost of the intervention from the health system perspective.

Findings: The CHORUS-led intervention contributed to increasing awareness of CHPS/Outreach points for service delivery, intention to use services provided by CHOs, and actual utilization of healthcare services provided by CHOs in selected urban poor communities by 8.2 percentage points (pp) [95% CI: 3.3 to 13.2, p<0.001], 7.3pp [95% CI:2.4 to 12.2, p=0.004] and 11.7pp [95% CI: 0.6 to 22.7, p=0.038] compared to comparison districts respectively. Findings from qualitative data collected among healthcare staff and community members also corroborate these statistical results. The estimated total cost of the intervention was GHS1,243,112 (US$85,732) while the estimated cost per CHPS zone, considering horizontal equity, was GHS10,787.3 (US$744.0) at 5% discount. The total indirect cost due to time value was estimated at GHS716,595.04 (US$49,420.35).

Conclusion: The CHORUS-led initiative co-created and implemented a comprehensive intervention that leverages the strengths of community-based education and the CHPS awareness program, building the capacity of CHOs to deliver life-cycle health promotion and preventive services, facilitating CHO activities. The intervention substantially improved awareness, intention to use, and actual utilization of PHC services provided by CHOs to poor urban dwellers. It is effective, pragmatic, and has the potential to improve PHC delivery in poor urban settings.

Read more on this study here on the CHORUS website.

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5 IDEAMAPS Data Ecosystems: Developing a Community Action Plan for Maternal Healthcare Resilience in Kano State, Nigeria

Peter Elias (University of Lagos)

Background: Poor infrastructure, deep-rooted socio-cultural norms, and long distances to health facilities hinder access to maternal healthcare resilience in Kano State. The paper demonstrates how a community action plan for maternal health care reliance (CAP4HR) was co-created and co-developed to improve maternal healthcare resilience in Kano State, Nigeria. Kano State has a high maternal mortality rate (MMR) of over 1000 deaths per 100,000 live births with limited access to antenatal care, skilled birth attendance, and emergency obstetric care (EmOC). The CAP4HR aims to build partnerships among communities, NGOs, researchers, and city authorities to improve maternal healthcare. The primary target population is pregnant and postpartum women, especially adolescents and low-income mothers.

Methods: The IDEAMAPS Network utilises Participatory Action Research (PAR) to co-create and co-develop a community action plan for maternal healthcare resilience in Kano State. Two urban informal settlements in Kano State namely, Ɗorayi Karama (Gwale LGA) and Rimin Kebe (Ungogo LGA) were purposively selected owing to long history of partnership and engagements.

Findings: The results show that these communities are invisible in health data maps and records and face poor water, sanitation, and hygiene (WASH) conditions which contribute to health issues. Residents cover long distances to healthcare facilities and reliance on informal providers create access gaps. Community members are eager to participate in solutions to health problems. The process of developing CAP4HR include i) strong community engagement activities which allow communities to express their health priorities; ii) developing a crude model to describe physical access to healthcare leading to stakeholder validation and discussions; and iii) using PAR exercise for validation creating improved model which incorporates gender perspectives and mortality rates into EmOC access.

The CAP4HR complements existing initiatives like Primary Healthcare Revitalisation and Safe Motherhood Programs. It engages traditional and religious leaders and supports community-based health insurance. The potential benefits of CAP4HR include improved maternal health outcomes through strengthened health systems and equitable access to services; enhanced surveillance to track outcomes and inform policy decisions; and better resource allocation aligned with maternal healthcare needs.

Recommendations: The CAP4HR recommends key strategic implementation framework including: engaging community health workers (CHWs) and traditional birth attendants (TBAs) to identify and report danger signs in pregnancies; training CHWs using pictorial materials to recognize danger signs and equipping them with digital tools for reporting; mapping pathways to healthcare facilities and standardize referral protocols for emergencies; and automating health information systems for maternal death reporting and prepare for emergencies with essential supplies.

Keywords: IDEAMAPS Network, participatory action research, maternal healthcare, health inequality, Kano

Enhancing Linkages between Informal and Formal Health Providers in Nigerian Urban Slums: A Moderated Mediation Analysis of Intervention Effects on Self-Efficacy, Motivation, Perceived Effectiveness and Affective Attitudes

Ethelbert C. Agu, Charles T. Orjiakor, Benard C. Okechi, Pamela Adaobi Ogbozor, Chinyere Mbachu, Obinna Onwujekwe, (University of Nigeria)

Background: Informal health providers play important roles in health service delivery in Nigerian urban slums. Hence, strengthening their linkages with formal health providers is essential for improving healthcare delivery and wellbeing among residents of these neighbourhoods. There are limited evidence on the mechanisms and conditions (e.g. psychological and motivational variables) through which linkage interventions influence informal providers' attitudes toward this collaboration. The study evaluated the effects of a linkage intervention on affective attitudes among informal health providers, by examining the mediating role of self-efficacy via the moderating roles of motivation and perceived effectiveness.
Methods: A total of 236 informal health providers comprising of 86 male and 150 female operating in selected urban slums in Nigerian participated in the study. 63 participants received the linkage intervention while 173 did not forming the intervention and control groups respectively. To test the study hypotheses, a moderated mediation analysis was conducted via Hayes PROCESS Macro (Model 14) for SPSS to examine the direct and indirect effects of the linkage intervention on affective attitudes. Self-efficacy was the mediator, while motivation and perceived effectiveness were the moderators of the indirect pathways.
Results: The findings revealed that linkage intervention was significantly associated with self-efficacy ($t = 4.23$, $p = .001$), with trained participants reporting higher self-efficacy. The linkage intervention was not significantly associated with affective attitudes. However, self-efficacy ($t = 7.09$, $p = .001$), motivation ($t = 5.16$, $p = .001$), and their interaction ($t = -3.72$, $p = .001$) were significantly associated with affective attitudes. Also, perceived effectiveness ($t = 2.02$, $p = .05$) and its interaction with self-efficacy ($t = -3.34$, $p = .001$) were significantly associated with affective attitudes. Furthermore, the moderated mediation index of motivation and perceived effectiveness were significant, indicating that the indirect effect of the intervention through self-efficacy was moderated by motivation and perceived effectiveness. The moderated mediation index showed that the more the informal health providers are motivated and affectively perceived the linkage intervention, the less they depend on self-efficacy benefits from it to develop positive attitudes.
Conclusion
The study highlights the importance of linkage interventions on self-efficacy of informal health providers which in turn influences their affective attitudes for the collaboration depending on their level of motivation and perceived effectiveness. Taken together, the findings portrays the need of addressing psychological factors in implementing linkage interventions between formal and informal health system in urban slums.

Reach of an Intervention Linking Formal and Informal Healthcare Providers in Urban Slums: Who Was Reached, Who Was Missed, and Why

Chinelo Obi, Chinyere Mbachu, Obinna Onwujekwe (University of Nigeria)

Background: In Nigeria's urban slums, most people rely on informal providers such as patent medicine vendors, traditional birth attendants, and traditional bonesetters, for care. Although efforts to link informal providers with primary healthcare services are increasingly promoted, less attention has been paid to how

such efforts reach actors across the health system and community. This study examines the reach of a formal–informal provider linkage intervention, focusing on who was included, who was missed, and the pathways shaping participation.

Methods: A qualitative assessment of intervention reach was conducted as part of a broader process evaluation, drawing on in-depth interviews and focus group discussions with formal primary healthcare workers, informal healthcare providers (patent medicine vendors, traditional birth attendants, and traditional bonesetters), and community leaders across four urban slum communities in three local government areas in Enugu State, Nigeria. Guided by an implementation outcomes framework, data were analysed thematically using NVivo 15 to examine patterns of reach and facilitators and barriers to stakeholder engagement.

Results: Reach occurred primarily through training-based pathways. Among formal healthcare providers, initial training of selected primary healthcare (PHC) staff was extended through step-down training within facilities, increasing exposure among additional formal health workers. Among informal healthcare providers (IHPs), reach occurred through participation in training, follow-up engagement during supervision visits, and parallel training of state-level Urban Health Desk officers and Ministry of Health actors. This combined approach enabled identification, legitimisation, and follow-up of informal providers beyond training venues, with traditional birth attendants more consistently reached for formal registration and linkage to nearby PHC facilities.

Training of community leaders provided an additional reach pathway, extending engagement beyond providers. At the community level, reach was greatest among poorer households reliant on informal providers, as well as among women, children, and older adults.

Unsuccessful reach reflected incomplete inclusion of some informal providers during mobilisation and training, alongside persistently limited engagement of men and youth. Reach was facilitated mainly through government involvement that legitimised participation, while peer influence generated interest without expanding reach during the study period. Barriers to reach were participation-related, including PHC workload constraints, unclear mobilisation messages, mistrust among informal providers, opportunity costs of attending training, and limited availability of men and youth.

Conclusion: Findings indicate that reach in urban slum health interventions is shaped by inclusive mobilisation, trusted communication, and institutional support that legitimises informal providers, alongside tailored strategies to address participation constraints and improve engagement of men and youth.

Referral Patterns Among Informal Health Providers in Urban Slums

Onechie Eze, Chinyere Mbachu, Obinna Onwujekwe (University of Nigeria)

Background: Informal Health Providers (IHPs), play a pivotal role in delivering healthcare services in the urban slums of Enugu State, Nigeria. Their prominence is attributed to factors such as affordability, accessibility, and cultural acceptance. However, their operations often exist outside formal healthcare systems, leading to challenges in patient referrals and continuity of care.

Methods: A cross-sectional descriptive study was conducted among IHPs in selected urban slums of Enugu East and Enugu North Local Government Areas. Data were collected using structured digital questionnaires, capturing information on provider demographics, referral behaviors, and factors influencing referral decisions. Two datasets were analyzed: one detailing provider characteristics and another listing specific referral destinations. Descriptive statistics were employed to summarize referral practices and identify influencing factors.

Results: The majority of IHPs reported referring patients, predominantly when cases exceeded their capacity or after initial treatments failed. Referral destinations commonly included private hospitals and

maternity homes. Factors such as formal training, registration with regulatory bodies, and years of experience were associated with an increased likelihood of patient referrals. However, the absence of standardized referral protocols and limited integration with formal health systems were identified as significant barriers to effective referrals.
Conclusions: IHPs are integral to healthcare delivery in Enugu's urban slums, yet their referral practices are often informal and inconsistent. Strengthening referral systems through targeted training, regulatory engagement, and the development of structured referral pathways is essential to enhance patient outcomes and integrate IHPs into the broader health system.

Operationalising Strategic Purchasing for Urban Primary Healthcare in Bangladesh: Qualitative Insights on Feasibility and Practical Pathways

Baby Naznin (BRAC JPGSPH); Fatema Kashfi (ARK Foundation); Amatul Hauqe Chaahat, Fariha Nowshin, (BRAC JPG); Rumana Huque (ARK Foundation), Zahidul Quayyum (BRAC JPG)

Background: Urban primary healthcare (PHC) in Bangladesh stands at a critical crossroads. Despite a pluralistic service delivery landscape – encompassing public, private, NGO, and informal providers – urban PHC remains fragmented, weakly regulated, and dominated by passive purchasing arrangements. High out-of-pocket expenditures, uneven quality of care, and limited responsiveness to the needs of the urban poor population continue to undermine progress toward universal health coverage. Against this backdrop, strategic purchasing has re-emerged in national policy discourse as a potentially transformative reform pathway. This study explores the feasibility, challenges, and operational requirements for introducing strategic purchasing in urban PHC in Bangladesh.
Methods: We conducted a qualitative study comprising key informant interviews with national and local policymakers, healthcare providers, program implementers, and development partners. These were complemented by multi-stakeholder consultation workshops to validate findings and explore implementation pathways. Guided by the SPARC framework for strategic purchasing, the analysis examined service package design, governance and institutional arrangements, provider payment mechanisms, and monitoring and accountability systems. Data were analyzed thematically.
Findings: Stakeholders acknowledged that strategic or performance-based purchasing has been discussed in government policy circles for over a decade. However, bureaucratic complexity, political economy constraints, and limited institutional capacity have hindered meaningful implementation. The long-running Urban Primary Health Care Service Delivery Project (UPHCSDP), which contracts NGOs to deliver services, illustrates partial purchasing arrangements but falls short of a comprehensive strategic purchasing model. Critical gaps persist as service package definitions remain ambiguous, with unresolved questions around the scope of PHC services, population coverage, and provider selection criteria. Institutional weaknesses were evident in contracting, negotiation, and performance monitoring functions, compounded by unclear governance mandates, weak health information systems, limited provider readiness, and the absence of systematic patient feedback mechanisms. Stakeholders cautioned that without strengthened governance and capacity building, poorly designed strategic purchasing reforms could exacerbate inequities or distort provider behavior. Importantly, recent amendments to the Public Procurement Act and Public Procurement Rules create a timely policy window by formally enabling outsourcing and more flexible contracting arrangements for health services.
Conclusion: We argue that operationalizing strategic purchasing for urban PHC in Bangladesh is both feasible and timely, provided targeted reforms are undertaken. Priority actions include developing national strategic purchasing guidelines, establishing a dedicated purchasing authority, clarifying service packages

with an explicit equity focus, aligning provider payment mechanisms with quality and performance indicators, and strengthening real-time monitoring systems. These findings offer actionable insights for policymakers to strengthen urban PHC system by implementing strategic purchasing.

Community Preferences for Urban Primary Health Care Services in Bangladesh: A Discrete Choice Experiment

Fardeen Kabir, Baby Naznin, Farzana Sehrin (BRAC JPGSPH); Zahid Hassan, Bryony Dawkins (University of Leeds); Zahidul Quayyum (BRAC JPGSPH)

Background: Urban primary health care (PHC) for low-income populations in Dhaka is characterized by fragmented provision, high out-of-pocket payments and variable quality, which together undermine equitable access to essential services. Strategic purchasing offers a way to reorganize this supply by explicitly defining which PHC services and delivery arrangements are financed. Incorporating community preferences into the design of the purchased PHC package can provide decision-makers with concrete evidence on which service components and provider characteristics should be prioritized, with the aim of improving equity, financial protection and responsiveness for urban poor communities in Bangladesh.
Methods: We are conducting a discrete choice experiment (DCE) with adults (≥18 years) living in a selected slum area of Dhaka city. Qualitative work including community advisory panel workshops, in-depth interviews and focus group discussions with residents of informal settlements was used to identify and refine PHC service attributes within the WHO Availability, Accessibility, Acceptability and Quality (AAAQ) framework. The final DCE study includes six policy-relevant attributes: medicine/other treatment costs, consultation fee, referral services, services beyond maternal and child health, type of provider, and waiting time. A Bayesian D-efficient design was employed to generate 36 choice sets, blocked into four versions of nine choice tasks, each comprising two hypothetical facilities plus an opt-out option, administered using interviewer-led visual Q-cards tailored to low-literacy respondents. A systematic random sample of 288 households was surveyed, with additional data on demographics, socioeconomic status, health status, and recent healthcare use. Primary analyses used mixed logit models to estimate mean preferences and preference heterogeneity, complemented by latent class analysis and willingness-to-pay estimates for changes in key attributes.
Findings: Final results will report the relative importance of PHC attributes, respondents' willingness to trade between financial and non-financial features of care and patterns of preference heterogeneity by gender and socioeconomic indicators. We will present predicted uptake of alternative PHC "bundles" under a strategic purchasing arrangement and identify the service configurations that would likely to maximize uptake among residents of informal settlements.
Conclusion: This study generates actionable evidence on how residents of urban informal settlements value different features of PHC facilities. By translating these preferences into feasible service bundles for strategic purchasing, the study aims to inform the design of an urban PHC package that is affordable, acceptable and aligned with community priorities, and to guide prioritization of service components and provider characteristics in PHC purchasing decisions.

Addressing NCDs through Public Private Partnership in urban setting in Nepal: Insights from need assessment to evaluation

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Background: Urbanisation in Nepal has accelerated rapidly, with the proportion of urban residents increasing from 17% in 2011 to 66.08% in 2017 (Central Bureau of Statistics, 2022). This trend has contributed to a growing burden of non-communicable diseases (NCDs). Urban poor and marginalized communities are particularly vulnerable, with limited access to healthcare further exacerbating this burden. In this context, the study examined approaches to strengthen local health systems by engaging private health providers to deliver quality NCD prevention and care for urban poor communities. The study was conducted in four phases; needs assessment, co-design, intervention implementation, and evaluation.
Methods: A needs assessment in Pokhara Metropolitan City mapped and assessed 660 public and private health facilities for NCD service readiness using GIS and social mapping, transect walks, and stakeholder interviews. Pharmacies emerged as the primary first point of contact for hypertension and diabetes screening in slum areas due to greater accessibility, but showed low readiness for NCD care, while public facilities faced limited hours, supply shortages, and distance barriers. Gaps in pharmacy record-keeping further underscored the need for stronger public–private integration. These findings informed a participatory co-design process with communities, Female Community Health Volunteers, public providers, Health Facility Operation Management Committee members, and private-sector stakeholders, leading to the development of a public–private partnership approach. The intervention was implemented through four interlinked strategies guided by Proctor's Implementation Outcomes Framework, including customized PEN guidelines, pharmacy capacity building, and standardized referral linkages between pharmacies and public health facilities.
Findings: We evaluated the implementation through RE-AIM framework. These findings showed that public-private partnership approach helped pharmacies reach more clients than public health facilities and they were widely trusted as first points of care. Modest improvements in NCD management, particularly for hypertension were observed at six months but declined by 12 months, with limited sustained changes in behaviors and clinical outcomes. Provider capacity improved, but challenges such as staff shortages, supply disruptions, weak referral systems, and budget constraints persisted. While public–private collaboration proved feasible and acceptable, long-term sustainability will require policy reform, strong municipal leadership, reliable supply chains, and integration of pharmacy data into routine health information systems.
Conclusion: Public–private partnerships that engage pharmacies can improve access to NCD services for urban poor populations, as pharmacies serve as trusted first points of care. While short-term improvements were observed, sustained impact requires stronger policy support, municipal leadership, reliable supplies, effective referral systems, and integration of pharmacy data into routine health information systems.

Factors influencing low Primary Health Care utilization by the urban poor in Ghana: A qualitative investigation

Dominic Gadeka, Selase Odopey, Lauren Wallace, Adanna Nwameme, Delali Kumapley, Ivy Agbenu, Patience Mamattah, Kofi Adjabeng Duah Dwomoh, (University of Ghana); Priscilla Anima-Poku (Ghana Health Services); Bassey Ebenso, Mahua Das (University of Leeds); Irene Agyepong (Ghana College of Physicians and Surgeons); Helen Elsey (University of York); Genevieve Aryeetey (University of Ghana)

Background: Primary Health Care (PHC) is recognized as the most inclusive, accessible, equitable, and cost-effective approach to achieving universal health coverage (UHC), yet its utilization among the urban poor population is often low. We explored the factors that influence low urban PHC utilization in four densely populated urban-poor communities in Ghana, focusing on community members' perspectives.
Methods: We conducted a qualitative study involving focus group discussions (n=22: 12 female groups and 10 male groups) targeting the urban poor on factors related to personal, family, community, and health system influences on PHC utilization. Participants were sampled purposefully based on different
background characteristics, including age, sex, marital status, educational level, and religious affiliation.

Notes and audio recordings of the interviews were transcribed, managed and coded for themes guided by the thematic network analysis recommended by Attride-String. We presented the findings using a four-domain framing of context of PHC intervention: i) individual values and perceptions ii) cultural norms, iii) health systems environment, and iv) general societal factors.
Results: The analysis revealed that personal values and perceptions, such as the belief that minor illnesses or certain types of ailments do not need care at primary healthcare facilities other than
pharmacies, contribute to the low utilization of PHC services. Additionally, cultural norms such as the availability, perceived effectiveness, and cultural beliefs about traditional medicine, as well as the limited decision-making power of urban poor women regarding healthcare, hinder the use of urban PHC. Factors within the health system, such as the wide availability and proximity of pharmacies, low trust in PHC providers, high perceived costs, and low quality of care at PHC facilities, also serve as barriers. A broader societal issue affecting urban PHC use is the common practice of self-medication among the urban poor.
Conclusion: The findings highlight personal, family, community, and health system factors that influence low urban PHC utilization among the urban poor. Targeted interventions addressing these barriers may enhance PHC utilization by the urban poor. Initiatives to strengthen PHC, for example, linking or integrating pharmacies and over-the-counter medicine sellers to the broader healthcare system, have the potential to improve PHC access and quality for the urban poor.

Enhancing Linkages between Informal and Formal Health Providers in Nigerian Urban Slums: A Moderated Mediation Analysis of Intervention Effects on Self-Efficacy, Motivation, Perceived Effectiveness and Affective Attitudes

Ethelbert C. Agu, Charles T. Orjiakor, Benard C. Okechi, Pamela Adaobi Ogbozor, Chinyere Mbachu, Obinna Onwujekwe (University of Nigeria)

Background: Informal health providers play important roles in health service delivery in Nigerian urban slums. Hence, strengthening their linkages with formal health providers is essential for improving healthcare delivery and wellbeing among residents of these neighbourhoods. There are limited evidence on the mechanisms and conditions (e.g. psychological and motivational variables) through which linkage interventions influence informal providers' attitudes toward this collaboration. The study evaluated the effects of a linkage intervention on affective attitudes among informal health providers, by examining the mediating role of self-efficacy via the moderating roles of motivation and perceived effectiveness.
Method: A total of 236 informal health providers comprising of 86 male and 150 female operating in selected urban slums in Nigerian participated in the study. 63 participants received the linkage intervention while 173 did not forming the intervention and control groups respectively. To test the study hypotheses, a moderated mediation analysis was conducted via Hayes PROCESS Macro (Model 14) for SPSS to examine the direct and indirect effects of the linkage intervention on affective attitudes. Self-efficacy was the mediator, while motivation and perceived effectiveness were the moderators of the indirect pathways.
Results: The findings revealed that linkage intervention was significantly associated with self-efficacy ($t = 4.23$, $p = .001$), with trained participants reporting higher self-efficacy. The linkage intervention was not significantly associated with affective attitudes. However, self-efficacy ($t = 7.09$, $p = .001$), motivation ($t = 5.16$, $p = .001$), and their interaction ($t = -3.72$, $p = .001$) were significantly associated with affective attitudes. Also, perceived effectiveness ($t = 2.02$, $p = .05$) and its interaction with self-efficacy ($t = -3.34$, $p = .001$) were significantly associated with affective attitudes. Furthermore, the moderated mediation index of motivation and perceived effectiveness were significant, indicating that the indirect effect of the intervention through self-efficacy was moderated by motivation and perceived effectiveness. The moderated mediation index showed that the more the informal health providers are motivated and affectively perceived the linkage intervention, the less they depend on self-efficacy benefits from it to develop positive attitudes.

Conclusion: The study highlights the importance of linkage interventions on self-efficacy of informal health providers which in turn influences their affective attitudes for the collaboration depending on their level of motivation and perceived effectiveness. Taken together, the findings portrays the need of addressing psychological factors in implementing linkage interventions between formal and informal health system in urban slums.

Factors associated with knowledge, attitude, practice and training interest of drug sellers in shaping antimicrobial resistance: A cross sectional study in urban Bangladesh

Asiful Haidar Chowdhury, Badruddin Saify (ARK Foundation); Rebecca King (University of Leeds); Helen Elsey (University of York); Rumana Huque (ARK Foundation)

Background: The study aimed to understand the position and role of drug sellers working in formal and informal pharmacies and explore factors and challenges associated with their knowledge, attitude, practice, training interest regarding antibiotics and antimicrobial resistance (AMR) in shaping approach to AMR in urban Bangladesh.
Methods: We mapped 1100 pharmacies in study site Mirpur. A survey was conducted among randomly selected 400 drug sellers from those pharmacies to understand their educational qualification, training or experience, pharmacy type, age, knowledge, attitude, practice, training interest regarding antibiotic, dispensing rules and AMR. FGD was conducted among drug sellers to explore challengesin antibiotic drug dispensing and counseling customers to comply with rule of regulatory body to prevent AMR. Data were collected in April and September-October of 2024. Quantitative and qualitative data were analyzed.
Results: Out of 400 pharmacies, type of pharmacy was found formal (with a license) for 57.3% and informal (without a license) for 42.8%drug sellers. Mean score of correct knowledge on AMR issues were found higher for drug sellers having graduate or higher general education (6.8 vs 6.5; $p<0.01$), pharmacy education of grade A or B or C (6.8 vs 6.4; $p<0.001$), higher duration of training or experience (6.7 vs 6.6; $p=0.331$). Mean score of positive attitude towards role of drug sellers and other stakeholders to prevent AMR was found high (21.9 ± 3.0) but indifferent across their education, training and pharmacy type. Mean score of training interest of drug sellers not having pharmacy education of grade A or B or C was found slightly higher (4.80 vs 4.78) than those having pharmacy education. Drug sellers from formal type of pharmacy, those having higher duration of training or experience and those having higher correct knowledge on AMR issues were significantly associated with higher good practice score with RR=1.04 (C.I.: 1.01 to 1.08), RR=1.03 (C.I.: 0.99 to 1.07) and RR=1.15 (C.I.: 1.10 to 1.20) respectively. Peer pressure, economic motivation, fear of losing customers, lack of knowledge are some challenges for compliance of rules in antibiotic dispensing and counseling.
Conclusion: It is recommended to take necessary strategiesfor monitoring preparatory status of informal pharmacies for licensing, arrange regular training for drug sellers, monitoring and supervision of drug sellers for compliance of rules and regulations towards proper dispensing of antibiotic drug and counseling customers which may be helpful for strengthening knowledge, capacity, practice of drug sellers and also reducing inequality towards shaping AMR in urban Bangladesh

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Enhancing life-cycle health promotion and preventive services in urban poor communities in Ghana: A quasi-experimental protocol for an urban-adapted Community-based Health Planning and Services (CHPS) intervention

Selase Odopey, Lauren Wallace, Adanna Nwameme, Delali Kumapley, Ivy Agbenu, Kofi Adjabeng, Duah Dwomoh (University of Ghana); Patience Mamattah, Priscilla Anima-Poku (Ghana Health Services); Justice Nonvignon (University of Ghana); Bassey Ebenso, Mahua Das (University of Leeds); Irene Agyepong (Ghana College of Physicians and Surgeons); Helen Elsey (University of York); Genevieve Aryeetey (University of Ghana

Background: Ghana's Community-based Health Planning and Services (CHPS) programme is the foundation of primary health care delivery, historically prioritising maternal and child health in rural settings. However, rapid urbanisation and the rising burden of non-communicable diseases (NCDs) have exposed limitations of the existing CHPS model in deprived urban neighbourhoods. Evidence from urban poor communities indicates low awareness, access, and utilisation of CHPS for life-course health promotion and preventive services. This protocol describes a quasi-experimental evaluation of a co-designed intervention to enhance life-cycle health promotion and prevention services delivered through urban CHPS.
Aim: To evaluate the effectiveness of an enhanced urban CHPS intervention in increasing access to and utilisation of CHPS services for life-cycle health promotion and prevention in urban poor neighbourhoods in Ashaiman and Madina, Ghana.
Methods: The study employs a quasi-experimental pre–post control group design using a difference-in-differences approach. Intervention communities (Ashaiman and Madina) will be compared with control communities (Nima and Mamobi) in the Greater Accra Region. The intervention comprises three integrated components: (1) empowering Community Health Officers (CHOs) through supplementary training to deliver life-cycle health promotion and preventive services, including family planning, NCD screening, and mental health support; (2) public education and CHPS awareness activities using churches, mosques, markets, community information centres, and local media; and (3) facilitation of CHO activities through provision of logistics, equipment, and expanded outreach beyond household visits.
A multi-stage cluster sampling design will be used to recruit approximately 3,620 adults (≥18 years) from 2,070 households across four municipalities. CHOs and community health volunteers will also be included. Primary outcomes include utilisation of CHPS services through compounds, outreach points, and extended visits. Secondary outcomes include awareness of CHPS, intention to use services, health-seeking behaviour, modern contraceptive use, and adherence to NCD medication. Quantitative data will be analysed using multivariable logistic regression and Poisson models with robust standard errors. A process evaluation will document implementation fidelity, contextual factors, and stakeholder experiences.

Estimating the cost of 'Enabling Enhanced Life Cycle Health Promotion & Prevention Services at Household and Community Level' Intervention in Urban Poor settings in Ghana.

Genevieve Aryeetey, **Henry Okudzeto,** Selase Odopey, Dominic Gadeka, Delali Kumapley, Ivy Akushika Agbenu Kofi Agyabeng, Duah Dwomoh, Ada Nwameme, Lauren Wallace (University of Ghana); Irene Agyepong (College of Physicians and Surgeons); Justice Nonvignon(University of Ghana); Bryony Dawkins, Joseph Hicks, Bassey Ebenso, Tim Ensor (University of Leeds); Helen Elsey (University of York)

Background: Urban poor residents encounter numerous socioeconomic and health challenges. To improve life-cycle health promotion and prevention services, CHORUS, a research consortium, implemented an intervention called 'enabling enhanced life cycle health promotion and prevention services at household and community levels' through urban Community-based Health Planning and Services (CHPS), Ghana's primary health care strategy, in selected urban poor communities. The intervention comprises three integrated components: (1) training Community Health Officers (CHOs) with additional skills to provide family planning, non-communicable disease screening, and mental health support; (2) raising public awareness and CHPS activities via churches, mosques, markets, community information centers, and local media; and (3) supporting CHO activities by providing logistics, equipment, and expanded outreach beyond household visits. This study aimed to estimate the cost of implementing the CHORUS-led intervention to guide policy decisions on scaling up.
Methods: We adopted a cross-sectional research design using the Activity-Based Costing (ABC) approach to collect data from a health system perspective involving 121 CHPS zones in La Nkwantanang and Ashaiman municipalities. Data collection involved activity logs (staff and researchers track time and materials used for the intervention), and structured questionnaires (CHOs and clients record activities and time while implementing or accessing the intervention). Data were analysed descriptively in Microsoft Excel. We conducted a sensitivity analysis with a 5% discount rate. All costs were reported in Ghana Cedi and US dollars.
Results: The estimated total cost of the intervention was GHS1,243,112 (US$85,732).The total cost for empowerment of Community Health Officers (CHOs) was GHS450,245 (US$31,051), public education on CHPS awareness, GHS 77,498 (US$5,345), and facilitation of CHOs activities, GHS715,369 (US$ 49,336), which represents 36.2%, 6.2%, and 57.5% of the total cost, respectively. The estimated cost per facility, considering horizontal equity, was GHS10,787.3 (US$744.0) at 5% discount. The total indirect cost due to time value was estimated at GHS716,595.04 (US$49,420.35).
Conclusion: The integration of the CHORUS-led initiative that leverages the strengths of community-based education and the CHPS awareness program, building the capacity of CHOs to deliver life-cycle health promotion and preventive services, and facilitating CHO activities, is feasible but cost-intensive, particularly with respect to training and logistics provision. Targeted adoption based on the components evaluated will enhance its integration and ensure access to and utilization of PHC services by the urban poor

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Co-Design of a Mental Health Intervention Framework for School Going Adolescents in Nepal

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Background: Adolescence is a critical period for mental health intervention, as half of mental health issues begin during this time. In Nepal, adolescents are at risk of mental health issues due to natural disasters, socio economic inequalities, academic pressure and limited access to mental health services. While Nepal's National Adolescent Health and Development Strategy emphasizes school-based psychosocial activities, a dedicated intervention for implementation has not yet been developed. Thus, this study aimed to develop a school based framework for promoting mental health and preventing mental health problems among school going adolescents in Nepal through a tiered, preventive and promotive approach.
Methods: The study was conducted at Pokhara Metropolitan City using purposive sampling. Key Informant interviews were held with government representatives (N=2), school management committee (N=2), parents (N=2) and focus group discussions with adolescent boys (N=8) and girls (N=8) from four government schools. A participatory co-design process involving adolescents, teachers, parents, government, and NGOs informed the development of an intervention framework, drawing on qualitative findings and global and regional guidance, including the SHAPE/SHERE frameworks, WHO–UNESCO–UNICEF school mental health pillars, Multi-Tiered Systems of Support, and the Helping Adolescents Thrive Toolkit.

Framework: The key strategies and activities of "School-Based Mental Health Promotion Framework" comprises 2 key components- interventions to improve overall school climate and three tiered public health promotion model. The overall school climate focuses on creating a supportive and healthy environment by strengthening teacher capacity, fostering student belonging and institutionalizing health promotion through School Health Promotion Groups. Tier-1 (Universal intervention) targets all students to promote mental health literacy of students, socio emotional learning, mindfulness, positive social skills, physical activity and parental engagement for all students. Tier-2 (Targeted intervention) provides life skills training, group and individual counseling, socio emotional learning modules to improve emotional regulation, mindfulness, stress management and early identification and referral for at risk adolescents. Tier-3 (Intensive intervention) ensure access to individual counseling by trained school nurses or counselors, family involvement, and referral to primary and specialized mental health services through a collaborative school health system.
Conclusion: This co-designed, multi-tiered school-based mental health framework offers a structured and contextually appropriate approach to promoting adolescent mental well-being and preventing mental health problems in Nepal. Its implementation has the potential to strengthen school systems, improve early identification and support, and contribute to improved educational and mental health outcomes for adolescents in low-and middle-income settings.

Poster Presentation Abstracts
Session 3: Multisectoral Collaboration to Address the Wider Determinants of Health

Using SWOT Analysis to Explore the Intersection of Crime and Healthcare Access and Delivery in Primary Health Centers in Nigeria: Perspectives from Multisectoral Stakeholders

Pamela Adaobi Ogbozor, Charles Tochukwu Orjiakor, Aloysius Odii, Ethelbert Agu, John Eze, Obinna Onwujekwe (University of Nigeria)

Background: Rapid urbanization, particularly in low-income countries, has led to increased crime and insecurity due to competition and unequal access to resources. This negatively affects the well-being of residents, ranging from physical harm, psychological, economic and social impacts. Crime also affects the functioning of Primary Health Centers (PHCs) services by causing staff displacement, absenteeism, facility closures, disrupted medical supply chains, and cancelled outreach activities. Understanding how crime interacts with health system performance is critical for developing contextual, multi-sectoral actionable solutions that promote access to care for vulnerable populations.
Method: A SWOT analysis was conducted during a policy dialogue workshop held between March- April 2025 in Aba and Onitsha, Nigeria, to examine the impact of the intersection of urban crime and health. Sixty-three (63) stakeholders (policy makers, managers and community leaders) from health, justice, media, community leadership, ward development committee chairman and civil society organization participated in roundtable discussions, shared perspectives reflected on effects of crime and jointly identified and prioritized actions for strengthening healthcare access amid crime-related challenges in urban areas.
Results: Stakeholders highlighted community-led security efforts and state-supported taskforces as important strengths supporting PHC facilities. However, persistent weaknesses included poor coordination among security agencies, inadequate infrastructure, corruption within security and justice systems, weak implementation, limited protection for whistleblowers, and underuse of existing community structures. Opportunities were identified in increased health financing through the Basic Health Care Provision Fund

(BHCPF) and investments in free education as longer-term approaches to reducing youth involvement in crime. Key threats included ongoing public safety risks, weak law enforcement, poorly paid security personnel assigned to health facilities, and wider economic instability. Recommendations emphasized stronger multi-sector collaboration, improved community policing , use of digital security tools such as Closed-circuit television, revitalization of desk unit in police for quick response to crimes in communities, better crime reporting systems, and building community resilience through civic and moral education.
Conclusion: Crime continue to undermine access to primary healthcare for poor and marginalized urban populations. Addressing these challenges requires coordinated action across health, security, justice, education, and community sectors. Integrating security considerations into urban health planning can help protect PHC services, strengthen system resilience, and support progress towards equitable and sustainable urban health outcomes.

Exploring Political and Economic Issues for Mainstreaming Health in Non-Health Sectors for Preventing and Controlling Communicable and Non-Communicable Diseases in Sub-Saharan Africa: A Scoping Review

Paul Onuh, Enyi Etiaba, Chinyere Mbachu, Obinna Onwujekwe (University of Nigeria)

Background: Mainstreaming health in non-health sectors is essential for the prevention and control of communicable and non-communicable diseases, because of the effects of the social determinants of health. However, mainstreaming health in non-health sectors has significant political and economic implications, as it requires intersectoral coordination and resource reallocation. This scoping review aims to identify and synthesize the key political and economic factors that enable or hinder the mainstreaming of health across all sectors as a strategy for the prevention and control of communicable and non-communicable diseases in sub-Saharan Africa.
Methods: The scoping review was guided by the methodological framework developed by Arksey and O'Malley. Systematic search for articles was performed across databases. Search terms were customized for each database to account for differences in controlled vocabulary and search syntax. Articles that were published from 2004 to 2024 and available in English language were retrieved and screened. A total of 18 articles were included in the review. A descriptive analytical approach was used to map enablers and barriers.
Findings: The review shows that mainstreaming health policies in non-health sectors to improve health outcomes holds significant promise. While there are enabling political and economic factors, mainstreaming health policies and programmes in non-health sectors are undermined by political factors such as weak political governance structure, competing and conflicting sector stakeholder interests, stakeholder resistance, and economic factors such a limited resources, poor prioritization, and dependence on external donor funding. To overcome the observed challenges and improve mainstreaming of health policies in non-health sectors, we recommend the improvement of political governance structures, fostering stakeholder collaboration, and diversification of funding.

A Scoping Review of Institutional Frameworks for Multisectoral Action on Prevention and Control of Communicable and Non-Communicable Diseases in Rapidly Urbanizing African contexts

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Background: Rapid urbanization is exacerbating the dual burden of communicable and non-communicable diseases (CDs and NCDs) in Africa due to increases in risk factors such as overcrowding, poor sanitation, unhealthy diets and sedentary lifestyles. Addressing these challenges requires robust institutional frameworks that facilitate multisectoral action (MSA) across urban planning, agriculture, environment, education, finance, and health sectors. This study synthesized evidence on institutional frameworks supporting MSA for the prevention and control of CDs and NCDs in Sub-Saharan African countries.

Methods: The scoping review was guided by the methodological framework developed by Arksey and O'Malley and PRISMA-ScR guidelines. Systematic search for peer-reviewed and grey literature was performed in PubMed, Hinari, AJOL and Google Scholar. Search terms were customized for each database to account for differences in controlled vocabulary and search syntax. Articles that were published from 2004 to 2024 and available in English language were retrieved and screened. Data analysis and reporting was guided by the PAGER framework.
Results: The review included 20 documents from 9 sub-Saharan African countries. MSA responses to the rising disease burden vary widely, with some countries establishing intersectoral coordination platforms or embedding MSA in urban health policies and strategies. Kenya's Health in All Policies (HiAP) strategy explicitly addresses urban health challenges such as informal settlements and poor sanitation in cities; Nigeria's Multisectoral Action Plan for the prevention and control of NCDs includes provisions for urban implementation, particularly through local government-level coordination; and Ghana's agriculture-based "farm-for-impact" model integrates health financing with food systems in urban and peri-urban contexts. The initiatives demonstrate how MSA is being operationalized within urban policy frameworks. Enablers of MSA included political commitment, legislative mandates, inter-ministerial collaboration, and alignment of interventions with resource realities using evidence from economic feasibility analyses (EFA), as seen in Nigeria and Ghana. Key barriers included fragmented governance, sectoral silos, limited urban health planning capacity, and weak accountability structures, particularly in rapidly growing urban centers.
Conclusion: Institutional frameworks for MSA exist in some sub-Saharan African countries. However, their functionality is limited by political, structural and capacity constraints. Strengthening these frameworks requires systematic political economy analysis to understand power dynamics, stakeholder interests, and institutional incentives. Strategic choice assessments are also needed to guide context-sensitive reforms that align public preferences, stakeholder interests and institutional capacity for more effective urban health governance.

Investigating Community-Driven Initiatives for Mitigating the Influence of Crime on Access to Healthcare in Urban Areas in Nigeria

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Background: Crime and insecurity are growing threats to health service delivery in rapidly urbanising Nigerian cities, yet limited evidence exists on how communities and frontline actors co-develop practical solutions to improve safety and access to care. This study explored stakeholders' experiences of crime and its effects on healthcare utilisation, and co-created context-specific interventions to mitigate these challenges.
Method: We adopted a qualitative design comprising 44 in-depth interviews and eight focus group discussions (n=52) with security personnel, health workers, policymakers, and community leaders in Aba (Abia State) and Onitsha (Anambra State) to explore how crime affects access to healthcare and the strategies communities currently use to address it. In addition, we convened a co-creation workshop with 43 stakeholders drawn from the Nigeria Police Force, Nigeria Security and Civil Defence Corps, Ward Development Committees, local security groups, civil society organisations, and state health agencies, to validate these findings and jointly develop context-appropriate interventions. The interviews were conducted by trained qualitative researchers using semi-structured guides, and data were transcribed verbatim and analysed thematically.
Result: Participants reported that theft, burglary, armed robbery, and phone or bag snatching around primary healthcare centers (PHCs) and residential areas reduced service utilisation, particularly at night, and threatened the safety of health workers. Communities currently rely on informal security arrangements, including vigilante groups, neighborhood gates, community sanctions, and ad hoc collaboration between health workers and local security teams, to reduce criminal activity. Through the co-creation process,

stakeholders prioritised three interventions, which this study focused on the third intervention: formation or revitalization of functional Community Security Committees to coordinate local responses.
Conclusion: These interventions offer actionable, community-informed pathways for improving safety around PHCs, sustaining service delivery, and advancing equitable access to healthcare in high-crime urban settings in Nigeria.

Crime Exposure, Perceived Safety, and Interpersonal Trust as Environmental and Social Determinants of Urban Health in Southeast Nigeria

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Background: Urban health in low- and middle-income countries (LMIC) is shaped by the interplay among environmental stressors, social dynamics, and behavioural responses. In Nigerian cities, crime exposure and insecurity remain pressing challenges that undermine both physical and psychological well-being. This study examines how perceptions of safety moderate the relationship between crime exposure and interpersonal trust, with implications for healthier urban communities. Perceived safety is conceptualised not only as an individual psychological state but also as a collective determinant that influences how residents interact with their environment and with one another. Crime exposure often erodes trust among community members, leading to social fragmentation and reduced cooperation. Yet interpersonal trust is a critical component of social capital that supports resilience, collective efficacy, and healthier communities. By investigating the moderating role of perceived safety, this research highlights how positive safety perceptions can buffer the negative effects of crime exposure, sustaining trust and promoting healthier social relations even in high-risk contexts.
Method: The study used a cross-sectional survey of urban residents in Southeast Nigeria (N = 304), including quantitative measures of crime exposure, perceived safety, and interpersonal trust. Data analysis was carried out using SPSS (version 23), with descriptive and multivariate techniques applied. Statistical significance was set at $p < 0.05$, and all estimates were reported with a 95% confidence interval. To explore the moderating role of perceived safety on the relationship between crime exposure and interpersonal trust, interaction effects were tested with Hayes' PROCESS Macro (Model 1).
Results: Findings suggest that when residents perceive their environment as safe, the detrimental impact of crime exposure on trust is reduced. Conversely, low perceptions of safety amplify distrust and weaken social cohesion, with downstream effects on stress, health behaviours, and willingness to engage with community health initiatives.
Conclusion: Policy implications emphasise the need to enhance perceived safety through community policing, improved urban design, and participatory governance. Strengthening perceptions of safety can foster interpersonal trust, reduce health risks, and contribute to more resilient urban environments. While the study primarily aligns with the CHORUS pillar on environmental, social, and behavioural determinants of urban health, it also offers crosscutting relevance to healthcare access, as unsafe environments may discourage use of formal providers and increase reliance on informal care.

Do Coping Mechanisms Magnify the Burden of Crime on Wellbeing in Nigerian Urban Cities?

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Introduction: Coping with crimes in urban areas in Nigeria is a key determinant of wellbeing among residents. Increasing urbanization spur high population density and poorly planned urban areas, leading to high crime levels. We explored how crimes affects the wellbeing of urban residents in two commercial cities in the Southeast region of Nigeria and how coping mechanisms worsen this effect.

Method: A quantitative survey was conducted among 304 households in Aba and Onitsha, cities in Southeast Nigeria. Respondents comprised of 170 male and 134 female household heads or representatives, aged 18-70 years. Data was collected on personal, household and neighbourhood experiences on 22 crimes as well its impact on their wellbeing. The use of four coping mechanisms were assessed: avoidance, counselling, community watch and talking to neighbours. Hayes PROCESS Macro (Model 1) was used to test the study hypotheses. Physical wellbeing was the dependent variable, five different crimes (Theft, assault, drug-related offences, public order and environmental) and their cumulative score as the independent variable while the cumulative score of the coping mechanisms was the moderating variable.
Results: Theft, assault, drug-related offences, public order and environmental crimes were the most commonly experienced crimes. Theft, drug-related offences, public order crimes, and environmental offences were not significantly associated with wellbeing. However, assault ($t = -2.29$, $p < .05$), cumulative crime exposures ($t = -2.05$, $p < .05$) and coping mechanisms ($t = -4.45$, $p < .001$) were significant negative predictors of wellbeing. We noted minimal use of coping mechanisms, as most people did not utilize them following exposure to crimes. Additionally, coping mechanisms surprisingly exacerbated the impact of theft, assault, and sum of all the crime incidences on wellbeing.
Conclusion: Crime in urban areas negatively impacts wellbeing, while the use of coping mechanisms in response have mixed effects on it. These findings highlights the need for the introduction of counselling programs and other relevant coping mechanism for crime victims. Multisector collaborations are critical in acknowledging and mitigating the impact of crimes on public health.

Small Area Heat Vulnerability Index for Dhaka City

Anisur Rahman Bayazid, Zahidul Quayyum, (BRAC James P Grant School of Public Health)

Background: Rapid urbanisation and climate change have increased heat exposure in Dhaka city, particularly in densely built-up areas with limited green and blue spaces. This heat creates disproportionate vulnerability among elderly, young, and low-income populations. Despite these vulnerabilities, evidence at smaller spatial scales remains limited, constraining the identification of neighbourhoods most at risk and the design of targeted interventions.
Methods: This study aims at creating a small area heat vulnerability index (HVI) to identify areas that need immediate attention for the health and wellbeing of the residents. For the HVI, more than a dozen open source variables and field collected near surface air temperature data were used. The variables are categorized into three components - exposure, sensitivity, and adaptive capacity, in line with the Intergovernmental Panel on Climate Change (IPCC) based framework. The variables were normalized before analysis. A two-step Principal Component Analysis (PCA) was applied to derive weights for individual indicators and components. Sensitivity analysis was performed using leave-one-out component (LOOC) analysis. Final output showcased ward level vulnerability for Dhaka. The study also identified grid-based HVI for the city, with 250 meter hexagon grids. All the variables have been converted into raster format. Presence and absence of features, and distance from specific features have been considered for the grid based HVI.
Findings: The study identified significant intra-urban variation across different parts of the city. High vulnerable areas experience high heat exposure, high Land surface temperature (LST), higher nighttime light, high building density, high population density, and lack of green and blue spaces. Some of the most vulnerable wards lack healthcare facilities to provide emergency care among the heat-affected people. Also, most of these areas lack sufficient open spaces to plan for any intervention to reduce heat exposure. This identification is crucial, to maximize resource utilization and minimizing heat impacts. Immediate and sustainable urban planning is crucial for these areas. This open-source data based HVI approach can be applied to LMIC cities experiencing similar challenges and lack sufficient health and environmental data for urban health planning.

Understanding Access to Primary Healthcare in Dhaka's Urban Slums: A Qualitative Inquiry into Community Perceptions and Health Equity Challenges

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Background: Faced with rapid urbanisation and a rise in non-communicable diseases in LMICs, Dhaka's public primary health care services are struggling to meet the growing needs of its urban poor. This study investigates health care access and utilisation in urban informal settlements in Dhaka, exploring the contrasting perceptions of service delivery between providers and patients at NGO clinics and government outdoor dispensaries (GoDs).
Methods: We used a qualitative case study approach, purposively sampling four NGO clinics and two GoDs located close to informal settlements within the city as our cases. For each case, we conducted in-depth interviews with male, female, and Hijra (third-gender) patients within the catchment areas. The data collection process took place between December 2022 to August 2023, following the Consolidated Criteria for Reporting Qualitative Research (COREQ) guideline.
Results: We identified five themes that explain health care seeking behaviour for non-communicable diseases at primary health care centres among these diverse low-income urban residents: -1) Costs and perceptions of cost, 2) Availability and quality of NCD medicines and facilities, 3) Behaviour of providers, both positive and negative 4) Perception of PHC focus on Maternity and Neonatal Child Health (MNCH), and 5) Patient perceptions of NCDs. Particular barriers included how men and hijras are excluded, how restricted facility hours limit working-class men's access, and how social networks can help reduce exclusion.
Conclusion: This study advances understanding of barriers to primary healthcare utilisation in Dhaka. While global frameworks offer valuable guidance, context-specific strategies such as public-private collaboration, inclusive service design, and community engagement are necessary to address persistent inequities in primary healthcare access in Dhaka City.

Reframing Masculinity to Promote HIV/STI Health Seeking: Qualitative Evidence from Nigerian Slums

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Background: Boys' and men's health-seeking behaviours for Human Immunodeficiency Virus (HIV) and other sexually transmitted infections (STIs) are influenced by masculine norms. These norms often encourage risk-taking, concealment, and endurance, leading to delayed care. Yet, little is known about how these norms can be reframed to support positive health-seeking within the unique context of urban slums. This study explores how masculinity influences HIV/STI-related behaviours and identifies opportunities to reframe health-seeking in ways that align with men's identities.
Methodology: This study was conducted in three selected slums in Enugu State, Nigeria. Qualitative interviews were held with 11 boys and men living with HIV, 6 formal health providers involved in HIV/STI counselling, testing, and treatment, 6 focus group discussions with boys and men residing in slums who had notable experiences of HIV/STI, and spouses/partners of people living with HIV. Data analyses were guided by the Masculine Values Framework, centring on family, work, health, sexuality, and social status. The findings were presented to stakeholders for validation.
Findings: There are multiple pathways to reframe HIV/STI testing, treatment, and prevention in ways that promote positive behavioural change among boys and men in slums. Under health, masculinity norms of endurance and risk-taking discouraged early care; however, testing can be positioned as an act of strength,

disclosure as courage, treatment as resilience, and maintaining health as a man's responsibility. Under family, men prioritised household welfare over their own care, often postponing treatment even when services were free; this can be reframed by presenting health-seeking as an investment in sustaining the provider role. In sexuality, norms positioned male sexuality as uncontrollable and risky, yet participants also acknowledged that responsible men protect themselves and their communities; health-seeking can therefore be framed as both self-protection and safeguarding others. In social status, fear of shame and stigma constrained care-seeking, but testing and treatment can be promoted as acts of courage, leadership, and responsibility that sustain dignity and respect. Finally, in work, men placed productivity and income generation above treatment; reframing treatment as the foundation for sustained strength and productivity can encourage engagement.
Conclusion: Masculine norms function simultaneously as barriers to and facilitators for improving boys' and men's health-seeking behaviours in urban slums. Rather than viewing masculinity solely as an obstacle, this study demonstrates that key masculine values, such as strength, responsibility, productivity, and protection, can be strategically reframed to promote positive engagement with HIV/STI testing, treatment, and prevention. These findings provide actionable guidance for peer mentors, healthcare providers, and programme implementers by identifying language and engagement strategies that resonate with men's identities and lived realities. Training interventions should therefore equip community-based male mentors and frontline health providers with masculinity-affirming counselling approaches that reposition HIV/STI services as expressions of strength, care for family and community, and responsible manhood. Embedding Such approaches within urban HIV/STI programmes has the potential to reduce avoidance of care and improve health-seeking outcomes among boys and men in slum settings.

Exploring Cultural Beliefs, Gendered Perceptions, and Practices Shaping Antimicrobial Use in Urban Slums of Southeast Nigeria: A Grounded Theory Study

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Objectives: In many low- and middle-income settings, cultural beliefs and perceptions shape how antimicrobial agents are demanded, dispensed, and used. This study explored these beliefs, perceptions, and everyday practices influencing understandings and uses of antimicrobials.
Methods: This was a cross-sectional qualitative study conducted across three slum settlements of Ebonyi State in southeast Nigeria. This study employed a constructivist grounded theory approach to generate a contextually grounded explanation of antimicrobial behaviours. Data were collected through twelve in-depth interviews with patent medicine vendors (PMVs), and nine focus group discussions among their clients. The interview transcripts were coded in NVivo 15 using a pre-defined coding framework, while an inductive thematic analysis of data was performed.
Results: Findings show that antimicrobials were widely perceived as universal remedies for diverse health conditions. Injections were viewed as stronger, and longer-lasting than tablets, with some believing that injections could prevent illness recurrence for months. Concurrent use of antibiotics with other drugs, especially antimalarials, to enhance treatment or address multiple suspected illnesses was common. All forms of abdominal complaints were often seen as requiring antimicrobial therapy. Women were thought to be more prone to infection, especially the poorly-defined 'toilet infection' and thus, expected to use more antibiotics, yet certain antibiotics, such as Augmentin, were considered too strong for them by some participants. Conversely, some participants believed antibiotics could impair men's reproductive organs and sexual performance. A practice known as "washing and setting" emerged, involving non-therapeutic use of antimicrobials, particularly among men. Beyond treatment, antibiotics were also used as contraceptives, arbotificients, and as preventive rather than curative measures for sexually transmitted infections.
Conclusion: This study reveals that antimicrobial use in urban slums is deeply embedded in local health beliefs, gender norms, and informal dispensing practices. Tackling AMR in such contexts requires moving beyond awareness campaigns to integrated approaches that strengthen regulation, support providers, and engage communities in reshaping norms around illness and treatment.

Strengthening Health Outcomes Among Urban Slum Populations Through Tailored Health Communication: Insights from Ashaiman Municipality, Greater Accra Region, Ghana

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Background: Urban slum communities face heightened health risks driven by overcrowding, limited access to formal services, fragmented information flows, and persistent social vulnerabilities. These conditions make effective health communication not only beneficial but essential for improving health outcomes. This reflection from Ashaiman Municipality in the Greater Accra Region of Ghana examines how context-specific, community-anchored communication strategies can enhance health-seeking behaviours, service uptake, and trust in the health system among vulnerable urban populations.
Methods: Data was collected through six Focus Group Discussions with community members and seven In-depth Interviews with health workers, civil society representatives, and media actors. All data were analyzed thematically using NVivo 13. Emerging themes were interpreted through the EAST Framework — Easy, Attractive, Social, and Timely — and the Activation Theory of Information Exposure to guide the development of the study's findings.
Results: Effective health communication in Ashaiman's poor urban areas aligns with Community-led Responsive and Effective Urban Health Systems (CHORUS) Pillar 4 of identifying, reaching, and engaging vulnerable populations. Participants, including residents, health workers, civil society actors, and media representatives, emphasized the value of co-designed messages delivered through trusted local messengers. Interpersonal communication emerged as the preferred channel, supported by digital tools and local FM radio. The findings further highlight the importance of linking communication efforts to accessible services and clear referral pathways. Health workers, community volunteers, market networks, and youth groups play central roles in sustaining consistent and actionable messaging. Community members viewed health workers as reliable sources of information, and mobile vans were identified as some of the effective tools for disseminating timely health messages across densely populated areas.
Conclusion: Despite the growing push toward digitalization, the study shows that health workers remain central to effective health communication in dense urban slums. Their role as trusted messengers underscores the need for continuous training and support to equip them with the skills to deliver clear, accurate, and culturally appropriate messages. The findings also highlight the importance of developing creative, context-specific strategies to ensure accurate health information reaches residents in poor urban areas, including those with limited digital access.

Identifying Urban Poverty at Small Area Level: Evidence from Dhaka City

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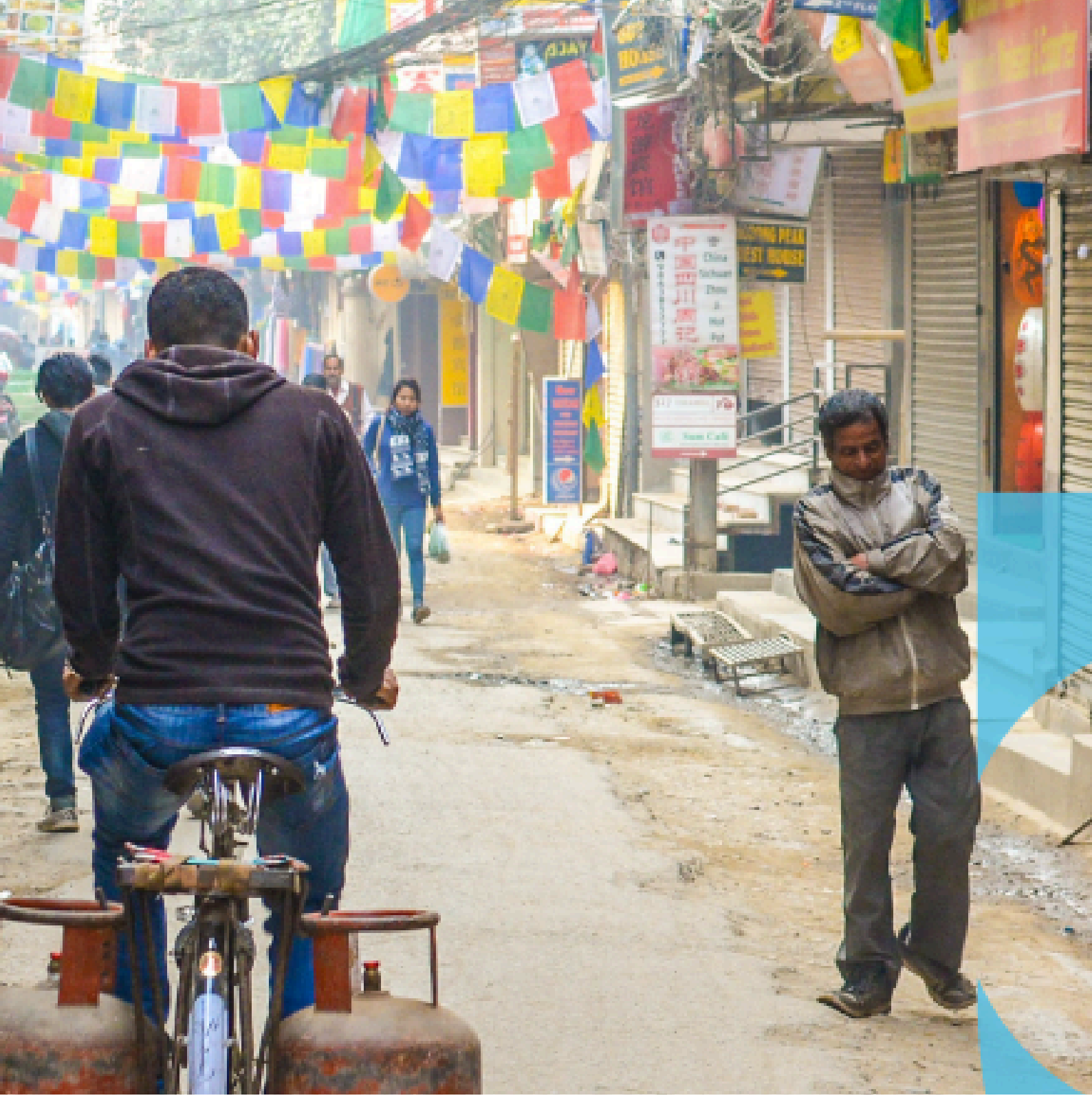
Background: Urban poverty in Dhaka City is highly uneven with sharp contrasts between neighborhoods that are often hidden by city-level or aggregate poverty estimates. Rapid urbanization has intensified this pattern, concentrating disadvantaged populations in small and fragmented geographic pockets including informal settlements, shared housing arrangements, and overcrowded dwellings embedded within wealthier areas. These diverse forms of urban poverty are frequently overlooked in conventional data sources such as household surveys, population censuses, and routine health information systems. As a result, existing evidence often provides an incomplete picture of deprivation, leading to policy responses and resource allocation that fail to reach the most vulnerable urban populations.

Methods: This study focuses on the application of Small Area Estimation (SAE) techniques to generate ward-level (smallest administrative units) estimates of consumption-based poverty in Dhaka City by integrating household survey data with population census data. Household consumption data from the Household Income and Expenditure Survey (HIES) 2022 will be used to develop mixed-effects models that incorporate both household and area-level characteristics. Model performance will be assessed through cross-validation, and the best-performing specification will be applied to the Population and Housing Census 2022 to predict household consumption across all wards. Multiple model specifications will be explored to capture heterogeneity in poverty patterns and to reflect the varied ways in which urban poverty manifests across the city. The SAE-based estimates will be used to examine spatial variation in poverty and to identify small-area clusters of deprivation that may not be visible in aggregate statistics. Spatial mapping will be used to assess and illustrate the distribution of predicted poverty alongside key contextual characteristics such as housing conditions, population density, and slum concentration.

Policy Implications: This work helps CHORUS Pillar Four by making it easier to identify poor people living in cities. It produces poverty estimates that show where poor households are located, including in small and often overlooked areas. This helps fill important gaps in data that usually miss the urban poor in health systems. By clearly showing where poverty exists at the small-area level, the study can support better targeting of both preventive and treatment health services. It can also help planners design fairer and more need-based urban health and social protection policies in Dhaka City.



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