

19th International Conference on Urban Health

6-9 November 2023

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Abstract Book

Breakout Session 1: Healthcare I

10:45 - 11:45 Tuesday, 7th November, 2023

Location Kirkwood

Presentation type Oral

209 A study to understand behavioral predictors of Immunization service uptake in the urban areas of two states of India

Dr. Ayushi Agrawal Program Lead, Urban RI project¹, Dr. Pritu Dhalaria Technical Director, Immunization¹, Mr. Ajeet Kumar Singh Sr. Research Officer¹, Dr. Iqbal Hossain Sr. Immunization Technical Advisor², Ms. Lora Shimp Director, Immunization Center²

¹John Snow India, New Delhi, Delhi, India. ²John Snow, Inc. (JSI) - Immunization Center, Lorton, Virginia, USA

Abstract

Background: India has made remarkable progress in immunization coverage, as per reports of National Family Health Survey-5 (2019-21). However, urban immunization is emerging as an impediment to improving immunization coverage in the country. Rapid urbanization of the country over the past decade, has hindered efforts to reach every child in urban areas. Magnitude of the problem is even more conspicuous in the two largest states of India which contribute to 35 % of the country's urban population. On comparing the progress made between 2015-16 and 2019-21 in India, rural areas have seen a significant increase in immunization coverage by 15.1 percentage points, whereas progress in urban regions has been slower at 11.6 percentage points. This slow progress in immunization coverage can be attributed to many known and unknown variables relating to demand and supply of immunization services. To understand the behavioral barriers for immunization uptake in urban areas, this study was undertaken in 23 cities of two large states (contributing to 40% of the birth cohort) of India.

Method: This research is a multi-level qualitative study wherein In depth interviews and Focus group discussions were held with care givers, health care workers, policymakers and community influencers. **Result:** The study findings identified three broad thematic areas of behavioral barrier for immunization service uptake in the urban areas; Knowledge and awareness of caregivers, Quality of immunization services and social structure of urban population. Under the Knowledge and awareness theme caregiver's unawareness about importance of vaccination, misinformation on vaccine safety and AEFIs, limited information on session plan were the major challenges identified. Poor past experience in public health facilities, mistrust in health care providers, inconvenient timing of sessions were the primary drivers identified with regard to the quality-of-service. Barriers related to social structure of the urban population like lack of social connectedness between health system and caregivers, migratory nature of population emerged as important predictors for service uptake in the urban areas.

Conclusion: To achieve sustainable improvement in urban immunization, it is crucial to understand and address the identified barriers as was undertaken in the study area to develop urban immunization strategy.

214 Enhancing Access and Quality of Immunization Services in Urban area through Model Immunization Centers: A Case study

Dr. Ayushi Agrawal Programme Lead, Urban RI Project¹, Dr. Pritu Dhalaria Technical Director, Immunization¹, Mr. Ajeet Kumar Singh Sr. Research Officer¹, Dr. Iqbal Hossain Sr. Immunization Technical Adviser², Ms. Lora Shimp Director, Immunization²

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Abstract

Background: The Immunization Agenda 2030 emphasizes the principle of being "people-centered," urging programs to prioritize the needs of the people being served and the health workers who serve them. Vaccination services must not only be available and accessible but also be of adequate quality to address the requirements of the communities they serve, establish trust-based relationships, create resilient demand, and maintain equitable coverage. Barriers to utilization of immunization

services in the urban areas have included economic constraints, loss of daily wages while attending immunization clinic, inconvenient timings and lack of effective communication with health personnel. The Government of Bihar introduced the idea of Model Immunization Centers (MIC) in 2017 to bridge these gaps in accordance with the Immunization Agenda 2030, aiming to enhance immunization coverage and antenatal care services in urban areas by delivering child friendly services that prioritize beneficiaries in a favorable environment. The present case study was conceptualized with the objective of evaluating the potential for scaling up MICs to strengthen immunization services in urban areas, in order to provide more accessible, equitable, and high-quality healthcare services to the urban communities. **Method:** This study employed a mixed-method approach to understand the utilization of services delivered at MICs and evaluate the caregiver's perspective for assessing the need of model immunization center through exit interviews and In-depth interviews. **Result:** The MIC was instrumental in improving the immunization service utilization from the community. On comparing the vaccine uptake data to the period before establishment of MIC (2017 to 2022), the vaccination uptake increased by an average 36% for all vaccines. The establishment of MIC also aided in efficient service delivery as substantiated by a decrease in wastage for all vaccines, **Conclusion:** The study found that expanding MICs could enhance immunization services in urban areas and strengthen the healthcare infrastructure. Therefore, the findings of the study suggest that scaling up MICs could be an effective strategy for addressing gaps in immunization services in urban areas and achieving the goals of the Immunization Agenda 2030.

289 Promoting Equity: Advancing Sexual and Reproductive Health for Indigenous Women in the Chittagong Hill Tract, Bangladesh

Farhana Alam MPH, Dhanista Chakma, Md Sajib Rana

BRAC James P Grant School of Public health, BRAC University, Dhaka, Bangladesh

Abstract

Indigenous women in the Chittagong Hill Tract (CHT) region of Bangladesh face significant healthcare challenges and experience marginalization in various aspects of their lives. This study investigates their experiences in relation to sexual and reproductive health (SRH) services, aiming to shed light on their availability and accessibility. From Sept-Nov 2022, 25 in-depth interviews and 25 key informant interviews were conducted with community women, students, and indigenous women's rights activists from 12 communities in Rangamati and Bandarban, CHT.

The study reveals a concerning lack of awareness programs and healthcare services specifically targeting remote areas, leaving indigenous women uninformed about sexual and reproductive healthcare. Accessing SRH services becomes difficult due to geographical remoteness, often requiring long journeys involving crossing hills or walking considerable distances. Transportation barriers further compound the challenges faced by pregnant women, delaying access to essential healthcare facilities, especially during emergencies. Community clinics offer prenatal/contraceptive services but lack child delivery services, leading to reliance on home births and posing risks to mothers and children. Lack of language assistance to indigenous women with limited Bangla skills makes it challenging to communicate with doctors, hindering effective healthcare interactions. Moreover, deep-rooted cultural beliefs surrounding pregnancy and menstruation, such as dietary restrictions, mobility limitations, and home birth preferences, significantly impact healthcare decisions and experiences.

To promote equitable healthcare access, it is crucial to reduce the financial burden on sexual and reproductive healthcare through initiatives like distributing affordable sanitary pads and promoting organic options. Awareness programs about SRH tailored to indigenous communities' specific needs and cultural contexts, delivered through school-based seminars and classes, can bridge the knowledge gap and empower indigenous girls/women to make informed decisions. Improving health services in the CHT includes increasing community clinics and establishing mobile medical centers to reach remote areas. Efforts should address the lack of qualified doctors and nurses, provide necessary facilities and equipment, and train healthcare staff in behavior and communication. Additionally, providing culturally sensitive healthcare materials and resources in the local languages can be a useful strategy. Providing child delivery services at community clinics and reducing associated costs can help bridge the healthcare access gap.

451 Identifying local needs and opportunities to improve immunization equity in urban settings

Monitoring, Evaluation and Learning Officer Andi Sutter MS, MPH¹, Senior Learning Advisor Ankita Meghani², Project Director Gopal Soni³, Senior Technical Officer Iqbal Hossain¹, Project Director Joel Yakubu Cherima⁴

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Abstract

Urban populations are increasing markedly and public health systems are not keeping pace with the increased demand and need for health services in cities. In 2000, 40% of people in LMICs lived in urban areas, and by 2021, that increased to 52%. The general perception that urban populations have more resources and greater access to health services masks the underlying truth of pockets of under-served or excluded populations in urban areas. Analyses of immunization data from within urban settings show large disparities in access to and uptake of vaccines in urban areas, informal settlements, and among mobile populations. Health systems planners, managers, and staff need new ways of planning and implementing health services in urban environments that consider the needs of populations.

In 2018, an urban immunization toolkit was developed by the Urban Immunization Working Group (UIWG), made of experts from UNICEF, GAVI, WHO and other organizations, to provide principles and approaches for identifying, locating, and serving unvaccinated urban populations. The MOMENTUM Routine Immunization Transformation and Equity project recently collaborated with the UIWG to review and revisit-assess the toolkit to understand the extent of its use and identify content areas that can be improved, through the lens of decolonizing knowledge and co-creating with communities and end-users. In this presentation we will present findings from discussions with the UIWG and an urban immunization needs assessment, including the local solutions that were co-created to provide recommendations for improving the toolkit.

The project used human centered design (HCD) approaches to conduct a needs assessment among urban health stakeholders, including health systems managers and staff, staff of municipalities, community influencers, religious leaders, and community members and clients of health services. All worked together to co-create locally-relevant solutions to improve immunization equity and contribute content to the urban immunization toolkit. This presentation describes the lessons learned from applying HCD approaches to urban health challenges and presents the insights gleaned from urban community members themselves and the solutions they co-created in India and Nigeria. This presentation should inform others aiming to improve equity and decolonize knowledge about urban health.

Breakout Session 2: Transportation and Pollution

10:45 - 11:45 Tuesday, 7th November, 2023

Location Centennial

Presentation type Oral

346 The impact of New York City's Open Streets Program on Traffic Levels: A difference-in-differences analysis

Sabah Usmani MCP, Marianthi-Anna Kioumourtoglou PhD, Jaime Benavides PhD, Darby Jack PhD
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Abstract

In recent years, there has been a growing popularity in urban policy measures aimed at prioritizing pedestrians by reallocating road space from motorized vehicles, with a focus on promoting active modes of transportation like walking and cycling, as well as public transit. However, there is limited research exploring the local traffic implications of such policies. The Open Streets Program in New York City (NYC) is an initiative to create car-free zones by closing select city blocks to traffic. Launched in April 2020 (and made permanent in May 2021), the program aimed to provide New Yorkers with outdoor respite and increased access to public space during the Covid-19 pandemic. The program's impact on traffic is not well understood. We conducted a difference-in-differences analysis using monthly average daily traffic data obtained from the Streetlight Insights database, which includes NYC-wide highly spatially resolved crowdsourced traffic estimates, based on mobility data such as cell phones and in-car navigation. Our analysis specifically compares traffic estimates for census tracts during the pre-implementation period in 2018 and 2019 with a post-implementation period in 2021. This study contributes to the understanding of the effectiveness of such urban policies in influencing traffic levels and offers insights into the application of a causal research method for evaluating the outcomes of road space reallocation schemes and the promotion of pedestrian-friendly environments in urban areas.

66 Streets for Cleaner Air: Design and Evaluation Strategies

Eduardo Pompeo Design Lead^{1,2}, Renan Carioca³

¹Global Designing Cities Initiative - GDCl, São Paulo, SP, Brazil. ²Independent research consultant, Fortaleza, CE, Brazil. ³Global Designing Cities Initiative - GDCl, Fortaleza, CE, Brazil

Abstract

The World Health Organization (WHO) considers exposure to polluted air a major public health issue—an estimated 4.2 million deaths attributed to ambient air pollution annually and billions more impacted. Air pollution is especially harmful to the health of children. It can disrupt how their lungs, brains, and other organs develop, often causing irreversible damage.

Road transport is a significant source of air pollution in cities. Vehicle emissions occur inherently closer to human activity when compared to other major sources of pollution, like power plants.

The way we design streets can help address this issue in two ways:

- **Reducing road transport emissions:** incentivizing a shift towards more emission-efficient modes like walking, cycling, and using transit, as well as curbing resuspended road dust and incentivizing cleaner freight transport.
- **Reducing exposure to polluted air:** influencing where emissions happen, how people interact with the public space, or by making it harder for polluted air to reach people

These two mechanisms will often act simultaneously in a street transformation. As part of this session, we will present six proven street design strategies to curb air pollution, which are also linked with multiple co-benefits, like reducing traffic injuries, curbing GHG emissions, and increasing livability and quality of life, among others:

1. Design streets that promote walking, cycling, and transit to reduce emissions
2. Separate emissions from dense or sensitive activity areas
3. Promote cleaner urban freight
4. Increase the lateral distance between vehicles and people
5. Add vegetation to channelize and absorb pollutants
6. Reduce road dust resuspension

As part of the presentation, we will share more specific data and findings based on a recent literature review on the built environment's impact on local air quality and specific case studies. Further, the presentation will outline specific techniques to measure air quality changes before, during, and after a change to the design of the street.

397 Private car travel is the dominant form of transport to work for health workers in western Sydney: results of a large travel survey across a health region

Dr Soumya Mazumdar PhD¹, Prof. Bin Jalaludin MBBS, PhD², David Surplice³, Dr Stephen Conaty BA, MBBS, MPH⁴, Kim Jobburn⁴, Linda Stanbury⁵, Helen Ryan⁶

¹James Cook University, Townsville, Queensland, Australia. ²UNSW, Sydney, NSW, Australia. ³Transport for NSW, Sydney, NSW, Australia. ⁴South Western Sydney Local Health District, Sydney, NSW, Australia. ⁵Nepean Blue Mountains Local Health District, Sydney, NSW, Australia. ⁶Western Sydney Local Health District, Sydney, NSW, Australia

Abstract

Private car travel is the dominant form of transport to work for health workers in western Sydney: results of a large travel survey across a health region

Soumya Mazumdar, Bin Jalaludin, David Surplice, Stephen Conaty, Kim Jobburn, Linda Stanbury, Helen Ryan, Josephine Chow

Abstract

Objective: To gain a baseline understanding of healthcare worker travel behaviour and factors influencing their travel choices in western Sydney.

Methods: A web-based travel survey was promoted to all the healthcare staff working across three local health districts in greater western Sydney in May 2020.

Results: Overall, 5,133 respondents completed the survey. The study findings show that most staff drive to work in their private vehicle (72.8%), with most parking on-site (61.7%). Only 16.9% travelled by public transport (12.8% by train; 4.1% by bus), and a tiny proportion (3.4%) got to work by walking or cycling. The most frequently stated barriers to walking were time and distance; the most frequently stated barriers to cycling were time and distance, safety, and lack of infrastructure. For public transport, barriers were time constraints, lack of public transport options, too many interchanges, and unreliability.

Conclusions: Western Sydney is a geographically large, diverse area characterised by urban sprawl with a population of approximately 2.7 million. The survey was one of the first examples of joint working between western Sydney local health organisations under the Greater Western Sydney partnership. Transport to work is a key issue for staff health and amenity. The

project has clarified strategies to encourage a mode shift from driving to public transport and / or active travel for healthcare employees.

189 Co-producing and Co-creating Knowledge on Ambient Lighting, Air and Noise Pollution, Gendered Accessibility and Transport for an Equitable Healthy Dhaka City

Sabrina Mustabin Jaigirdar¹, Syeda Tahmina Ahmed¹, Khadiza Tul Kobra Nahin¹, Riaz Hossain Khan¹, Frans Berkhout², Zahidul Quayyum¹

¹BRAC James P Grant School of Public Health, BRAC University, Dhaka, Bangladesh. ²King's College London, London, United Kingdom

Abstract

Co-production and co-creation of knowledge in designing healthcare interventions and programmes can lead to more inclusive, equitable, and sustainable healthcare policy reforms. In this regard, Pathways to Equitable Healthy Cities Programme in Dhaka, Bangladesh, held a three-day series of knowledge co-production workshops on Ambient Lighting, Air and Noise Pollution and Gendered Accessibility and Transport from the 27th to the 29th of September 2022. The workshops aimed to jointly develop an action plan for co-producing knowledge on these emergent public health concerns, create and support existing links across institutions, and identify and develop concrete opportunities for future scenarios. Following the building blocks of co-production by AMMA 2050, the workshop method included live polling using a web-based response system called Poll Everywhere to build a common ground for all, group-wise structured brainstorming sessions to co-explore the need and co-develop solutions, and plenary discussions and feedback sessions for co-delivering and evaluating the potential solutions and recommendations. The workshops engaged stakeholders, including sixty-seven academics, forty-one policymakers and implementors, seven activists, and two media professionals. Stakeholder engagement and debate led to solutions for mass education and stronger monitoring of urban etiquette. Holistic approaches should be adopted, behavioural change is required, and overcoming implementation struggles is essential. Insufficient urban data impedes informed decisions, and enforcement is crucial for positive change. Coordinated efforts, innovation, and including professionals, policymakers, and the public are essential in designing interventions and solving the issues rampant in urban cities. When developing evidence, stakeholders suggested focusing on impact evaluation and using a gender perspective in research. Although getting the participants to attend the workshop was challenging, the participants who attended were keen to engage, reflect, learn, and create connections between and across topics. Another challenge of conducting the workshop was moderating and engaging the stakeholders with a diverse audience with different expectations, especially when there were conflicts and differences of opinion. Although the workshops were limited by the perspectives and priorities of the academics and social partners engaged, the outcomes of the workshops, combined with the research study, are expected to benefit other practitioners and researchers involved in developing interventions in these areas.

517 Can Marriage between Public Transit and Fresh Produce Help Combat the “Food Apartheid”? A Socioecological Model of the MARTA Market in Atlanta

Ph.D. Candidate Yilun Zha

Georgia Institute of Technology, Atlanta, GA, USA

Abstract

Disparities in access to healthy food have had a significant impact on people's health. The lack of accessible fresh food and the prevalence of fast-food outlets reflect a clear socio-economic pattern, known as the phenomenon of “food apartheid” (Washington, 2018). However, current solutions to address food access often focus solely on the undifferentiated presence of fresh food, while disregarding other social and physical barriers. The MARTA Market [1] stands out as one of the few

exceptions, as it recognizes that mobility constraints are a more comprehensive concern than the mere presence, particularly for economically disadvantaged individuals residing in historically underserved neighborhoods.

To test this hypothesis, this study utilizes a socio-ecological model to conceptualize impacts of the multi-level intervention that combines public transit and fresh produce on food-related behaviors. We employ a natural experiment by selecting neighborhoods within the walking distance to seven MARTA Market stations as the treatment group, and their adjacent neighborhoods as the control group. By using anonymous mobile phone tracking data, we assess temporal changes in food-related behaviors in selected neighborhoods during two distinct time periods - three months prior to the establishment of the market and during the market season. Additionally, through the application of spatial regression models, we identify potential associations between food behaviors and the interaction between transit and food, thereby validating the multi-level interactive impact suggested by the conceptual model. The positive results indicate that the combination of mobility options and fresh food source is more effective than the presence of either treatment alone.

Implications of this study can be two-fold. Firstly, it proposes and aims to validate the socioecological model of food access, which expands the scope of existing frameworks in order to better capture the multi-level nature of food behavior determinants. Secondly, it provides empirical evidence regarding the effectiveness of current solutions. For planners, public policy analysts, and local officials, this study offers guidance for future practices in combating food apartheid.

[1] MARTA is the mass transit serving the greater Atlanta metro area. In 2023, MARTA hosts seasonal farmers markets at six stations in areas lacking reliable access to healthy food.

Breakout Session 3: Voices and Challenges of Marginalized and Vulnerable Groups in Urban Informal Settlements in Nairobi, Kenya: Building on a spectrum of community-based participatory research (CBPR) approaches

10:45 - 11:45 Tuesday, 7th November, 2023

Location Sweet Auburn

Presentation type Panel

319 Voices and Challenges of Marginalized and Vulnerable Groups in urban informal settlements in Nairobi, Kenya: Building on a spectrum of community-based participatory research (CBPR) approaches

Dr Caroline KABARIA¹, Robinson Karuga², Ivy Chumo¹, Prof Blessing Mberu^{1,3}

¹African Population & Health Research Center, Nairobi, Kenya. ²LVCT Health, Nairobi, Kenya. ³Department of Demography and Population Studies, University of Witwatersrand,, Johannesburg, South Africa

Abstract

Background: Slum growth seems to be an inevitability for sub-Saharan Africa's rapidly growing cities, and poor health outcomes among slum dwellers will increasingly influence overall urban and national health indicators. Understanding and responding to fluid and intersecting marginalities and vulnerabilities within growing urban slums is particularly critical to achieving inclusive urbanization, where no one is left behind, a theme central to the Sustainable Development Goals (SDG11). The dearth of evidence as to what works for slum communities demands a sharper focus on systems that can -and should- generate health and improve wellbeing.

This session aims to discuss social and economic disparities facing urban populations in African cities and the impact on their health and wellbeing. Presenters will share research findings on intersecting marginalities and vulnerabilities among the urban poor in rapidly urbanizing cities in Africa.

Objectives (1) To present findings of case studies assessing vulnerabilities and marginalization within slums in Kenya (2) To share lessons on the value of a spectrum of community-based participatory research approaches for understanding the health and well-being needs of poor urban communities (3) To contribute to knowledge on how to stimulate collaborative action with slum residents to ensure equitable environments, supporting the health and wellbeing of all residents.

Presentations: (1) Introduction: (2) Mapping Social and Governance Terrain in Nairobi Informal settlements (3) Complementarity of formal and informal actors and their networks in support of vulnerable populations in informal settlements: Governance diaries approach (4) A Photovoice Case Study on vulnerability and marginalisation of children heading households (5) Participatory mapping – case study of slum mapping in Nairobi

Breakout Session 4: Combating disparities and driving health equity in urban informal settlements across Bangladesh, India, Kenya and Sierra Leone: Intersectional analyses from the ARISE consortium

10:45 - 11:45 Tuesday, 7th November, 2023

Location Buckhead

Presentation type Panel

229 Combating disparities and driving health equity in urban informal settlements across Bangladesh, India, Kenya and Sierra Leone: Intersectional analyses from the ARISE consortium

Abu Conteh^{1,2}, Partho Mukherjee³, Inviolata Njeri Njoroge⁴, Samuel Saidu⁵, Farha Musharrat Noor⁶, Sohrab Hossen⁶, Inayat Singh Kakar³, Surekha Garimella³, Rosie Steege², Sally Theobald², Kate Hawkins⁷, Helen Elsey⁸, Laura Dean²

¹SLURC, Freetown, Sierra Leone. ²Liverpool School of Tropical Medicine, Liverpool, United Kingdom. ³The George Institute, New Delhi, India. ⁴LVCT Health, Nairobi, Kenya. ⁵College of Medicine and Allied Health Sciences, University of Sierra Leone, Freetown, Sierra Leone. ⁶BRAC James P Grant School of Public Health, Dhaka, Bangladesh. ⁷Pamoja Communications, Brighton, United Kingdom. ⁸University of York, York, United Kingdom

Abstract

Informal settlements are widespread in cities globally, housing millions of people. The residents of these spaces face multiple challenges to their health and wellbeing. The ARISE hub seeks to understand and address linkages between urban informalities and health and well-being outcomes for those living in urban informal settlements. Central to this, is applying intersectionality theory to understand how power relations (due to gender, age, disability, chronic disease) shape vulnerability to ill health. Intersectionality theory is also essential in recognising individual and community capabilities and supporting the generation of social movements to demand the right to health and build more equitable, responsive health systems.

This panel will convene speakers with a breadth of knowledge to reflect on how interconnected power dynamics shape experiences of structural, symbolic and everyday violence and health seeking practices. Drawing on ARISE's research conducted in partnership with residents of informal settlements across Bangladesh, India, Kenya, and Sierra Leone, we will highlight priorities for funders, governance actors and policy makers to promote health equity in these settings. We will introduce the ARISE equity analysis framework and illustrate how power differences contribute to, and shape, ill-health and wellbeing in urban informal settlements, through the following powerful, rapid presentations:

- An Intra-categorical exploration of health and wellbeing in Bangladesh, India, Sierra Leone and Kenya. (Partho Mukherjee)
- Conceptualising Disability and Informality: Adapting a Human Development Model of Disability, Health and Wellbeing in Low- and Middle-Income Countries' informal settlements (Inviolata Njoroge)
- Young People's Health and Wellbeing urban informal settlements: Co-produced research with young people in Sierra Leone (Samuel Saidu)
- An intersectional gender analysis of factors influencing health care access among the women living in informal urban settlement in Bangladesh (Farha Musharrat Noor, Md. Sohrab Hossen)
- Intersectional and gendered impact on health and wellbeing through opportunities for collectivisation among waste workers in India (Inayat Singh Kakar).
- Health as a Daily Crisis: Chronic disease and gender as points of exacerbation in urban informal settlements (Abu Conteh)

Chair, Surekha Garimella (TGI, India), will then invite participatory discussion and reflection with the audience.

Afterwards, we will write up a blog to feature on our website.

Breakout Session 5: Cities & Health Special Issue Launch: The Practice of Urban Health Equity

10:45 - 11:45 Tuesday, 7th November, 2023

Location Highlands

Presentation type Panel

87 Cities & Health Special Issue Launch: The Practice of Urban Health Equity

Prof. Jason Corburn Professor¹, Marcus Grant Editor², Dr. Blessing Mberu³, Smruti Jukur⁴, Jorge Perez-Jaramillio⁵

¹University of California, Berkeley, Berkeley, CA, USA. ²Cities & Health, Bristol, United Kingdom. ³APHRC, Nairobi, Kenya. ⁴Society for the Promotion of Area Resource Centre (SPARC), Mumbai, India. ⁵Medellin, Medellin, Colombia

Abstract

This panel will launch the Cities & Health journal Special Issue, co-sponsored by ISUH, "The practice and delivery of health and equity for neighbourhoods and local environments." Paper copies of the journal will be distributed and the editorial team and select authors will discuss their papers. The conversation will be focused on insights from practice for urban health equity. We will also discuss how the ISUH and the journal Cities & Health can build their collaboration to ensure findings from practitioners, including non-conventional findings such as spatial plans, participatory workshops, photo stories and others, are shared with researchers and decision-makers working toward urban health equity.

Breakout Session 6: Food Systems Approaches to Promoting Urban Health

12:00 - 13:00 Tuesday, 7th November, 2023

Location Kirkwood

Presentation type Panel

534 Food Systems Approaches to Promoting Urban Health

Amy Webb Girard¹, Tammy Reasoner², Joan Wilson², Leslie Marshburn³, Aleta Mclean⁴, Sarah Moore⁵, Whitney Barr⁶

¹Emory University Rollins School of Public Health, Atlanta, GA, USA. ²Emory Urban Health Initiative, Atlanta, GA, USA. ³Grady Memorial Hospital. ⁴Open Hand Atlanta, Atlanta, GA, USA. ⁵Wholesome Wave GA, Atlanta, GA, USA. ⁶City of Atlanta Mayor's Office of Sustainability and Resilience Urban Agriculture & Food Systems Team, Atlanta, GA, USA

Abstract

Atlanta consistently ranks as one of the most inequitable cities in America. This inequity reveals itself in the substantial health disparities that persist across race and ethnic lines. Food insecurity is a significant contributor to health disparities in Atlanta communities. The rate of food insecurity among Black and Indigenous People of Color living in Atlanta is more than double that of whites. Panelists from health systems, government, and local community-based organizations will discuss their short and long-term strategies to address urban health disparities through food systems. They will share their successes, challenges and approaches for success in evolving urban contexts.

Breakout Session 7: Leading the Charge: Effective Messaging and Communication Strategies for Health Professionals on Climate Change

12:00 - 13:00 Tuesday, 7th November, 2023

Location Centennial

Presentation type Workshop

67 Leading the Charge: Effective Messaging and Communication Strategies for Health Professionals on Climate Change

Diamond Spratling MPH^{1,2}, Rebecca Tamiru³

¹Climate Advocacy Lab, Atlanta, GA, USA. ²Girl Plus Environment, Atlanta, GA, USA. ³Climate Advocacy Lab, San Francisco, CA, USA

Abstract

Climate change has significant impacts on health outcomes, and health professionals are uniquely positioned to leverage their voice as trusted messengers to engage their colleagues, patients, and communities to take action and shift the public conversation on climate and health. The challenge remains— how do we communicate on climate in a way that does not leave people despairing, but rather galvanized to take the action necessary to meaningfully address it? This workshop will provide health professionals the necessary skills and tactics— distilled from field experiments, evidence-based insights in social science and learnings from across the climate community— to compellingly discuss climate change to motivate the public and their colleagues to take action.

The workshop will briefly begin by highlighting the key impacts of climate change on health outcomes and the role of health professionals in addressing these challenges. It will explore the science and art of communication and provide health professionals with the strategies essential for engaging health professionals and their communities to take action on climate. The workshop will cover effective message framing, storytelling techniques, tailoring your message to your audience, strategies to build efficacy, leveraging social norms, and other insights and recommendations to support health professionals to effectively communicate for climate action.

During the workshop, participants will also have the opportunity to engage in interactive exercises and case studies to practice their skills and apply what they have learned. Specifically, there will be an opportunity for participants to craft their own climate story using Marshall Ganz' "Story of Self, Us, & Now". They will also have access to a range of resources and tools to support their messaging and communication efforts.

By the end of the workshop, participants will have gained critical skills and knowledge necessary to communicate effectively on climate and health, engage their colleagues and communities, and drive meaningful action. They will be better equipped to integrate climate change messaging into their practice, promote behavior change, and influence policy decisions at local and national levels. Overall, this workshop provides an excellent opportunity for health professionals to enhance their communication skills and become effective advocates for climate action.

Breakout Session 8: One Urban Health/Une seule santé urbaine

12:00 - 13:00 Tuesday, 7th November, 2023

Location Sweet Auburn

Presentation type Workshop

64 One Urban Health/Une seule santé urbaine

Professor Evelyn de Leeuw MSc MPH PhD^{1,2}, Professor Yan Kestens PhD³, Professor Cécile Aenishaenslin DVM MSc PhD⁴, Professor Sébastien Lord MArch MPlanning PhD⁵, Dr. Jinhee Kim PhD¹

¹UNSW, Sydney, NSW, Australia. ²Université de Montréal, Montréal, Québec, Canada. ³ESPUM Université de Montréal, Montréal, Québec, Canada. ⁴Faculté de médecine vétérinaire - Département de pathologie et microbiologie U de Montréal, Montréal, Québec, Canada. ⁵Faculté de l'aménagement - École d'urbanisme et d'architecture de paysage, Montréal, Québec, Canada

Abstract

The traditional view of 'One Health' posits a view of the world where animal, natural, ecosystemic and human health and disease are intricately intertwined. It has been pursued mostly by veterinarian epidemiologists and public health experts, and has been driven particularly by pathogenic concerns about (the vector control of) the interface between these domains.

With the declaration of a Public Health Emergency of International Concern by WHO for COVID-19, the One Health perspective has come into sharper and more acute focus. A range of global actors has sharpened and operationalised important views on the field, including the [Quadripartite \(UNEP, FAO, WHO and WOAHI\)](#) Plan of Action, and the Report of the European Monte Commission. They share a new concern that 'One Health' happens specifically in urban environments around the world. For pandemic preparedness, this is critical. However, the current 'One Urban Health' discourse still is mostly one that is deficit (i.e., disease and risk) based. We will demonstrate that a new, positively framed programme of work around '*One Urban Health/Une seule santé urbaine*' yields more responsive, resilient, sustainable and engaged options for the improvement of community and planetary health.

Conceptually, this perspective hinges on an eight-year investment in transdisciplinary work that forges Doxiadis' 'Science of Settlement' with Hill & Hupe's 'multi-level governance' conceptualisations. Such a perspective allows for a significant diversity of new urbanist ideas and interventions, combined with recent insights in urban nature and ecology and cutting edge health promotion and public health advances. Even legal innovation (e.g., on the legal status of natural features such as rivers or mountains, driven by Indigenous cosmologies and spirituality) is part of the strength of this programme.

In the workshop we will first present a number of brief 'pracademic' case studies of these perspectives. We will then demonstrate, in interaction with participants, that (theory-based) transdisciplinary engagement and development can create a coherent programme of work in partnership with animal and human communities and stakeholders. The - intermediate - outcome of this workshop is a broad agenda of action that we expect to be globally (North/South; decolonising; multispecies) relevant.

Breakout Session 9: Advancing U.S. Adoption of Innovative Strategies to Intersect Health and Equity with Climate Change Action

12:00 - 13:00 Tuesday, 7th November, 2023

Location Buckhead

Presentation type Panel

489 Advancing U.S. Adoption of Innovative Strategies to Intersect Health and Equity with Climate Change Action

Mr. Garin Bulger¹, Dr. Tisha Holmes², Mrs. Jeanne Herb¹, Dr. William Butler², Dr. Karen Lowrie¹

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Abstract

Historic structural racism, underinvestment in certain communities, and lack of representation of people of color in civic and decision-making processes are among the same root causes that drive health disparities, as well as limit the capacity of these populations to cope, respond, and recover from climate impacts. While research is ongoing about climate injustices, there is a growing body of inquiry on the promising approaches that systematically intersect community-based health equity outcomes with climate change action in ways that are sustainable, systemic, and transformative.

This proposed panel will discuss elements of a Robert Wood Johnson Foundation-sponsored research project which aims to collect, analyze, assimilate, frame, and communicate approaches outside of the U.S. that, in their design and implementation, fundamentally intersect public health and equity goals and outcomes with climate change efforts, and to assess the extent to which those approaches offer promising replicability in the U.S. These case studies were identified across a diversity of country and climate contexts and were assessed to employ innovative and authentic involvement of the populations and communities whose health are disproportionately affected by changing climate conditions in order to present multiple ways of knowing, customs and traditions, experiential practice and lived experiences in addressing climate and health equity issues.

Panelists will include research project leaders, advisors, and community leaders from select case studies. The discussion will offer a robust examination of the range of climate and health equity adaptation actions pursued, sources of funding, sustainability of actions, implementation barriers and challenges faced, and the potential for translating lessons to underserved communities in the US. Additionally, the panel will critically assess the process of conducting community-informed research to broaden cross-cultural opportunities for learning and practice to advance equitable climate action in non-extractive and collaborative ways. By disseminating knowledge about effective strategies overseas that offer promising replicability in the U.S., the panel aims to elevate shared learning outcomes to guide government policy, philanthropic funding, and academic engagement in community-led health equity and climate change actions.

Breakout Session 10: Equitable Vaccination in Urban Centers in Low- and Middle- Income Countries during COVID-19: Maintaining childhood immunization coverage while reaching priority populations with COVID vaccines

12:00 - 13:00 Tuesday, 7th November, 2023

Location Highlands

Presentation type Panel

356 Equitable Vaccination in Urban Centers in Low- and Middle- Income Countries during COVID-19: Maintaining childhood immunization coverage while reaching priority populations with COVID vaccines

Dr Ibrahim Dadari MD, MIHMEP, DrPH, CPH, FRSM¹, Ms Rachel Belt², Dr Iqbal Hossain³, Ms Katharine Bagshaw⁴, Dr Olubunmi Akinlade⁵, Dr Subhash Chandir MBBS, MPH, PhD⁶

¹UNICEF, New York, New York, USA. ²University of Oxford, New York, New York, USA. ³JSI, Arlington, Virginia, USA. ⁴USAID, Washington, DC, Washington, DC, USA. ⁵Lagos State Primary Health Care Board, Lagos, Lagos, Nigeria. ⁶Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, USA

Abstract

Maintaining the continuity of childhood immunization services in cities and large urban centers in low- and middle-income countries (LMICs) during a pandemic came with unique challenges. The COVID-19 pandemic, which saw a public health emergency of international concern (PHEIC) that lasted three years[1], plagued health systems with daunting response needs that overwhelmed health systems, globally. The impact of the pandemic in LMICs including service disruptions has been reported in countries with significant urbanization and large cities[2]. Lessons have been learned on the drivers of continuity or disruptions in childhood vaccination while delivering COVID-19 vaccines to eligible populations in cities or urban centers.

The panel discussion brings together experts working on improving immunization in urban areas and select country officials who worked to maintain the delivery of childhood immunization while delivering COVID-19 vaccines during the pandemic. The panelists will share and discuss examples and experiences from countries such as Pakistan, India, and Nigeria on the delivery of childhood vaccination in urban settings during the pandemic. The examples will illustrate the concurrent efforts taken to reach all vulnerable populations with the COVID-19 vaccine while ensuring children did not miss life-saving routine immunizations. Panelists from UNICEF and the University of Oxford will discuss the global guidance developed to ensure equity in immunization in urban environments and ways to scale up novel methods to research immunization coverage in informal settlements. Panelists from JSI will share country experiences of resuming urban RI systems for catching up on missed children (Zero dose and under-vaccinated) due to the COVID-19 pandemic and the use of different tracking tools for monitoring the progress. The panelist from USAID will highlight efforts to reclaim lost ground from the COVID-19 pandemic and align approaches to foster resilience and preparedness against future health threats, including in urban areas. The discussion will aim to summarize key steps and actions toward future preparedness and response with a view of maintaining childhood vaccination service continuity in urban settings.

Breakout Session 11: Healthcare II

15:00 - 16:15 Tuesday, 7th November, 2023

Location Kirkwood

Presentation type Oral

4 Understanding Health System Adaptation to Local Realities Through the Roles and Lived Experiences of Internally Migrating Informal Caregivers in Urban Nigeria

Dr Kudus Adebayo^{1,2}, Dr Mofeyisara Omobowale³

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Abstract

Informal caregivers have been dubbed “indispensable”, given their supportive roles to patients and how they mitigate the impact of staff shortages in under-resourced settings. However, we know little about how different categories of caregivers play this role and their lived experiences, especially in the context of hospitalisation. In addressing critical knowledge gap, we share findings from a tertiary hospital-based photovoice study conducted in a Nigerian city. Specifically, we examined the roles and lived experiences of internally migrating informal caregivers, a subpopulation of caregivers who travel far away from home to care for hospitalised patients while stationed in/around an urban health facility. The study, which relied on extensive field notes, observation, interviews (72) and photovoice data, revealed that: 1) while constrained to become temporarily domiciled in the hospital to support the care of hospitalised relatives, caregivers live in an “errand loop”, often step-in to provide informal but routinised care and mobilise resources; 2) issues related to WASH, movement and circulation in the hospital, living arrangement, payment system, waiting, safety and hazard, and coping/adaptation are crucial for understanding their lived experiences as captured in their photovoice account. The study calls attention to the crisis of abjectivity in health system adaptation and advances the fields of informal caregiving, migration health and critical health systems studies in urban Africa.

60 Negotiation for Healthcare by People Living in Informal Urban Settlements in Dhaka City: Strategies, Drivers and Barriers

Bachera Aktar PhD Student

BRAC James P Grant School of Public Health, BRAC University, Dhaka, Bangladesh. Liverpool School of Tropical Medicine, Liverpool, United Kingdom

Abstract

Introduction: Availability and access do not always ensure receiving healthcare services, especially for the poor people living in cities’ informal settlements. They have to constantly negotiate with different actors to claim their health rights. More than seven million people live in more than 5000 informal settlements in Dhaka city, the capital of Bangladesh and one of the most crowded megacities in the world. In Bangladesh’s complex, fragmented and pluralistic urban health systems, the urban poor face difficulty in accessing affordable healthcare from formal health systems. This PhD research tried to understand how informal settlement dwellers negotiate to receive healthcare from formal health systems.

Methods: This abstract presents preliminary findings from an ethnographic method - Governance Diaries. Sixteen purposively selected families from two informal urban settlements of Dhaka city were interviewed twice/thrice at two to three weeks intervals between February and May 2023. The participating families represented marginalized groups, community leaders and NGO workers. Multisystemic Resilience in Social-Ecological Systems theory guided the thematic analysis.

Findings: The findings revealed different strategies research participants applied to negotiate with different actors at different levels and settings for receiving healthcare. Most of the families reported that in public hospitals, they had to negotiate with hospital administrations to get admission and hospital beds, with doctors and nurses to get treatment, and most often, service providers demanded money for providing services. In private hospitals, the negotiation happened by agreeing to treatment costs in the name of a “contract for a service package” before the treatment started. Service recipients usually did not pay the total amount at once and made the last payment after the completion of the treatment – as a negotiation strategy to ensure proper treatment. Negotiation skills depend on the socioeconomic background of the families, access to information, political and institutional affiliations, and social networks.

Conclusion: Poor people living in informal urban settlements apply different strategies to negotiate with service providers to receive health services. Negotiation skills of poor people can be developed by informing them of health rights and formal health systems and providing leadership training.

83 Health seeking behaviour of urban slum dwellers of Bhubaneswar city

Dr Smarajit Chakraborty

Population Foundation of India, Delhi, Delhi, India

Abstract

Health seeking behaviour of urban slum dwellers is complex and is one of the major determinants to improve the coverage and quality of urban health program. The study encompasses an enhanced understanding of the health seeking behaviour of the slum dwellers to make the health care providers, program manager and policy makers able to develop strategy to increase demand for health care services. The study was conducted in Bhubaneswar city, India. 22 focus group discussions conducted in authorised and unauthorised slums in the city, detailed house hold survey conducted in 503 families which is 10% of the total house hold of city and 10 key informant’s interviews revealed that unavailability of health facilities in the vicinity of slums, inadequacy of medicine and doctors, cost of transportation, unfriendly behaviour of the facility staffs and lack of knowledge on existing health services are few major reasons for poor health seeking behaviour. Proper mapping and relocation of the existing health facilities, detailed facility assessment, IEC/BCC, community engagement in planning & monitoring of health services, establishment of a grievance redress mechanism are major recommendations of the study

Keywords: Urban slum, health behaviour, urban poor

268 GIS-Enabled Area and Population Mapping: Identifying Opportunities for Strengthening Immunization Coverage and Outreach in Urban Patna, Bihar, India

Vatsal Dhaka¹, Dr NK Sinha², Dr Gunjan Taneja³, Dr Mahesh Aggarwal⁴, Dr Suresh Dalpath¹, Harkabir Jandu⁴, Vama Shah⁴, Manish Ratna¹, Sukhada Bakare⁴, Arushi Sharma¹, Devak Namdhari⁴

¹Clinton health access initiative, Patna, Bihar, India. ²Health department, Government of Bihar, Patna, Bihar, India. ³Bill and Melinda Gates Foundation, Delhi, India. ⁴Clinton health access initiative, Delhi, India

Abstract

Rapid urbanization in cities poses significant challenges for ensuring equitable access to basic health services for growing beneficiary cohorts. This abstract presents a novel urban health initiative that utilizes a GIS-enabled approach for addressing low childhood immunization coverage in an urban catchment area in Patna in Bihar (India). The initiative led by the Government of Bihar and supported by Clinton Health Access Initiative (CHAI) with assistance from Suvita, UNICEF and WHO, leveraged the network of community mobilizers called Anganwadi Workers (AWW) to conduct a digital survey of beneficiaries. The comprehensive geospatial beneficiary mapping and data analysis exercise helped assess the status of immunization

coverage among under-5 children for planning for improved immunization delivery action and identify areas not currently covered by health workers for outreach services in a routine manner.

Conducted in an urban ward of Patna, the initiative aimed at establishing proof of concept and surfacing learnings. 10 AWWs did house-to-house surveys in their designated catchment areas to digitally record information on ~3000 households and their ~16,000 residents including ~1,028 children aged 0-5 years. The exercise highlighted shortfalls around access to immunization services, deviation from coverage reported in administrative dataset, and boundaries and location of potentially missed areas in the ward where no AWW currently mobilizes for immunization services or other programs. The exercise entailed deep diving into root causes and systemic issues resulting in shortfalls and formulating possible solutions such as reapportioning of geographical areas for outreach services, ensuring availability of vaccination cards with beneficiaries, improving beneficiary tracking mechanism for migrants especially amongst vulnerable subgroups, and improving of data recording and reporting mechanisms.

The outcomes of this initiative have implications beyond the urban immunization program. By deploying GIS-technology towards relevant urban health use-cases and strengthening urban health systems, the initiative holds promise for improving access to urban public health services. The solutions identified under this approach can enhance accuracy of beneficiary enumeration, improve data quality and its use, and strengthen overall healthcare service delivery while tackling migration and expanding formal and informal urban catchments.

533 Achieving Healthcare workforce diversity: Implementing pipeline programs within high schools serving minority communities

Stacie Schmidt, [Brittany Prince](#), Jasmine Herd, Barbara Biney, Tammy Reasoner, Charles Moore
Emory University, Atlanta, GA, USA

Abstract

There is currently inadequate representation of people of color in the United States Health Care System. In addition, health disparities exist in part due to the lack of representation in the healthcare field. Health Careers Collaborative (HCC) addresses inequalities in the health field by exposing High School Students from underserved, low SES minority areas to health topics and mentorship within the health professions.

The Health Career Collaborative (HCC) is a rewarding and innovative association between high school students and teaching partners in health and medicine, public health, and other allied health sources. The HCC is meant to advance the possibilities of further studies and careers in medicine and other allied health sciences for underrepresented, low-income high school students. The program centers on inspiration, cultivating a feeling of real potential, and awakening a sense of vision and purpose in students' educational journeys. It is an opportunity to build meaningful relationships between a cohort of high school students at an early stage in their development and a team of dedicated older students and health care professionals who are immersed in the practice of delivering medical care and health services.

HCC is staffed by physician faculty members from the Emory School of Medicine and the Emory Urban Health Initiative, who help shape the curriculum and facilitate the discussions around health care. The program relies on volunteers who are both healthcare practitioners and medical students from Emory School of Medicine, School of Nursing, and Rollins School of Public Health, as well as Registered Dietitians from Open Hand Atlanta.

Under the umbrella of the Emory Urban Health Initiative, medical students from Emory University School of Medicine implemented the Health Careers Academy program with Benjamin E. Mays High School. The student enrollment is 1,244; graduation rate is 78%; Black or African American students enrolled are 98%; 97% eligible for free lunch, 3% for reduced lunch. Currently, Mays High School ranks in the bottom 50% of all schools in Georgia for overall test scores, including math and reading proficiency.

524 Emory Urban Health Initiative addressing social determinants of health (SDOH) in metro Atlanta through various initiatives

Charles Moore MD, Brittany Prince MHA
Emory Urban Health Initiative, Atlanta, GA, USA

Abstract

Formed in 2011, the Emory Urban Health Initiative (UHI) uses a place-based approach to improving health outcomes (e.g. obesity, diabetes, hypertension, cardiovascular disease) and reducing health disparities for diverse, low-income and underserved populations in Metro Atlanta. Several programs to address these disparities are Tobacco Cessation, Violence Intervention Program, and Community Resource Hub.

Tobacco Use Prevention and Cessation provides Grady Hospital patients, employees, and Atlanta community members with information and advice about the dangers of smoking and vaping. The program utilizes Freshstart to help participants make successful quit attempts. The program is designed to help smokers quit by addressing behaviors, thoughts, and feelings of the smoker, as well as assisting in developing a plan to quit. Freshstart consists of four one-hour sessions designed around the stages of change when quitting smoking. The program has been successful in assisting employees and community members to quit use of tobacco products. Additionally, some employees and community health workers have learned to be cessation trainers for patients. Our program is provided in in-person and virtual formats in Georgia and Florida.

Community Resource Hub is a mechanism for community organizations to access volunteers to assist with their events. Volunteer activities range from data collection, provision of health services at community health fairs to voluntary labor to assist with set up or distribution of food products in the metropolitan Atlanta area. Post COVID, efforts expanded to include South Carolina and Alabama.

The violence intervention program aims to increase healing services for young people in the community affected by trauma by the development of hospital-based and community interventions for survivors of violence. Atlanta will have a guide to implementing strategies for well-being and programs that address healing from trauma and social determinants. The project expands community partnerships, increases opportunities for young people to connect to programs addressing the social determinants of health, such as food insecurity by increasing access to food and community gardening to promote well-being. Through a series of guides and convenings, participants benefit from a peer learning collaborative. These tools serve as a road map for reimaging and implementing health, well-being, and equity.

Breakout Session 12: Women's Health

15:00 - 16:15 Tuesday, 7th November, 2023

Locations Centennial

Presentation type Oral

523 Exploring the potential for Community Health Workers to enhance hypertension management among postpartum women of color with hypertensive disorders of pregnancy – A mixed methods study

Amy Webb Girard PhD, MSN

Emory Rollins School of Public Health, Atlanta, GA, USA

Abstract

Background: In the U.S, women of color carry a higher burden of Hypertensive Disorders of Pregnancy (HDP) and face increased cardiovascular and mortality risks. Community health workers (CHWs) educate patients and link them to care, but their usage in the postpartum period is understudied

Objectives: This mixed methods study aimed to characterize participants, assess change in blood pressure (BP) and describe the role, acceptability, and effectiveness of CHWs in a hypertension support demonstration project at an urban safety-net hospital in Atlanta, GA.

Methods: 30 postpartum women with HDP received personalized hypertension management, lifestyle support, and linkages to hospital and community services from trained CHWs. Demographics and medical history were extracted from Electronic Health Records (EHR) and a baseline survey captured data on socio-demographics and health behaviors. Change in BP from enrollment to 6-weeks follow-up was assessed using paired t-test. Semi-structured in-depth interviews were conducted with program leadership, 2 CHWs and 6 program participants (2 in Spanish, 4 in English) in March 2023 and analyzed using thematic analysis

Results: Participants (n=30) were predominantly Black /African American (53%) or Hispanic / Latino (47%). 43% had Medicaid, 37% were uninsured, and 20% had private insurance. 32% experienced food insecurity in the 30 days prior to the survey. Systolic and diastolic BP declined significantly from enrollment to follow up (SBP: -8.03 ± 15.34 mmHg ($p=0.0132$); DPB: -5.83 ± 8.93 mmHg ($p=0.0027$). The 6-weeks postpartum visit no-show rate was 28% compared to >50% for the hospital's general postpartum population. Participants described how tailored and consistent interactions with CHWs increased motivation to manage their blood pressure (BP), knowledge on the importance and techniques of measuring BP, and adherence to medication and management behaviors. Interviews highlighted the personal qualities and professional backgrounds (nursing and social work) of the CHWs which enabled them to be adaptive, compassionate, and effectively build trust with participants

Conclusions: These preliminary findings suggest CHW programs are a feasible and potentially effective option to support postpartum patients of color with HDP. We advocate for randomized controlled trials that center the use of CHWs, self monitoring of BP, and lifestyle management of HDP in minority populations.

463 Poverty, COVID, Lone Mothers and Public Health: Intersections of Risk

Dr Lea Caragata PhD¹, Ms Zeynya Alemayehu², Ms Viveca Ellis²

¹University of British Columbia, Vancouver, BC, Canada. ²Centre for Family Equity, Vancouver, BC, Canada

Abstract

The Covid 19 pandemic had wide ranging impacts and changed our daily lives. We know too that the health-related impacts were not equally and equitably distributed. This paper reports on how Covid 19 affected low-income lone mothers across the province of British Columbia across all aspects of their lives including their health and that of their children.

Utilizing survey, focus group and individual interview data, we examined lone mothers' experiences of precarious work, managing child care amidst school and daycare closures and the overwhelming stresses of financial insecurity that created new health problems and exacerbated those that were pre-existing. Many of the digital health innovations that were enabled for those with privilege including virtual access to health care providers were unavailable to those with low incomes.

While much attention has been paid to the significant society-wide mental health challenges associated with the pandemic, inadequate attention has been given to the impacts of social isolation for low income, lone mother-led families. Research participants reported lacking the resources to ameliorate, in even modest ways, illness, overwork, family stress, poverty and the debilitating worry and anxiety deriving both from trying to keep their families safe and healthy while also trying to earn a living sufficient to feed their children.

These analyses point to systemic issues in our health systems the addressing of which must be attended to now, in advance of another global health crisis.

500 SHE Works! A multi-modal, community-based participatory approach to reducing substance abuse and sexual risk in young adult African American women.

Shani Harris Ph.D.

Spelman College, Atlanta, Georgia, USA

Abstract

The Student Health Empowerment (SHE) Program was an evidence-based healthy living intervention targeting African-American women (18-24) at an all women's liberal arts college in Atlanta, GA. The program aimed to reduce substance abuse and sexual risk-taking while promoting emotional and physical wellness in young adult women. The program was developed collaboratively with a local community-based organization using principles of Community-Based Participatory Research. Both community stakeholders, students, and other young adults participated in each step of program development and execution.

The SHE program used a multi-modal approach that incorporated the delivery direct and indirect intervention strategies. The direct method was the implementation of culturally-tailored, evidence-based substance use and sexual risk interventions. This involved in-person courses led by trained health educators that delivered evidence-based programs over multiple sessions. Indirect strategies included on-campus events, branded social media messages, and a branded website that disseminated program goals, health messages, and information about the in-person sessions.

Five-hundred forty women African-American women (n=540) completed the SHE intervention, with a 91% completion rate. Pre- and post-test results revealed that participants reported significantly less risky sexual attitudes, increase knowledge of local health services, increased knowledge of substance abuse risk, and reduced anxiety.

At the program's close there were approximately 2000 visits to the SHE website by 600 unique visitors, 4592 page views on the SHE Facebook page, and 8509 engagements/impressions on Twitter and Instagram.

The SHE Program is a successful example of effectively reaching young adult urban women, engaging them in activities that increase their health knowledge and improve health attitudes. While the program was large in scope and scale, elements can easily be adapted and disseminated to young adults in urban areas to improve sexual and mental health outcomes.

436 Preterm births and social inequalities across Latin American cities. Descriptive results.

Dr Serena Perner¹, Dr Andrés Trotta¹, Dr Marcio Alazraqui¹, Dr Goro Yamada², MS Huda Bashir³, Dr Amélia Augusta de Lima Friche⁴, Dr Ariela Braverman², Dr Ana Ortigoza⁵, Dr Ana Diez Roux²

¹Instituto de Salud Colectiva - Universidad Nacional de Lanús, Remedios de Escalada, Buenos Aires, Argentina. ²Drexel University, Philadelphia, USA. ³Michigan University, Ann Arbor, USA. ⁴Federal University of Minas Gerais,, Belo Horizonte, Brazil. ⁵PAHO, Washington DC, USA

Abstract

Background.

Prematurity is the main cause of perinatal morbi-mortality, and these are more severe and frequent the shorter the gestation period is. In most countries preterm birth rates had increased since the beginning of the 20th century. Cities provide numerous opportunities for health improvement, but the unplanned urbanization in Latin American has an impact on the residential segregation within cities, which impacts spatial inequalities in health.

Aim.

To examine changes over time in the proportion of preterm and late preterm births in large Latin American cities (>100K residents) from Argentina, Brazil, Chile, and Mexico, and its relationship with socioeconomic characteristics.

Methods.

We used individual level data from vital statistics for years 2010–2019 (gestational age and mother's education), compiled by the SALURBAL project. For the defined outcomes, preterm (below 37 weeks) and late preterm (between 34 and 36 weeks) births, we analyzed the change over time and the association with socioeconomic characteristics of the mothers (educational attainment).

Results.

A total of 50,925,373 live births were studied over a 10-year period. Overall, the proportion of preterm births was 9.2% (between-city range 13.4%) and 6.8% of late preterm births (between-city range 9.7%). The proportion of preterm and late preterm births was higher among women with lower educational attainment than among those with middle and higher. When analyzing birth frequency distribution by gestation age, in Argentina, Chile, and Mexico the peak of the distribution shifted from 40 weeks in 2010 to 39 weeks in 2019. Both in 2010 and 2019 the most frequent gestational age was lower in women with higher education compared to women with lower education: 38 vs 39 weeks in Chile, and 39 vs 40 weeks in Argentina and Mexico; in Brazil the difference was only observed in 2010.

Discussion.

We found important changes and shifts over the last decade in the distribution of gestational age and marked differences according to the educational level of the mother. These observations, in addition to emerging evidence of increased morbidity the lower the gestational age, suggest the need for investigation and debate in the context of medical interventions in pregnancy and childbirth.

392 Return Home Safe: A Collaborative Program to Prevent Falls Among Older Adults by Addressing Housing as a Social Determinant of Health

Dana Parke MA¹, Stephanie Osterland MA², Britney Johnson MSW², Thomas Derkowski M.H.A., B.Sc., EMS I/C, EMT-P¹, Leonard Adams B.A, CC-P, NREMT-P¹, Lauren Gillette³, Tina Marzolf³

¹Henry Ford Health, Detroit, MI, USA. ²Habitat for Humanity Detroit, Detroit, MI, USA. ³Baldwin Society Supporting Older Adults, Birmingham, MI, USA

Abstract

Background: Each year in the United States 27.1% of adults age 65+ fall, resulting in medical costs of \$50 billion, and falls are expected to increase among the rapidly growing age 85+ population segment (America's Health Rankings 2020). Housing is an important social determinant of health and poor housing quality puts occupants at risk of falls.

Methods: The Return Home Safe Program is a partnership among Henry Ford Health (HFH), Habitat for Humanity Detroit (HFHD), and Baldwin Society Supporting Older Adults (BSSOA) which focuses on fall prevention among low-income older adults in the Detroit, Michigan area. HFH's Mobile Integrated Health team identifies patients at-risk for falls at home and inputs referrals into HFH's electronic medical record system. The referrals automatically send to HFHD who then performs patient-centered home safety repairs/modifications and makes referrals to BSSOA for short-term support of daily living activities with private duty aides. HFHD sends program data back to HFH via a closed-loop referral system, allowing for analysis of health outcomes.

Results: As of May 2023, 78 patients received home safety repairs. Main interventions included grab bars (290), motion lights (152), raised toilet seats (77), handrails (59), and non-slip flooring (52), costing an average \$740 USD per patient. Four patients received private duty aide services. Of patients served, 87.2% are people of color, two-thirds are women, 100% are low-income, and 55% are extremely low-income. Among 44 patients surveyed post-intervention, 39 (88%) reported no falls within the past 30 days; 2 of 5 patient falls occurred outside of their home. Ninety-five percent strongly agreed (30, 68%) or agreed (12, 27%) that this program reduced their fear of falling at home. Final analysis will evaluate evidence for reduction in falls, emergency department visits, hospital readmissions, and cost of care to quantify value.

Conclusions: Partnerships between health systems and community-based organizations can effectively promote healthy housing. This low-cost intervention is reducing falls and fear of falling and supporting aging in place. Increased and sustainable funding is needed to support more comprehensive home repairs (i.e. building ramps) to meet patient needs and improve health and housing equity.

271 Delivery of Health services to pregnant adolescents in informal urban settlements in Kenya: Perspectives in policy versus practice

Ms Linet Okoth Masters degree in Global Health¹, Dr. Rosie Steege PhD², Ms Anne Ngunjiri Masters¹, Professor Sally Theobald Professor³, Dr. Lilian Otiso Masters¹

¹Lvct health, Nairobi, Kenya. ²London school of hygiene and tropical medicine, London, United Kingdom. ³Liverpool school of tropical medicine, Liverpool, United Kingdom

Abstract

In Kenya, teenage pregnancy rates are at 18%, and have further increased due to the COVID-19 pandemic. Adolescent girls living in informal urban settlements are exposed to rapid socio-economic transitions and multiple intersecting health risks and may be particularly disadvantaged in accessing sexual reproductive health services. Understanding vulnerabilities and service-seeking behaviours from different perspectives is important to support the development and implementation of progressive

policies and services that meet adolescents' unique needs within urban informal settlements. This study explored policy makers, community health service providers and community's perceptions about access to, and delivery of, sexual reproductive health services for pregnant adolescents in one informal urban settlement in Nairobi. We employed qualitative methods with respondents throughout the health system, purposively sampled by gender and diversity of roles. We conducted focus group discussions with community members (n=2 female-only; n=2 male-only), key informant interviews with policymakers (n=8,) in depth interviews with traditional birth attendants (n=12), community health volunteers (n=11), nutritionist (n=1), social workers (n=2), clinical officers (n=2). Data was collected, transcribed and thematic analysis employed. Government policies and strategies on sexual and reproductive health for adolescents exist in Kenya and there are examples of innovative and inclusive practice within facilities. Key factors that support the provision of services of pregnant adolescents include devolved governance, and effective collaboration and partnerships, including with community health volunteers. However, policies too often evaporate within the devolved Kenyan context. Inadequate financing and medical supplies, human resource shortages and stigmatising attitudes from health providers and communities, mean that pregnant adolescent girls from informal urban settlements are missing critical and lifesaving services. The provision of quality, youth-friendly reproductive health services for this group requires policies and practice that seek to achieve reproductive justice through centring the needs and realities of pregnant adolescent girls, acknowledging the complex and intersecting social inequities they face.

Breakout Session 13: Building a Shared Impact Framework for Urban Health Public Private Partnerships: The Case of Cities Changing Diabetes

15:00 - 16:30 Tuesday, 7th November, 2023

Location Sweet Auburn

Presentation type Workshop

529 Building a Shared Impact Framework for Urban Health Public Private Partnerships: The Case of Cities Changing Diabetes

Thomas Rahbek

Novo Nordisk, Copenhagen, Denmark

Abstract

ICUH Workshop concept #1 – Building a shared impact framework for public private partnerships within urban health – the case of Cities Changing Diabetes

Brief description

In solving big societal issues such as chronic diseases, Public Private Partnerships (PPPs) are often highlighted for their potential to engage a broader range of stakeholders and extend or improve policies, programmes and services that might otherwise be underfunded/underprioritised. This is the case, for example, working at the local level to prevent chronic diseases like diabetes and obesity. Estimating the (shared-)value and impact of these PPPs can, however, be challenging. Cities Changing Diabetes (CCD) was established as a PPP almost 10 years ago by Steno Diabetes Center Copenhagen, Novo Nordisk and University College London, with a focus on urban diabetes. It has since expanded its network to work in almost 50 cities on health promotion and disease prevention. Various approaches have been tried to monitor and evaluate the impact of the programme in a holistic way – from global to local, from inputs to outcomes. With chronic diseases on the rise globally and rapid urbanisation, this PPP network provides an interesting case to discuss the challenge of evaluating the impact of large-scale collaborative urban health programmes.

In this workshop we will present the case of CCD and selected learnings as an outset for discussing the future role of city network PPPs and how to evaluate their impact. The discussion will focus on how to evaluate the global programmatic impact, but also on the local project/intervention level. We will cover aspects of partnership roles and impact opportunities and collectively propose a future direction for measuring and evaluating large scale urban health PPPs.

Breakout Session 14: Policy & Governance

15:00 - 16:15 Tuesday, 7th November, 2023

Location Buckhead

Presentation type Oral

358 The health impact assessment for sustainable development (HIA4SD) project: from research to policy change

Prof. Mirko Winkler

Swiss Tropical and Public Health Institute, Basel, Switzerland

Abstract

The development and operation of natural resource extraction projects (e.g. minerals, metals, oil and gas) often lead to in-migration and urbanization, thereby affecting public health, ecosystems and societies in producer regions. The health impact assessment for sustainable development (HIA4SD) project is a major multi-country research for development effort aiming to analyze the conditions under which impact assessments are an effective regulatory mechanism to engage the extractive industries – and any other large infrastructure development – in working towards healthy and equitable communities. In this paper, we summarize the findings generated through our concurrent triangulation study that specifically addresses the topics of (i) impact assessment governance and policy, (ii) determinants of health and (iii) associated health outcomes in extractive industry settings in sub-Saharan Africa. The research components of the project were complemented by a comprehensive stakeholder engagement process, which ultimately led to a policy dialogue at the national level in Burkina Faso, Ghana, Mozambique and Tanzania. The systematic and trans-disciplinary approach applied by the HIA4SD project has proven effective in triggering a policy dialogue on how the application of HIA as a regulatory mechanism can be strengthened to incorporate public health thinking – including the promotion of health equity – at the planning stage of any large infrastructure development project. With the HIA4SD project we hope to inspire other countries to work towards strengthening health, wellbeing and equity in impact assessment regulatory frameworks as a fundamental strategy to promote sustainable and equitable urban planning initiatives.

44 Urban violence and the city of the Global South: insights from Bogota and Rio de Janeiro

Dr Elis Borde

Federal University of Minas Gerais, Belo Horizonte, Brazil

Abstract

Background

Although there is an increasing recognition of the importance of addressing urban violence in Urban Health, research has focused on describing homicide rates across time and identifying, mostly individual-level risk factors. Urban Health scholarship has accordingly largely failed to locate urban violence in concrete historical and territorial contexts and critically engage with the persistently unequal geographical and social distribution of violence and the ways in which violence is productive in shaping urban space. Based on a comparative case study, a critical approach to urban violence is proposed.

Methods

The case studies of the neighborhoods “San Bernardo” in Bogota and “Maré” in Rio de Janeiro are based on a comprehensive literature review and fieldwork drawing on four focus group interviews and 46 individual semi-structured interviews with residents, specialists and community leaders.

Results

The case studies reveal that apart from pervading the everyday life of urban dwellers, urban violence imposes violent death and suffering which may not be measurable using common indicators, but eventually becomes “embodied”. The cases reflect the violence implied in permanent threats of eviction, “necropolitical” police/military interventions and a silent imposition of a “slow death” on infrastructure, the neighborhood and its residents, which “fracture” the lives of significant parts of the urban population and bring about health consequences that are rarely considered in relation to urban violence. Accordingly, the cases are about death and injury but also about the broader implications of urban violence and ways in which possibilities for dignified lives are systematically being withdrawn in the context of increasingly “fractured” cities of “actually existing” neoliberalism in the Global South.

Conclusions

Urban violence needs to be reframed, which implies to move beyond the description of death registries and the association of discrete risk factors to urban violence. In this regard, market-driven urban restructuring processes, urban polarization and segregation cannot merely be mentioned as context variables in Urban Health research on urban violence but should be part of transdisciplinary theory informed research that engage with the territorial (un)making of the cities and specifically address historical and territorial dimensions of urban violence.

178 An Analysis of Urban Health Policies in Bangladesh and Identifying Gaps between Policies and Practices

Ms Baby Naznin Senior Research Associate, Mr Swaksar Adhikary Research Assistant, Dr Zahidul Quayyum Professor
James P Grant School of Public Health, BRAC University, Dhaka, Bangladesh

Abstract

In Bangladesh, the rapidly increasing urban poor population faces various social and financial barriers to healthcare access. While urban health has been emphasized over the years in various plans, policies, and strategies, there has been little intensive effort at the national level to provide need-based and quality healthcare to the urban population. In this context, it is crucial to understand the complexity associated with health policy implementation and why implementation gaps remain a challenge. Our policy analysis aims to explore the past and current health policies and strategies of Bangladesh to understand how urban health with its special needs has been addressed, what are the current implementation challenges and how the gaps between policies and practices can be addressed. We followed the Walt and Gilson policy triangle framework focusing on four factors critical to understanding public policymaking: the actors, policy contents, contextual factors, and the processes. We used a multiple descriptive case study design, with complementary methods including document reviews and key informant interviews. We conducted a desk review of all health-related policies, plans, and strategies published from 1972 – 2021. Moreover, we conducted key informant interviews with high government officials who are/were involved in the policy formulation and implementation processes to understand the implementation gaps of urban health policies and to get their views on how political dynamics and power relations contribute to the gaps between policies and practices. We found that urban health was only recognized as a critical area in the late 90s. Nevertheless, efforts from the government remained highly inadequate, while those funded by international organizations and NGOs have been effective, but they were not sustainable. Moreover, though urban populations and their health needs are diverse, there is a lack of plans to address that diversity in health services. The analysis of KIs is ongoing, where we are trying to find out the gaps in policies and practices from policy formulation to plan implementation. This analysis will help us understand if past and current health-related policies are translated into tangible solutions to address prevailing poor health outcomes, health system issues, and underlying implementation challenges.

391 Sustainability and Equity in Urban Development (S&EUD): A Content Analysis of “Bright Spots” from the Accelerating City Equity (ACE) Project

Dr. Nishita Dsouza PhD^{1,2}, Ms. Anitha Devadason MPH¹, Ms. Araliya Senerat MPH^{1,3}, Ms. Patrin Watanatada¹, Dr. David Rojas-Rueda PhD⁴, Ms. Giselle Sebag MPH, LEED AP¹

¹International Society for Urban Health (ISUH), New York, NY, USA. ²Social Intervention Group, Columbia University School of Social Work, New York, NY, USA. ³Urban Health Collaborative, Dornsife School of Public Health, Drexel University, Philadelphia, PA, USA. ⁴Colorado School of Public Health, Colorado State University, Fort Collins, CO, USA

Abstract

Sustainable and equitable urban development (S&EUD) is vital to promote healthy lives and well-being for all ages. To ensure that cities are inclusive, safe, resilient, and sustainable (SDG 11) and ensure healthy lives and well-being for all ages (SDG 3), recognizing equity as core to sustainable development is critical. Despite the increasing focus on equity and sustainability, there is a significant gap in implementation science research on the process of integrating equity in sustainable urban development. The aim of this study was to identify and assess the elements of equity and sustainability in exemplary bright spots using the Accelerating City Equity (ACE) Project Framework, which identified five dimensions of equity (distributional, participatory, recognition, structural, and intergenerational), and the United Nations' 5 Pillars of Sustainable Development (people, planet, peace, prosperity, and partnerships). Thirty bright spots were identified across different regions and sectors, 14 of which touched on all five dimensions of equity, and 12 of which touched on all five pillars of sustainability. Of the dimensions of equity, distributional equity, or the fairer distribution of urban infrastructure or resources, was mentioned most often. Intergenerational equity, or supporting equity for future generations, was mentioned least often. Of the pillars of sustainability, the people pillar, or social sustainability, was mentioned most often. The profit pillar, or economic sustainability, was mentioned least often. The S&EUD elements identified within these bright spots are important lessons learned that future urban development case studies can use to apply actionable strategies to promote equity and sustainability throughout the developmental process. As identified in the bright spots, urban development initiatives that integrate components of equity and sustainability lead to significant improvements in the health and well-being of those in marginalized communities. Implementation science research, which is largely concentrated at the individual-level or in clinical settings, holds much promise for advancing innovative urban-level solutions for public health improvement.

512 Driving Collaboration and Knowledge Exchange: Insights from Leading the ACE Latin America Hub

Solimar Rocha¹, Mariana Gomes², Bárbara Santos³, Carlos Oroza⁴, Diana Rossi⁵, Eber Marzulo⁶, Elis Borde⁷, Juan David Villamarín⁸, Otavio Barros⁹, Paula Guevara¹⁰, Waleska Caiáffa^{1,7}

¹Belo Horizonte Observatory for Urban Health, Belo Horizonte, Minas Gerais, Brazil. ²The Nature Conservancy, São Paulo, São Paulo, Brazil. ³CUFA, Belo Horizonte, Brazil. ⁴Urban 95, Lima, Peru. ⁵Intercambios, Buenos Aires, Brazil. ⁶Federal University of Rio Grande do Sul, Porto Alegre, Brazil. ⁷Federal University of Minas Gerais, Belo Horizonte, Brazil. ⁸United Nations Development Program, Bogotá, Colombia. ⁹Vale Encantado Cooperative and Residents' Association, Rio de Janeiro, Brazil. ¹⁰Universidad de los Andes, Bogotá, Colombia

Abstract

The Accelerating City Equity project – ACE Project is a worldwide initiative focused on the exchange of learnings and knowledge on sustainable urban development practices equity-driven, referred as Bright Spots. Latin America (ACE Latam) is one of the six regional hubs created to facilitate data collection and knowledge sharing. Researchers from the Urban Health Observatory in Belo Horizonte (OSUBH) have been in charge of leading the regional hub along with the ACE Project team leader. The ACE Latam members come from various sectors including public management, non-governmental organizations, academia, and grassroots leaders – and from five Latin America countries. The Bright Spots were presented by each member during the seven online hub meetings that were held throughout 2022. ACE Latam bright spots reflect the historical inequities prevalent in LA region. Socioeconomic inequalities, particularly related to income, emerged as a common theme across the bright spots. Themes related to political underrepresented groups and diversities, such as gender and racial equity, childhood and youth

protagonism, public spaces, urban planning, governance, urban violence, physical activity, and sanitation were also noteworthy. A key common aspect was the focus on community involvement and participation, which proved essential for the ongoing success and sustainability of initiatives. In most Bright Spots, particularly those outside of academia and public management, there is a considerable need for the collection of empirical data. Cross-sectoral partnerships with local and national governments, international institutions, and the community itself are aspects of some Bright Spots that might benefit others. By the end of the year 2022, the ACE Latam hub members recognized their work in Bright Spots as directly related to urban health and equity, demonstrating the accomplishment of one of the aims of the ACE project: the consolidation of a powerful and organic network in the Latin American region. The ACE Latam experience proved to be very important to create cross-sector alliances to promote urban health and generate horizontal dialogues necessary to overcome the challenges that shape urban health across the continent.

Breakout Session 15: Local governments for health, health equity and wellbeing in the Americas

15:00 - 16:15 Tuesday, 7th November, 2023

Location Highlands

Presentation type Panel

528 Local governments for health, health equity and wellbeing in the Americas

Hyung-Tae Kim¹, Fernanda Lanzagorta Cerecer MD²

¹WHO, Geneva, Switzerland. ²PAHO/ WHO

Abstract

Discuss in a panel the actions that surge from local governments that promote health, health equity and wellbeing. Moderated by PAHO, the panel will include a representative from the Regional Movement on Healthy Municipalities, Cities and Communities, technical focal point from a highly urbanized city and a government representative working on addressing the environmental determinants of health.

Moderator: Dr Fernanda Lanzagorta, International Consultant on Health Promotion

Participants:

Fabio Medrano, Vice-president of the Executive Committee of Health Municipalities, Cities and Communities Movement

Breakout Session 16: Infrastructure and health: optimising connections for better society

15:00 - 16:15 Tuesday, 7th November, 2023

Location Inman Park

Presentation type Workshop

93 Infrastructure and health: optimising connections for better society

Dr Patrick Harris Ba Hons, MPH, PhD, Prof Evelyne De Leeuw Prof
UNSW, Sydney, NSW, Australia

Abstract

The 21st century, more than any before, is the Age of Infrastructure. Humanity strives to and achieves progress through infrastructure. Infrastructure provides the hardware, tools and services for a connected and functioning planet. Those connections are not just for humans but whole ecosystems. But the world faces challenges that require infrastructure to be bold in scope and ambition, dynamic and adaptive, and full of vision and aspiration. Ecological devastation, climate justice, health inequity, compounded by widespread popular distrust in politics and institutions, has cemented the need for infrastructures that cover all dynamics, human and environmental, between the planetary and nano-particle. Above all, the new era of the Anthropocene requires infrastructure that enables and progresses big connections for wellbeing.

To provide a scholarly response to these challenges, 2022 Oxford University Press launched a new journal, 'Infrastructure and Health: Big Connections for Wellbeing'. In its inaugural commentaries and editorials (rigorously peer reviewed) the journal sets out the ambitious agenda that builds on, and moves beyond urban and planetary health. This interactive workshop will be a roundtable event where invited authors outline their arguments and open up for discussion and debate, moderated by the organisers.

The workshop brings together interdisciplinary research, practice and perspectives from local to global, local activism to policy and diplomacy, from practices to institutions.

Each speaker will talk for 5-10 minutes, with a moderated discussion by the Journal's Editors.

Specific topics are:

- Introduction to infrastructure and health – laying down the connections
- The role of infrastructure in an era of crises - do we have the major infrastructure to cope with the looming climate, population and justice crises
- Housing and health – making the connections between housing and health, including the role of healthy housing in mitigating and adapting to climate change.
- Infrastructure, intersectorality and the climate emergency
- Transport systems and equity – shifting institutions to connect infrastructure and justice for health equity
- Pandemic treaty – environment meets infrastructure with lessons for future climate crises
- Introduction to infrastructure and health – laying down the opportunities and mechanisms for action and change

Breakout Session 17: Data

10:45 - 11:45 Wednesday, 8th November, 2023

Location Home Park

Presentation type Oral

183 The value of coproduction: Exploring the use of built environment and health data to investigate urban health inequity in an informal settlement in Cape Town, South Africa

Dr Amy Weimann MSocSci, PhD^{1,2}, Ms Noxolo Kabane³, Prof Nicki Tiffin^{4,5}, Mr Dare David Alli⁶, A/Prof Tolu Oni^{1,7}

¹Research Initiative for Cities Health and Equity (RICHE), Division of Public Health Medicine, School of Public Health and Family Medicine, University of Cape Town, Cape Town, South Africa. ²African Centre for Cities, University of Cape Town, Cape Town, South Africa. ³Eastern Cape Office of the Premier, Research and Policy Development, Eastern Cape Provincial Government, Bisho, South Africa. ⁴Health Impact Assessment, Department of Health, Western Cape Government, Cape Town, South Africa. ⁵South African National Bioinformatics Institute, University of the Western Cape, Bellville, South Africa. ⁶Informal Settlement Support, Department of Human Settlements, Western Cape Government, Cape Town, South Africa. ⁷Medical Research Council Epidemiology Unit, University of Cambridge, Cambridge, United Kingdom

Abstract

There is a crucial need to measure and monitor population health in cities that are experiencing rapid urban growth and development. However, for many resource-limited African countries, data collection is costly and available administrative health and urban data often lie across separate government sectors. Therefore, there is a need to explore the feasibility of integrating and analysing existing administrative health and human settlements (urban) data to i) explore what urban features and systems are most needed, ii) identify populations groups and key areas for intervention, iii) determine appropriate and effective interventions for the local context, and iv) monitor progress in achieving the desired health outcomes and impacts.

Our study utilised coproduction, through a transdisciplinary research approach, to explore the interoperability of existing administrative health and urban human settlements data for generating new urban health evidence for a selected intra-urban context in South Africa. Through this, our study sought to establish baseline assessments of the urban epidemiology of diarrhoeal disease and selected determinants of health in an informal settlement in Cape Town, prior to upgrading interventions.

Firstly, our findings demonstrate an approach to generating new cross-sector urban health data and knowledge relevant for healthy and sustainable urban decision-making. Secondly, our approach provides a foundation for identifying context-appropriate interventions, and for monitoring changes to health and environmental profile measurements in response to selected interventions. Thirdly, we unpack considerations of access as related to inequalities in the social determinants of health for the urban poor currently living in informal settlements. Finally, our findings contributed to identifying opportunities for improved collaboration between two government sectors (health and human settlements) for supporting the development of healthy and sustainable cities in resource-limited contexts. This research is relevant to cities globally exploring new strategies for intersectoral collaboration for health, and contributes new knowledge from a global South perspective for cities undergoing rapid urban, demographic and epidemiological transition, and grappling with significant urban informality and health inequities.

440 Social inequalities and COVID-19 mortality between neighborhoods of Bariloche city, Argentina.

Dr Serena Perner¹, Dr Andrés Trotta¹, Dr Usama Bilal², Dr Binod Acharya², Dr Harrison Quick², MD Natalia Pacífico¹, MD Romina Berazategui³, Dr Marcio Alazraqui¹, Dr Ana Diez Roux²

¹Instituto de Salud Colectiva - Universidad Nacional de Lanús, Remedios de Escalada, Buenos Aires, Argentina. ²Drexel University, Philadelphia, USA. ³Hospital Zonal Bariloche, Bariloche, Rio Negro, Argentina

Abstract

Background. The COVID-19 pandemic had a major impact on urban areas but also revealed marked differences within and between cities. Studies assessing the influence of urban inequalities in COVID-19 mortality at a small area level have been documented in high-income countries but are not common in middle-income countries, especially in small and medium-sized cities.

Aim. To describe the spatial patterning of COVID-19 death rates in neighborhoods of the medium-sized city of Bariloche, Argentina, and to explore its relationship with the socioeconomic characteristics of neighborhoods.

Methods. We conducted an ecological study in Bariloche, Argentina. The outcome was counts of COVID-19 deaths between June 2020 and May 2022 obtained from the surveillance system and georeferenced to neighborhoods. We estimated crude- and age-adjusted death rates by neighborhoods using a Bayesian approach using Poisson regression that accounts for spatial-autocorrelation via Conditional Autoregressive (CAR) structure. We also analyzed associations of age-adjusted death rates with socioeconomic indicators.

Results. Median COVID-19 death rate across neighborhoods was 17.9 (10/90 percentile of 6.3/35.2) per 10,000 inhabitants. We found lower age-adjusted rates in the city core and western part of the city. The age-adjusted death rate in the most deprived areas was almost double than in the least deprived areas, with an education-related relative index of inequality (RII) of 2.14 (95% CI 1.55 to 2.96).

Conclusion. We found spatial heterogeneity and intraurban variability in age-adjusted COVID-19 death rates, with a clear social gradient. This highlights the importance of studying inequalities in health outcomes across small areas to inform place-based interventions.

103 Queering global places - diversities in networks and approaches

Professor Pippa Catterall¹, Professor Andrew Gorman-Murray², Professor Jason Prior³, Alice Vincent⁴, Charles (Chuck) Ormsby⁵, Rebecca Cadorin⁴, Edgar Liu⁶, Dr Esther Alloun⁶, Professor Arne Scheuermann⁷, Professor Evelyn de Leeuw^{8,9}

¹University of Westminster, London, United Kingdom. ²Western Sydney University, Western Sydney, NSW, Australia. ³University of Technology Sydney, Sydney, NSW, Australia. ⁴Arup, Sydney, NSW, Australia. ⁵Arup, Montreal, Quebec, Canada. ⁶UNSW, Sydney, NSW, Australia. ⁷Bern Applied University, Bern, Bern, Switzerland. ⁸ESPUM, Udm, Montreal, Quebec, Canada. ⁹CPHCE, UNSW, Sydney, NSW, Australia

Abstract

The health and wellbeing of people with queer identities (more commonly designated as LGBTIQ, LGBTQ2S+ or LGBTIAQ+) is increasingly becoming a spatially determined global health issue. This adds to a longer existing recognition of particular health care (access) needs of queer people. This workshop invites colleagues to engage with a growing and strengthening global research and practice agenda that represents a unique and powerful partnership between Arup (a multinational professional design and engineering services firm), universities, health services, and local governments.

In this workshop we will focus on two outcomes: (1) share our conceptual and practical efforts in mapping, interpreting, and developing inclusive design and policy approaches to queering public places; and (2) consult and invite (potential) partners on involvement and next steps in our global actions.

We draw on two reports and three current research programmes. ‘Queering Public Space’ resulted from collaboration between Arup and the University of Westminster (UK), while the ‘Queering Cities in Australia’ report is the results of a collaborative research project between Arup, Maridulu Budyari Gumal Healthy Urban Environments Collaboratory, Western Sydney University, the University of Technology Sydney and the University of New South Wales.

The three programmes look at larger community consultation and validation in New South Wales; on using AI and VR to test design and practices for queering public place in England; and on particular (spatially) defined environments (e.g., policy precincts, parks and heritage areas) in Switzerland.

Research across various countries has identified how public spaces can be dangerous and exclusionary for LGBTIAQ+ individuals, families and communities. Less work has focused on how to make public spaces safe, welcoming and inclusive, or to ‘usualise’ queerness in the use and design of public spaces. This is important for secure access to public spaces, including: 1. A sense of self-security in public spaces, 2. Safe access to social networks and interaction, 3. Safe access to employment and education opportunities, and 4. The use of open spaces (e.g. parks) for therapeutic and recreational purposes.

The growing multi-sectoral global partnership invites new friends to join.

109 Taxonomy of Informality: Methodology for Establishing Multi-dimension Global Informal Indicators to be Used on Crowd-sourced Database for Informal Community

Xinran Wang, Maitane Iruretagoyena, Dr. Luis Alonso Pastor, Dr. Kent Larson
Massachusetts Institute of Technology, Cambridge, Massachusetts, USA

Abstract

By 2050, the UN expects that 68% of the world's population will be living in urban areas and 90% of this urbanization is expected to take place in Africa, Latin America, and Asia (United Nations, 2018). Rapid urbanization leads to the growth of informal communities. The complexity and broad scope of assessing informality have led world organizations, such as UN-Habitat, to leave the data gathering and assessment task in the hands of local partners. However, local investigators often use a diverse and distinct (not normalized) set of methodologies and metrics, giving rise to unequal evaluations. As such, unified field research hampers comparisons between communities and makes it difficult to extrapolate successful strategies learned in a settlement to benefit other locations and communities. Measuring informality is a key step to evaluate these communities and implement policies or aids. Informality has been studied extensively, yet, most studies focus on only a few aspects and investigate at a local or community level. Criteria and standards are very different across studies and regions, making comparisons unfeasible. Based on the literature review and previous work made by the City Science group, MIT Media Lab, we propose a non-traditional comprehensive taxonomy of informality, containing three major aspects—Architecture, Populace, and Site—each described by a set of subcategories with sub-indicators. We quantify, update, and add to existing indicators to acknowledge the evolution of beliefs and global development and to echo the voice of informal community members.

141 Transport workforce risk and exposure to COVID-19 and other related respiratory pandemic diseases: Scoping review

Dr. Mohammed Owais Qureshi¹, Associate Professor Holly Seale¹, Dr. Abrar Chughtai¹, Dr. Edward Jegasothy², Professor Michael Quinlan¹, Dr. Patrick Harris¹

¹University of New South Wales, Sydney, NSW, Australia. ²University of Sydney, Sydney, NSW, Australia

Abstract

Background: During pandemics, transport workers may face increased occupational risk. However, there is limited research on the specific factors that contribute to this risk and effective risk reduction strategies. This study aimed to systematically review the current research on respiratory pandemic diseases among transport workers, identifying evidence-based recommendations for mitigating risks in the transport industry.

Method: We conducted a scoping review, searching English-language databases for peer-reviewed research articles. Our search yielded 12,540 research studies, with 39 articles included in the final review. We summarized and thematically categorized the results using coding.

Results: Out of 39 studies, the majority used quantitative methodologies (24). Spatial analysis showed uneven literature coverage across continents. The results indicated that transport workers were at an elevated risk of exposure due to crowded work environments, job demands, and inadequate protective equipment. Additionally, systemic and structural inequalities were identified among transport workers.

Conclusion: This study provides insights for policy and practice interventions that address the unique needs and challenges faced by workers in the industry, including how to promote social equity and justice during pandemics. There is a need for more qualitative and mixed-methods research approaches to obtain a more comprehensive understanding of the topic. More research is necessary in unconventional settings beyond the United States, Canada, the European Union, and the United Kingdom, given the worldwide susceptibility to respiratory infections and the crucial role that the global transportation sector plays in their transmission.

Breakout Session 18: Facilitating knowledge exchange in multi-country research: anti-colonial and participatory approaches

10:45 - 11:45 Wednesday, 8th November, 2023

Location Centennial

Presentation type Workshop

459 Facilitating knowledge exchange in multi-country research: anti-colonial and participatory approaches

Dr Helen Pineo¹, Dr María José Álvarez-Rivadulla², Dr Elis Borde³, Prof Waleska Caiaffa³, Dr Sergio Montero², Prof Olga Lucia Sarmiento², Dr Tisha Holmes⁴

¹University College London, London, United Kingdom. ²Universidad de los Andes, Bogotá, Colombia. ³Federal University of Minas Gerais Brazil, Belo Horizonte, Brazil. ⁴Florida State University, Tallahassee, FL, USA

Abstract

Research funders are increasingly aware of the shifting expectations for ethical multi-country research in response to decolonization processes and the need for transdisciplinarity. This workshop will consider how urban health researchers and their community-based partners can adopt anti-colonial research practices within the context of systems and institutions influenced by colonialism. Academic presenters will discuss their experiences working on multi-country projects where knowledge transfer from the global South to the North is expected. They will discuss attempts to avoid extractive practices and to provide meaning and value for partners and participants. Practice-based/community-based presenters will describe how changing existing power dynamics are key to anti-colonial, transdisciplinary and participatory research efforts.

We will facilitate small group discussions to reflect upon challenges and opportunities associated with new research and knowledge exchange methods that aim to redistribute power and disrupt existing knowledge hierarchies. Specifically, we will discuss experiences implementing innovative practices in progressing anti-colonial research, including: fair compensation for community-based partners and research participants, academic institutional barriers, non-hierarchical research governance structures, and co-production of research questions and study designs. We will produce a workshop report to share our findings with wider audiences, including academics and research funders.

Workshop objectives:

- Define decolonial and anti-colonial in the context of research and knowledge exchanges.
- Understand different manifestations of colonialism in global North and South settings (pertaining to urban health research) and the groups of people who are most marginalized as a result.
- Learn how research partnerships have applied anti-colonial practices and reflect upon their advantages and disadvantages.
- Feel equipped to embed anti-colonial practices into future research and knowledge exchange activities.

Breakout Session 19: Streets for Kids Reverse Periscope Workshop: Experiencing Streets from a Child's Perspective

10:45 - 11:45 Wednesday, 8th November, 2023

Location Sweet Auburn

Presentation type Workshop

453 Streets for Kids Reverse Periscope Workshop: Experiencing Streets from a Child's Perspective

Anna Siprikova¹, Paul Supawanich²

¹GDCI, Brooklyn, NY, USA. ²GDCI, Atlanta, GA, USA

Abstract

Join us for an engaging and interactive workshop on the revolutionary Streets for Kids Reverse Periscope. This do-it-yourself tool allows adults to experience streets from a child's height. This workshop will provide you with the knowledge and hands-on experience necessary to build and effectively use a Reverse Periscope, enabling you to see the world through the eyes of a child and transform your approach to street design.

Our workshop builds upon the recently released companion guide, "How Do Kids Experience Streets? The Reverse Periscope Companion Guide," developed by the GDCI's Streets for Kids program. This comprehensive guide offers step-by-step instructions for constructing a Reverse Periscope using simple materials such as mirrors, cardboard, tape, and a ruler. It also provides an interactive dimensions generator, downloadable Streets for Kids stickers, and a wrap, ensuring a seamless experience throughout the workshop.

During this hour-long workshop, our expert team will guide you through the process of building your Reverse Periscope, sharing insights on the importance of considering children's perspectives when designing streets.

You will have the opportunity to assemble your Reverse Periscope and take it on a "walkshop" where you can experience your local streets from a child's point of view. Through this immersive activity, you will discover how everyday street elements can become intriguing and playful while recognizing the potential dangers and challenges children face navigating urban environments.

Additionally, we will explore the educational applications of the Reverse Periscope, highlighting how it can foster empathy and awareness among future transportation planners and engineers.

Don't miss this unique opportunity to gain hands-on experience with the Streets for Kids Reverse Periscope and revolutionize your approach to street design. Join us and be part of the movement to create vibrant, inclusive, and child-friendly cities.

Note: Materials for building the Reverse Periscope will be provided during the workshop.

Breakout Session 20: Exploring the Interplay between Religious Beliefs and Gun-Related Issues: Implications for Laws, Reform, Ownership, and Violence

10:45 - 11:45 Wednesday, 8th November, 2023

Location Inman Park

Presentation type Panel

505 Exploring the Interplay between Religious Beliefs and Gun-Related Issues: Implications for Laws, Reform, Ownership, and Violence

Ms Sasha Crawlle Student, Dr Marilyn Davis Professor at Spelman College
Spelman College, Atlanta, GA, USA

Abstract

A study among undergraduate college students in four Southern Historically Black Colleges is going to be conducted to explore the relationship between religious beliefs and gun-related aspects such as laws, reform, ownership, and violence in the United States. Collaborating with professors from Spelman College, I will develop a survey to collect data from a minimum of 2000 willing participants, aiming to gain a comprehensive perspective on the subject. Using a correlational design, we will analyze the data to investigate the interplay between independent and dependent variables. Our study seeks to determine if a conclusive correlation exists between these variables, contributing valuable insights to the ongoing discourse on the topic. By focusing on the religious beliefs of college students, we aim to deepen our understanding of their perspectives and inform policymakers, educators, and community leaders in developing evidence-based strategies to address gun-related issues. Through this research, we strive to bridge knowledge gaps and contribute to the broader understanding of the complex dynamics between religion and gun-related beliefs.

Breakout Session 21: Achieving Impact for Communities & Cities: Sharing lessons learned from research-in-practice for equity and social justice

10:45 - 11:45 Wednesday, 8th November, 2023

Location Highlands

Presentation type Panel

80 Achieving Impact for Communities & Cities: Sharing lessons learned from research-in-practice for equity and social justice

Sarah Ruel-Bergeron RA¹, Emily Nix PhD²

¹ISUH, New York, NY, USA. ²University of Liverpool, Liverpool, United Kingdom

Abstract

Description:

In our urban health network many projects have created incredible impact in their communities, generating important take-aways around how to drive equity and social justice. These lessons learned are coveted by practitioners because they improve the capacity of each new project to generate even more success and impact. Our panelists will present learnings from a variety of their urban health work, sharing and discussing critical lessons for the audience to consider in their translation of research to impact. We will explore how programs and practices must be designed to have community impact that drives equity and social justice. Our panelists bring insights from diverse global locations and expertise across multiple sectors.

Panel co-moderators: Dr. Nathalie Roebbel, WHO and Sarah Ruel-Bergeron, RA

Panelists:

Alex Hart, RLA - Dirtworks, USA

Dr. Olga Lucia Sarmiento - SALURBAL, Latin America & Universidad de los Andes, Colombia

Dr. Blessing Mberu - African Population Health Research Center, Africa

Breakout Session 22: Herding cats or flying with the flock?: experiences of co-designing health systems interventions to improve health in complex urban environments

10:45 - 11:45 Wednesday, 8th November, 2023

Location Old 4th Ward

Presentation type Panel

243 Herding cats or flying with the flock?: experiences of co-designing health systems interventions to improve health in complex urban environments.

Dr Sushil Baral CHORUS lead researcher¹, Mr Deepak Joshi CHORUS senior researcher¹, Dr Chinyere Mbachu CHORUS senior researcher², Dr Lauren Wallace CHORUS Senior Researcher³, Deepa Barua CHORUS senior researcher⁴, Professor Rumana Huque CHORUS lead Bangladesh⁴, Professor Helen Elsey Research Director⁵, [Prof Zahidul Quayyum](#)⁶

¹HERD International, Kathmandu, Nepal. ²University of Nigeria, Enugu, Enugu, Nigeria. ³University of Ghana, Accra, Ghana. ⁴ARK Foundation, Dhaka, Bangladesh. ⁵University of York, York, West Yorkshire, United Kingdom. ⁶

Abstract

'Community-led responsive and effective urban health systems (CHORUS)' - brings together health researchers from Nepal, Nigeria, Ghana, Bangladesh and the UK to conduct research to strengthen urban health systems to meet the challenges facing rapidly growing cities. CHORUS works with many city actors to develop and test health system interventions to improve the health of the poorest urban residents. The co-design process built on needs assessments in each city, using a mix of household and facility surveys, qualitative and participatory methods. The aim of our panel is to share lessons from careful engagements with multiple stakeholders over a two year period to build collaborations to strengthen health system interventions for improved health in cities.

During the first half of our session we will use a combination of presentations and videos to explain and reflect on the co-design process for the following health systems adaptations:

1. Linking informal and formal providers for improved primary care service coverage and quality in informal settlements in Enugu, Nigeria: Co-design brought together informal providers (such as patent-medicine vendors, traditional birth attendants and bone-setters), community leaders, government primary care with multiple city and state decision-makers.
2. Improving primary care and prevention of diabetes and hypertension across government and NGOs in Dhaka, Bangladesh: the co-design process worked across two ministries and city corporations as well as technical teams implementing app-based reporting systems.
3. Adapting a community health programme designed for rural areas, to meet the needs of urban poor communities in Accra, Ghana.
4. Improving access, accountability and quality of primary care in Pokhara, Nepal by increasing the role of communities in shaping health services and sharing health data between providers and local government.

Presenters will form a panel and our moderator will facilitate discussion of the following co-design challenges:

- Addressing power imbalances within health services so key voices can be heard.
- Managing expectations and prioritisation of interventions within resource-constrained environments
- Facilitating meaningful community engagement, considering differences by gender, occupation, education and other characteristics within each context.

Key lessons will be shared through a blog on our website and will form the basis for a peer-reviewed publication.

Breakout Session 23: ACE Project Storytelling Sneak Peek: Essential Insights from Master Practitioners [Accelerating City Equity]

10:45 - 11:45 Wednesday, 8th November, 2023

Location Buckhead

Join us to watch documentary film clips featuring community leaders and long-time practitioners of equitable sustainable development around the world. We'll discuss challenges, successes, and lessons learned and how they might apply to your work.

Moderator: Camilla Calamandrei

Breakout Session 24: Gentrification, Racism, and Disparities

12:00 - 13:00 Wednesday, 8th November, 2023

Location Home Park

Presentation type Oral

11 Historical Measures of Structural Racism in the Study of Contemporary Built Environment and Health Disparities

Dr. Richard Sadler PhD, MPH

Michigan State University, Flint, MI, USA

Abstract

After perhaps street patterns, housing remains one of the most durable aspects of urban development. As such, the policy decisions that dictate housing characteristics in one era can influence residents over a long time horizon, particularly with respect to ongoing health disparities that exist beyond race and socioeconomic status. Many such policy decisions were made with the explicit intent of isolating certain racial or ethnic groups, in addition to industrial land uses and other 'undesirable' elements. For example, residential segregation is known to have long-lasting effects on neighborhoods and their residents.

In this talk, we discuss various aspects of structural racism in the built environment. In particular, we explore the lack of conceptual depth on this topic in relation to contemporary built environment and health disparities. While elements such as redlining and gentrification have started receiving more attention, other elements such as blockbusting/white flight, urban renewal, and predatory lending have not been studied. There are likely a multitude of additional dimensions through which this historical and ongoing racism acts on the composition of the built environment.

We posit that a lack of connection to urban historians, geographic information scientists, and other disciplines with archival and technical expertise has limited the growth of this area, particularly with respect to health. We discuss the need for conceptual and methodological advances in these areas to ensure rigorous measurement of these understudied factors. We also explore how dissemination efforts across a broad spectrum of disciplines could help expand awareness of potentially important, long-lasting patterns in the built environment in the way that factors such as redlining and gentrification have been explored in the recent past.

221 Levelling Up: Applying Principles of Placemaking and Health Equity in Urban Regeneration

Mr Andrew Reid BA PostGradDip IR MPolPubPol MPH MIPH^{1,2,3,4}, Dr Patrick Harris MPH PhD^{1,2,3,4}, Ms Karla Jaques BPH MPH^{1,2,3,4}, Mrs Ines Couper MPH²

¹A Unit of Population Health, South Western Sydney Local Health District (SWSLHD), NSW Health, Liverpool, NSW, Australia.

²Centre for Health Equity Training, Research & Evaluation (CHETRE), Liverpool, NSW, Australia. ³Centre for Primary Health Care and Equity, University of New South Wales (UNSW), Sydney, NSW, Australia. ⁴A Member of the Ingham Institute, Liverpool, NSW, Australia

Abstract

Background

Place-based approaches to health have gained renewed focus through the concept of 'Levelling up' - an agenda aimed at helping disadvantaged areas to grow and function economically compared to more advantaged areas. The provision of

infrastructure can create uneven and inequitable health outcomes, leading to spatial and health inequities. Effective levelling up can mitigate these inequities by applying principles of placemaking and health equity.

Aim

This study aimed to retrospectively apply the themes of effective levelling up to urban regeneration and placemaking interventions found in the literature. The study examined the successes and challenges faced during the implementation of these interventions and the overall impact of the interventions.

Methods

The study involved a scoping review of literature to explore the application of levelling up principles in infrastructure planning and delivery. The review was guided by a registered protocol that was adopted and adapted from an existing protocol. To limit the number of studies, the study restricted the search of articles published between 2010 and 2022. The data was extracted using a narrative review method.

Findings

Out of the 15 articles reviewed, none of them encompassed all five of the levelling up principles. However, two or three principles were commonly identified, while only one principle was found in five articles. The most frequently identified principle was "targeting disadvantaged communities", while the least commonly identified were "health-by-default and easy to use" and "matching resources to need". Notably, principle five, which is "matching resources to need", was nearly always present alongside principle three, which is "locally designed", except for one study.

Conclusion

The levelling up framework offers a valuable guide for infrastructure planning and implementation. However, the retrospective application of the principles revealed challenges in planning and delivering infrastructure using this framework, particularly around community engagement and long-term funding and resource commitment. Future research could evaluate the effective utilisation of this framework in practice. Professionals are encouraged to address these challenges across the standard infrastructure planning stages. By doing so, the framework can be used to promote effective levelling up, mitigate spatial and health inequities, and enhance health outcomes for all communities.

438 The association between gentrification and density of social organizations in the United States: 2000-2014

Francesca A. Mucciaccio MPH^{1,2}, Jana A. Hirsch PhD, MES^{1,2}, Gina S. Lovasi PhD, MPH^{1,2}

¹Urban Health Collaborative, Dornsife School of Public Health, Drexel University, Philadelphia, PA, USA. ²Department of Epidemiology and Biostatistics, Dornsife School of Public Health, Philadelphia, PA, USA

Abstract

Background: Gentrification could affect health through stressors like displacement, but such effects could be partially offset if gentrification provided additional opportunities for social stimulation by increasing the density of social organizations. We examined whether US census tracts that gentrified had subsequent increases in density of social organizations compared to tracts eligible to gentrify that did not.

Methods: We examined characteristics across contiguous US tracts (n=66,205), excluding those with special land use, <50 residents, and outside Core-Based Statistical Areas (CBSAs). Population characteristics in 2000 and 2010 (2010 census, 2008-2012 American Community Survey) came from a longitudinally harmonized database. We categorized gentrification status between 2000-2010 as ineligible to gentrify, eligible to gentrify but ungentrified, gentrified, or intensely gentrified. We used 2014 National Establishment Time Series data to define the outcome, which encompassed non-physical-activity-focused recreation hubs for social interaction (i.e., clubs and political/membership/volunteer organizations). We characterized baseline (2000) covariate conditions: population density, racial/ethnic density (≥60% vs. <60% non-Hispanic (NH) White), type of CBSA (metropolitan vs. micropolitan), social organization density, and inflation-adjusted median household income. Mixed-effects Poisson models were clustered by CBSA, offset by land area, and adjusted for baseline covariates.

Results: Between 2000-2010, 26% of tracts were ineligible to gentrify, 46% were eligible to gentrify but did not, 12% gentrified, and 16% gentrified intensely. Overall social organization density decreased by 20% between 2000-2014. Compared to tracts eligible to gentrify that did not, average organization density in 2014 did not significantly differ for gentrified (RR: 0.98; 95% CI: 0.76, 1.26) or intensely gentrified tracts (RR: 1.02; 95% CI: 0.80, 1.3) but decreased in ineligible-to-gentrify tracts (RR: 0.40; 95% CI: 0.31, 0.53). The association of gentrification status with the outcome was modified by type of CBSA ($p=0.012$). In stratified analyses, social organization density in 2014 was lower within intensely gentrified tracts in micropolitan areas (RR: 0.45; 95% CI: 0.22, 0.91).

Discussion: Gentrification did not result in an increase in social organization density, but the density of social organizations decreased in tracts ineligible to gentrify. Further efforts to characterize gentrification can help ascertain pathways that positively or negatively impact health.

390 Gender and country differences in the association between individual and contextual socioeconomic status with hypertension in Latin American cities

Débora Moraes Coelho PhD Student^{1,2}, Amanda Cristina de Souza Andrade^{3,2}, Uriel Moreira Silva^{1,2}, Solimar Carnavalli Rocha², Mariana Lazod⁴, Claire Slesinski⁴, Alex Quistberg⁴, Ana V. Diez-Roux⁴, Amélia Augusta de Lima Friche^{1,2}, Waleska Teixeira Caiaffa^{1,2}

¹Faculty of Medicine, Federal University of Minas Gerais, Belo Horizonte, Minas Gerais, Brazil. ²Observatory for Urban Health in Belo Horizonte, Belo Horizonte, Minas Gerais, Brazil. ³Institute of Public Health, Federal University of Mato Grosso, Cuiabá, Mato Grosso, Brazil. ⁴Dornsife School of Public Health, Drexel University, Philadelphia, Missouri, USA

Abstract

Background: Despite the growing interest in gender disparities and social determinants of hypertension, research in urban areas and regions with a high prevalence of hypertension, such as Latin America, is very limited. We investigated individual- and area-level socioeconomic status differences in hypertension proportions in adults from 230 cities in eight Latin American countries, and the extent to which these inequities vary by gender and across countries.

Métodos: Neste estudo transversal, usamos dados harmonizados de 109.184 adultos (57,8% mulheres), com idades entre 18 e 97 anos (média: 42,7±16,4), do projeto SALURBAL (Salud Urbana en America Latina). A hipertensão foi autorreferida. A educação em nível individual, submunicipal e municipal foi usada como substitutos para o status socioeconômico. Foram utilizados modelos de regressão logística multinível a três níveis (indivíduo, subcidade, cidade), ajustados por idade, considerando a heterogeneidade entre sexo e país.

Resultados: A educação em nível individual foi inversamente associada a maiores chances de hipertensão entre as mulheres (ensino universitário ou superior versus menos do que primário: razão de chances [OR] = 0,66, intervalo de confiança de 95% [IC] = 0,60-0,73), enquanto o inverso era verdadeiro entre homens (ensino universitário ou superior versus inferior ao primário: OR = 1,63; IC 95% = 1,45-1,83), com ambas as associações mostrando um padrão dose-resposta. Para ambos os sexos, o nível de escolaridade mais alto no nível da cidade foi associado a maiores chances de hipertensão (OR por desvio padrão [DP] = 1,05, IC 95% = 1,01-1,10; OR por SD = 1,09, IC 95% = 1,03-1,16 para mulheres e homens, respectivamente). Além disso, a associação entre educação municipal e hipertensão variou entre os países. No Peru,

Conclusão: O padrão social da hipertensão difere por gênero e pelo nível geográfico de análise nas cidades latino-americanas. Nossos resultados sugerem que as políticas destinadas a lidar com o ônus da hipertensão em LIMCs devem adotar estratégias sensíveis ao contexto e ao gênero.

Breakout Session 25: SALURBAL Findings: Health Equity and Social Justice for Urban Health

12:00 - 13:00 Wednesday, 8th November, 2023

Location Centennial

Presentation type Panel

448 SALURBAL Findings: Health Equity and Social Justice for Urban Health

Tonatiuh Barrientos¹, [Ana V. Díez Roux](#)², Andrés Trotta³, Mónica Mazariegos⁴, Sharrelle Barber², Alejandra Vives⁵, Olga Lucia Sarmiento⁶

¹Instituto de Salud Pública, Mexico City, Mexico. ²Dornsife School of Public Health, Drexel University, Philadelphia, PA, USA.

³Universidad Nacional de Lanús, Buenos Aires, Argentina. ⁴Instituto de Nutrición de Centro América y Panamá, Guatemala City, Guatemala. ⁵Pontificia Universidad Católica de Chile, Santiago, Chile. ⁶Universidad de los Andes, Bogotá, Colombia

Abstract

This panel will present the SALURBAL Project's efforts: 1) To quantify the contributions of city and neighborhood-level factors to health and health inequalities; and 2) To evaluate the health impacts of city and neighborhood-level policies in precarious settlements. SALURBAL team members will discuss findings and their relevance for developing policies that promote health equity and social justice.

SALURBAL has documented significant health inequities in cities at multiple levels. Differences in life expectancy across 361 cities were associated with city social and built environment conditions, with life expectancy varying as much as 10 years across neighborhoods. A better city social environment index (reflecting population educational attainment, water and sewage access, and overcrowding) was predictive of longer life expectancy. Better city social environments were also associated with lower infant mortality and lower cause-specific mortality (including unintentional injuries and homicides). In analyses of harmonized survey data, significant inequities were linked to individual-level education, with diabetes, obesity and hypertension strongly and inversely associated with education in women. SALURBAL has also leveraged available data to confirm that racialized groups experience worse health outcomes than non-racialized groups in more segregated cities. In partnership with the Ubuntu Center, SALURBAL has highlighted community-informed strategies to improve the collection and availability of data on race and ethnicity, which are generally lacking in the region.

SALURBAL has applied diverse approaches to evaluate the health impacts of urban policies focused on precarious housing and neighborhoods. In Brazil, the Vila Viva slum upgrading and urban regeneration program reduced homicide rates. In Chile, a government program to upgrade public housing was shown to improve perceived safety of the neighborhood and dwelling habitability, reduce respiratory illness, and improve self-rated health. In Colombia, SALURBAL documented impacts of the TransMiCable cable car transit system including reduced commute time, improved perception of safety in the area, reduced air pollution exposure on trips, and improved health related quality of life among women.

These findings highlight the need to further document and address the health impacts of systemic inequality and racism, and highlight how urban policies can address the drivers of health inequities across cities.

Breakout Session 26: Accountability and responsiveness of health systems in informal settlements: A layered approach to demonstrating impact using nested country Theories of Change

12:00 - 13:00 Wednesday, 8th November, 2023

Location Sweet Auburn

Presentation type Workshop

223 Accountability and responsiveness of health systems in informal settlements: A layered approach to demonstrating impact using nested country Theories of Change

Mr Joe Taylor Masters in Development Studies¹, Dr Louise Clark PhD in Rural Sociology¹, Dr Jiban Karki PhD in Public Health², Mr Anthony Mwaniki Master Arts, Project Planning and Management³, Ms Nazia Islam Master of Public Health (Global Health)⁴, Dr Sia Tengbe MBChB, MSc.IPH⁵, Ms Sweta Dash Masters' in Gender Studies⁶

¹Institute of Development Studies, Brighton, United Kingdom. ²Liverpool School of Tropical Medicine, Liverpool, United Kingdom. ³LVCT Health, Nairobi, Kenya. ⁴BRAC James P Grant School of Public Health, BRAC University, Dhaka, Bangladesh.

⁵Sierra Leone Urban Research Centre, Freetown, Sierra Leone. ⁶The George Institute For Global Health, New Delhi, India

Abstract

The ARISE (Accountability and Responsiveness in Informal Settlements for Equity) program is a £12 million UKRI investment to improve accountability and promote equity in the rights to well-being and health of marginalised people living and working in informal urban spaces, i.e, informal settlements in Dhaka, Bangladesh, Freetown, Sierra Leone, Nairobi, Kenya and in India with informal waste workers in Shimla and households living in relocated slum colonies in Ahmedabad. As the program moves into its final year, the evidence of the 'impacts' across the 4 countries are being periodically harvested to develop series of contribution case studies that will present the outcomes in each country context and explore the causal pathways that have delivered these changes. Each country's case study will generate evidence towards a picture of programmatic impact and reflections on how ARISE has delivered its Theory of Change.

This developmental evaluation in progress demonstrates an approach to operationalise the programmatic TOC with dedicated in-country MEL leads developing a series of nested ToCs that provide a framework for knowledge exchange, peer support and capacity strengthening to deliver a robust evidence base. This decentralised approach, based on principles of country ownership delivers contextualised MEL systems, monitoring tools and locally-relevant indicators that embrace the complexity, methodological innovation and uniqueness of each intervention. This is delivered within an overarching outcomes framework which creates an ability to zoom out to evaluate the impact of the program as a whole. The layering of the outcome harvest, sensemaking, and contribution case study also facilitate zooming in to demonstrate the causal pathways and highlight the competing contextual assumptions and evidence the contribution of the program to the impacts observed.

The proposed interactive workshop with the in-country MEL leads will demonstrate how a nested ToC approach that encompasses different contexts and priorities has been developed in practice and share the key lessons learned. Participants will have a chance to engage with the outcomes framework and consider how it might be adapted and applied in their context whilst also walking through the process through which each country's theory of change was nested within the programmatic TOC.

Breakout Session 27: "Smart City" Opportunities to Advance Universal Health Coverage in South Asia

12:00 - 13:00 Wednesday, 8th November, 2023

Location Inman Park

Presentation type Panel

96 "Smart City" Opportunities to Advance Universal Health Coverage in South Asia

Mr. Varun Kaul MSc¹, Dr. Amit Chandra MD, MSc²

¹PATH South Asia Hub, Delhi, India. ²US Agency for International Development, Washington, DC, USA

Abstract

South Asia faces significant challenges in achieving UHC, especially in cities due to rapid & unplanned urban population growth, constrained resources, and inadequate public healthcare infrastructure. To address these challenges, innovative and sustainable solutions leveraging digital technologies are needed to improve healthcare access and outcomes.

The proposed "Davos-style" panel discussion will explore the potential of digital, "smart city," solutions to drive universal health coverage (UHC) in rapidly growing South Asian cities. The panel content will be underpinned by a recent study, funded by the US Agency for International Development (USAID) conducted by Digital Square at PATH in five cities across India, Bangladesh, and Nepal. The gender balanced panel will consist of four and one moderator. The panel will be made up of representatives from South Asian countries (that include India and Bangladesh), intergovernmental agencies, and from USAID as an anchor to bridge investment priorities and key donor perspectives.

The panelists will discuss the opportunities for multi-sectoral digital solutions to advance access to equitable, quality healthcare and promoting the resilience of health systems in urban areas. They will also address the challenges faced in implementing digital solutions in growing urban centres, the role of cross-sectoral collaboration, and the potential for multidisciplinary training to bridge the gaps between urban design (smart city initiatives) and health practice. The discussion will chart a course for knowledge generation, translation, and application of research on digital technologies for urban health resilience.

Panelists include:

1. Dr. Suvajee Good, Regional Advisor Health Promotion and Social Determinants of Health, WHO Regional Office for South-East Asia
2. Micaela Arthur, Senior Health Advisor, USAID
3. Dr. Md. Shamim Hayder Talukder, CEO, Eminence associates for Social Development
4. Dr. Swati Mahajan, Lead – Health Systems Strengthening, PATH South Asia

The panelists will draw on their expertise and experience in public health, digital health, and urban planning to provide insights on the following topics:

- The potential of digital solutions to improve urban health access and outcomes
- The challenges of implementing digital solutions in South Asian cities
- The role of cross-sectoral collaboration and multidisciplinary training
- The need for holistic and culturally sensitive approaches

Breakout Session 28: Addressing multiple deprivations of children living in poor urban settings including slums and informal settlements: Identifying and reaching zero-dose children using a multisectoral approach

12:00 - 13:00 Wednesday, 8th November, 2023

Location Highlands

Presentation type Panel

357 Addressing multiple deprivations of children living in poor urban settings including slums and informal settlements: Identifying and reaching zero-dose children using a multisectoral approach

Dr Ibrahim Dadari MD, MIHMEP, DrPH, CPH, FRSM¹, Mr Thomas George¹, Mr Charles Kakaire¹, Ms Sandra Mounier-Jack²

¹UNICEF, New York, New York, USA. ²London School of Hygiene and Tropical Medicine, London, London, United Kingdom

Abstract

The notion that proximity to social services grants urban dwellers including those living in slums and informal settlements better lives is fast eroding. There is an increasing intra-urban disparity in access to and utilization of social services with a significant number of the most disadvantaged children in urban areas faring worse than their rural counterparts. This reversal of the 'urban advantage' is called the 'urban paradox'[1].

Globally the slum-dwelling population adds up to over one billion, including approximately 350 million children, most of whom live in Asia and Africa, and is expected to grow to 3 billion by 2050[2]. A UNICEF analysis of 70 countries shows that in half of these countries, urban children in the poorest quintile are at least twice as likely to die before their fifth birthday as their peers in the richest quintile. Lack of sufficient access to and utilization of preventive and curative health services, such as immunization and other health and social services, exacerbates vulnerabilities and inequities. The number of zero-dose children measured programmatically as those infants who missed the 1st dose of a DPT-containing vaccine is used as a proxy for multiple deprivations. More than 28% of overall zero-dose children are in urban areas, with another 40% within areas near the urban areas which are fast urbanizing but still deemed rural[3].

UNICEF's work is multisectoral addressing childhood deprivations in several social sectors including immunization, health, water and sanitation, nutrition, and child protection among others. The agency's urban strategy focuses on six priorities: disaggregated data and evidence, coordination of services, and strengthening local governance with a consistent and systematic inclusion of children in slums and informal settlements in urban strategies and plans. This panel intends to discuss opportunities and strategies for addressing the immunization and social needs of zero-dose children through a multisectoral lens in poor urban settings.

Breakout Session 29: ACE Sneak Peek at an Equity ‘Starter Kit’ for Practitioners [Accelerating City Equity]

12:00 - 13:00 Wednesday, 8th November, 2023

Location Buckhead

Join us to discuss five practices for advancing equity as identified by the Accelerating City Equity Project. You'll hear lessons learned from practitioners, and try out an exercise for identifying actions to advance equity in your work and local contexts.

Moderator: Patrin Watanatada

Poster Session 1

14:00 - 15:00 Wednesday, 8th November, 2023

Location Midtown Combined

Presentation type Poster

497 Private sector participation in urban areas for family planning is key to increase use of contraception among urban poor

Mr Samarendra Behera¹, Mr Mukesh Sharma², Mr Hitesh Sahni², Dr Sangeeta Goel¹

¹Population Services International India (PSI India), Lucknow, Uttar Pradesh, India. ²Population Services International India (PSI India), New Delhi, Delhi, India

Abstract

Private facilities and providers are significant in urban areas but under-utilized by the urban poor for family planning services. Over 4000 qualified private providers are available, in addition to the over 800 government facilities which provided clinical family planning services. The Challenge Initiative (TCI) project worked with the government and private sector to ensure their participation to serve urban poor and to achieve FP commitments.

Skilled, equipped and capacitated private facilities and providers are available near urban slums across the state and helps urban communities to access quality health services. Strengthening the government system to engage private sector in public health results in shaping private sector market for public health. Creating an enabling environment of responsibility, accountability and transparency helps private sector to participate in government programs. The huge private sector presence can contribute significantly in achieving FP goal.

The private sector was stimulated to participate in public health schemes through Public Private Interface meeting, training, orientation and community mobilization. The family planning facility base was expanded from 824 govt. facilities to 1931 including private facilities by accreditation and empanelment of private providers through online systems. The entire progress was monitored through online management dashboard by senior government officials. Private sector partnership cell was established to facilitate entire process.

Overall government family planning data started improving and resulted a significant growth in terms of all FP methods. During the period, private sector contributed over 1.1 million new users of FP methods from the private sector in the state of Uttar Pradesh. Through these private sector participation, government unlocked USD 15.78 million to private sector for strategic purchase of FP services for urban poor.

379 Inter sectoral Convergence of Services to strengthen Family Planning Services Accessible for Urban Poor

Mr Samarendra Behera¹, Mr Mukesh Sharma², Mr Hitesh Sahni², Dr Emily Das¹, Mr Amit Kumar¹

¹Population Services International India (PSI India), Lucknow, Uttar Pradesh, India. ²Population Services International India (PSI India), New Delhi, Delhi, India

Abstract

Convergence at the service delivery level depends on collaboration at the city level, where all the relevant departments work together for creating resilient health system. Even though the Indian government has mandated the concept and necessity of

convergence at the city level, local governments were unable to put it into practice. Hence, to ensure implementation of convergence, Population Services International India, through its project The Challenge Initiative (TCI) project, empowered local governments to rapidly and sustainably scale high-impact practices of urban health and other interventions to city level convergence platform to meet the family planning (FP) needs of an ever-growing urban population, especially the urban poor.

TCI India technically supported local government in creating inter and intra department convergence by establishing City Health Coordination Committee (CCC) across 41 intervention cities in three states of India namely, Uttar Pradesh, Bihar and Jharkhand. These City Coordination Committee include members/ representatives from various government departments namely National Urban Health Mission (NUHM), Integrated Child Development Service (ICDS), District Urban Development Agency (DUDA), Municipal Corporation (Urban Local Bodies), Education, Federation of Obstetric and Gynaecological Societies of India (FOGSI) and Indian Medical Association (IMA). TCI India through its coaching and mentoring facilitated the city health government to lead in formation and activation of the CCC across all 41 cities of three states. These CCC meetings are now conducted by the Chief Medical Officer (CMO) on a quarterly basis to have a better coordination and convergence among the various urban departments to strengthen urban FP program of the city. In these CCC meetings, the city officials majorly discuss on FP achievements, challenges related to FP commodities and service delivery at facility level, discuss and drive solutions jointly to ensure services accessible to urban poor.

The key results of the CCC meetings has increased the convergence among the various stakeholders and CHWs from respective departments to coordinate and provide support to have quality access and acceptance of the FP services of their choice from the respective public and private facilities of the city.

367 A Content Analysis of Korean Healthy City Ordinances

Eunjeong Kang, Mina Baek
Soonchunhyang University, Asan, Choongnam, Korea, Republic of

Abstract

Objectives: A legal foundation of healthy city can help a healthy city program to persist. Before the promulgation of healthy city in the National Health Promotion Act in 2021, healthy city ordinances in local governments were such legal foundations in Korean healthy cities. In this study, we analyzed the contents of healthy city ordinances for two purposes: first, to explore the operating system for healthy city programs, and second, to make suggestions for healthy city ordinances for better performance.

Methods: Among the 101 healthy city members of the Korea Healthy City Partnership (KHCP), 88 cities were reported to have a healthy city ordinance. We included all these 88 ordinances in the analysis. The contents were analyzed using the framework of normative and operational aspects. The normative aspects of a healthy city ordinance covered the purpose, definition, fundamental principles, responsibility, and healthy city programs. The operational aspects of a healthy city ordinance included the master plan, steering committee, financial support, and community participation. The contents of each healthy city ordinance were coded in Excel for descriptive analyses.

Results: In terms of the normative aspects, the purposes of a healthy city ordinance were relatively consistent across the ordinances, but the definition and the scope of a healthy city program were either lacking or focusing on individual-based health promotion programs. Among the operational aspects, most of the ordinances contained articles for the master plan, financial support, and steering committee, but their details were insufficient. None of them addressed the personnel or budget. However, we have found a few innovative approaches that are yet institutionalized at the national level but worth pursuing.

Conclusions: The findings of this study may help understand the current status of healthy cities in Korea. We also made some suggestions on how to improve healthy cities by strengthening healthy city ordinances.

215 Identifying Spatial Inequities and their Impacts on Health and Wellbeing through Participatory GIS Mapping: Experience from Bangladesh

Bachera Aktar^{1,2}, Dr Proloy Barua PhD¹, Dr Sadaf Khan PhD³, Dr Sabina Rashid PhD¹

¹BRAC James P Grant School of Public Health, BRAC University, Dhaka, Bangladesh. ²Liverpool School of Tropical Medicine, Liverpool, United Kingdom. ³Institute of Development Studies, Brighton, United Kingdom

Abstract

Background: People living in informal urban settlements face spatial inequities in distribution of resources and service availability. Poor living conditions and surrounding environment of the settlements also magnify spatial inequities, which profoundly impact people's lives. Participatory GIS (PGIS) mapping could be a great tool to visually present spatial inequities that exist within informal urban settlements, especially in a data-scarce context like Bangladesh. Drawn on the experience of a community-based participatory research conducted in Dhaka city, the capital of Bangladesh, this abstract highlights the use of PGIS mapping in identifying spatial inequities in informal urban settlements and their impacts on the health and wellbeing of the dwellers.

Method: Using PGIS mapping from April 2020 to December 2021, this research co-produced GIS maps of three informal settlements in Dhaka city. Selected community members were trained as community co-researchers who did the mapping using mobile GIS data gathering tool "Mobile Data Collection Portal - GIS Cloud (MDC GIS Cloud)". In weekly reflectivity sessions, community co-researchers guided academic researchers on including spaces, landmarks, infrastructures, and service delivery points important to the community people. They also discussed the importance and impacts of those spatial elements on people's health and wellbeing. Academic researchers produced interactive maps by combining those narratives with GIS coordinates.

Results: PGIS mapping helped to identify critical geospatial locations within the study settlements and to understand the intersectionality and gendered vulnerability of spaces, such as areas at risk of eviction, waterlogging and environmental pollution, and locations with security and safety concerns, especially for women, adolescent girls and children (for example, unsafe zones where women face sexual harassment). In addition to identifying geospatial disparity in service availability, this approach also helped document residents' lived experiences, which traditional GIS mapping cannot capture. For example, three settlements had piped water supply; although the water supply points varied between sites, the supply water quality was a common concern in all three settlements.

Conclusion: PGIS mapping is an important data-gathering and analytical tool for researchers, urban stakeholders and policymakers to identify and understand spatial inequities and risk factors in informal urban settlements and thus design interventions accordingly.

207 An endeavor to serve health equity towards reaching SDG 3: a case study on UNICEF's 'Model Urban PHC Clinics' piloting in selected cities of Bangladesh

Team Leader, Model Urban PHC Clinics, PHD Md Saidur Rahman MBBS. MPH. MMed. EMBA¹, Senior Director, PHD Ashish Kumar Dutta MSS², Director, Nari Maitree Masuda Begum MSS, MPH³, Senior Deputy Director Fatema Showkat Jahan MSS, MDS¹

¹Partners in Health and Development (PHD), Dhaka, Bangladesh, Bangladesh. ²Partners in Health and Development (PHD), Dhaka, Bangladesh, Bangladesh. ³Nari Maitree, Dhaka, Bangladesh, Bangladesh

Abstract

An endeavor to serve health equity towards reaching SDG 3: a case study on UNICEF's 'Model Urban PHC Clinics' piloting in selected cities of Bangladesh

Background: Bangladesh's annual urban population growth rate is 3.3% and Dhaka city's share rises to 46%. Urban Slum population increases 7% annually but urban Primary Health Care (PHC) is not structured like rural PHC. City people are dependent on private and public tertiary health facilities which is the reason of increasing OOP expenditure. The government and NGOs are working hand in hand to develop an urban PHC service. UNICEF came forward in 2021 with piloting the "Model Urban PHC clinics" project and could make an impact to contribute to serve inclusive urban healthcare.

Introduction: Project started piloting the six clinics in December 2021 and continuing to serve urban PHC over 0.65 million people in four city areas (Dhaka-North and South, Gazipur and Narayanganj). This case study tends to find out the urban healthcare service focusing on the health equity and access to all strata of urban community.

Methods and results: The team used the program data (December 2021 to April 2023) in this study purposely taken from Integrated Digital Healthcare Platform (IDHP). The project covered 92.86% from below poverty line and 7.14% above poverty line among the served clients of urban catchments population. The key gender, cultural and religious barriers towards health equity in country context were lessened through employing at least a female doctor in each shift. Model ensured accessibility of 31.57% working-class through two shifts/day and 6 days/week service delivery approach. Project served 73.49% pregnant women, 14% under five children and 53.21% adolescents, and also addressed inclusion through reaching out to 90% transgender, 1.53% commercial sex workers and 0.94% disabled persons. Individual records of served populations are stored in IDHP that create opportunity for subsequent utilization.

Conclusion: The project objective is to usher a ray of hope for the city dwellers to get equitable and accessible PHC service. Project hopes wider scale up of the clinics under government stewardship to bring down the sufferings of urban people.

92 Illuminating policy for health: insights from a decade of researching urban planning

Dr Patrick Harris Ba Hons, MPH, PhD
UNSW, Sydney, NSW, Australia

Abstract

Background

Public health focussed policy analysis focusses on policy making practice and the conditions under which policies are made. The field has great promise for interrogating and creating 'healthy' public policy. Engaging with the complex realities of policy with a critical lens using established knowledge from other disciplines, especially political science, is crucial.

This presentation presents a comprehensive framework for public health focussed policy analysis, informed by deep engagement with political science especially new institutionalism. The presentation of the framework is supported by insights from its application to urban and infrastructure policy-making over the past decade.

Method

A priori application of theory from political science was mixed with deductive and inductive data collection and critical policy analysis of case studies of urban planning practices and systems in Australia from 2011 to 2020, including 250 policy documents and 92 semi-structured interviews.

Results

The final framework from the research is presented as a 'cube' made up of Institutions (actors, structures, ideas), Action and Evaluation (processes, decisions and choices, and outcomes and events), Governance (constitutive, directive and operational), Power and Time.

Essentially the research demonstrated the power of institutional silos and historical ways of working (path dependencies) that are challenging to shift and are underpinned by often unexplored normative values promoting market and economic growth and excluding risks to health and health equity such as climate change and social protections. Change however comes about by creating and ensuring health focussed representation and voices in the urban governance regimes that define, create and sustain policy-making.

Conclusion:

This comprehensive decade long research demonstrates how to investigate and interrogate healthy public policy that accepts and illuminates complexity to critically unpack policymaking.

305 Cancer Screening Among Garifuna Women

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Abstract

PURPOSE

The Garifuna are a marginalized Afro-Amerindian Central American group with unique sociocultural norms (i.e., Garifuna language, punta dance), with little known of their health behaviors. Few studies examining the health behaviors of the Garifuna largely focus on reported high rates of HIV/AIDS in the population. This study aims to examine cancer screening practices among Garifuna women residing in the boroughs of New York City (NYC), and to identify any disparities in their cancer screening practices and their association with demographic factors, access to healthcare services, perceptions, cancer screening knowledge, acculturation, and Garifuna identity.

DESIGN METHODS

Self-identified Garifuna women aged 50 years and older residing in NYC were surveyed. Univariate analysis was used to describe the study sample and bivariate analysis measured level of association between variables. Logistic regression examined the predictive nature of variables in explaining cancer screening adherence.

RESULTS

Four hundred two Garifuna women completed surveys over a twenty-two-month period. The results show low rates of colorectal cancer screening (65 %) in comparison to overall United States (US) rates (67%). Models for colorectal cancer screening show that Garifuna women who maintained their culture had significantly greater odds of receiving colorectal cancer screening by fecal occult blood testing versus with colonoscopy (aOR= 2.287; 95% CI= 1.555-3.364).

CONCLUSION

Maintaining heritage sociocultural norms is a significant determinant of health behaviors among Black immigrant groups. NYC is home to the largest population of immigrant Garifuna in the US. Garifuna residing in NYC actively engage in community activism designed to improve poor quality of life stemming from high levels of discrimination and poverty in their homelands. Further studies on the effect of community activism and cancer screening behaviors of immigrant Garifuna women living in urbanized spaces are required. Recognizing sociocultural preferences towards fecal occult blood testing provides an opportunity to develop culturally appropriate interventions aimed to end colorectal cancer screening disparities in this unique Black immigrant group.

GRANT SUPPORT

This project was supported by an American Dissertation Fellowship Grant awarded by the American Association of University Women.

172 The Fault in our Social Safety Schemes: Tales of missing accountability and its impact on the health of informal settlers in Dhaka

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Abstract

Bangladesh's social safety net programs cover only 30 percent of households, giving a higher priority to rural poor. Pregnant and lactating mothers, widows and/deserted women, disabled people and those who are old and weak and live in the informal settlements in Dhaka are often more marginalized when compared to others and need social safety nets. They face greater barriers in obtaining necessary documents like birth certificates and national identity cards which in turn reduces their chances of receiving allowances, food assistance or training programs given by the government. This has an impact on their physical and mental health.

This paper deals with the system-induced inequalities that exist when marginalized people living in informal settlements in Dhaka access prerequisite documents, required to get social services. Without these documents and allowances, they suffer physically and mentally, missing out on crucial opportunities and remaining vulnerable to lifelong poverty's effects.

Data is drawn from a larger multi-method study using community-based participatory research methods like transect walk, stakeholder mapping, service mapping and validation sessions consisting of 36 participants conducted in 3 informal settlements in Dhaka between July-September 2022. The participants were daily wage earners, people with disabilities/their caregivers, pregnant/lactating mothers, widows/deserted women, old people and trans gender who were chosen by co-researchers who are also from the community.

Evidence shows that there are multiple constraints that leave many of them in a cycle of exclusion and exploitation – including confusing/incomplete information that people get from community leaders and neighbours, high transportation costs as they make multiple trips to local government offices, brokers who extort money with the false promise of giving them documents, lack of digital literacy to access government portals and lack of social networks. Instead, only a handful of them receive allowances while others suffer. They are unable to afford proper healthcare and healthy food, are under increased stress and have a greater likelihood of suffering from illness, malnutrition and chronic diseases, making them even more poor and vulnerable.

Discrimination, poverty and lack of voice create perpetual cycle of inequalities that worsen health outcomes for these informal settlers.

508 Housing Policy as a Social Determinant of Health in African Cities: Implications for Maternal and Child Well-being

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Abstract

The disparities in maternal and child health (MCH) within African cities are the result of multiple system failures, necessitating a comprehensive approach to research and intervention. A critical issue that threatens the well-being and safety of urban MCH is the looming shortage of quality housing in many African cities. Housing quality is closely intertwined with socioeconomic factors such as income and education, which significantly influence health outcomes, particularly for mothers and their children.

Across Africa, residents predominantly live in three types of areas: urban, urban informal, and rural settlements. The proliferation of informal and unsafe settlements poses a major challenge to rapidly urbanizing African cities. Unfortunately, many housing policies in Africa do not adequately consider the needs of informal settlements. In densely populated, informal settlements where access to clean water, sanitation, ventilation, and emergency healthcare is lacking, containing infectious diseases becomes especially challenging.

In the field of global health, three proposed frameworks, namely Health-in-all policies, Healthy Cities, and One Health, emphasize intersectoral and multisectoral approaches to health. However, the extent to which these frameworks have been implemented in the context of housing policies in African cities remains unclear. This study aims to investigate the thematic factors that influence the formulation and implementation of housing policies for MCH in African cities.

The examination of diverse scenarios reveals both progress and challenges in addressing the interplay between housing policies and health in African cities. One notable observation is the compartmentalized nature of society sectors, particularly the housing sector, in decision-making and implementation processes. This siloed approach contributes to significant gaps in MCH disparities within cities in the region.

The role of housing policy as a social determinant of health in African cities, particularly concerning maternal and child well-being, cannot be underestimated. Addressing the housing needs of urban populations, especially in informal settlements, is crucial for improving health outcomes. Policymakers, researchers, and stakeholders must work collaboratively to develop and implement comprehensive housing policies that consider the health implications, aiming to reduce health disparities within African cities.

28 Use of Telehealth by Michigan Older Adults during the Covid-19 Pandemic

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Abstract

Older Adults (people 65 years of age and older) have been mobility-disadvantaged in most parts of the U.S. The Covid-19 pandemic and the travel restrictions imposed by many states led people to resort to technology for many of their daily needs. From ordering groceries online, to communicating and staying in touch with friends and family via social media, many of the daily needs were being met through revised behaviors and dealt most often with technology. However, older adults have been known to be late adopters of technology compared to younger generations. This puts older adults at a greater disadvantage during times when travel is restricted.

Primary data collected through online surveys via a Qualtrics panel targeted to older adults living in Michigan, is the basis of this study. Preliminary results indicate that since this survey was an online survey, there is a bias in the use of technology. However, even with that bias, 40% of the respondents had not used zoom/skype or the like to connect with friends and family during the Pandemic. Over 80% had not shopped for groceries online and had them delivered, over 57% had not shopped for and got their prescriptions delivered, 72% had not visited their healthcare providers' website to request an appointment, and 75% had not used telehealth.

Barriers to using telehealth and factors that would encourage them to use it more are discussed. The study points to an emerging need for older adults to take more advantage of technology to overcome some of the barriers in accessing healthcare and being more socially active. Isolation has been known to be a serious issue in older adults especially during the pandemic,

and although technology cannot replace having real contact with people and being able to move about in the community, it helps to a certain degree to elevate mental and overall wellbeing.

104 Comparing the technical efficiency of local pandemic response: Results from the 50 largest cities in the United States of America

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Abstract

Disparities and variations in public expenditures have long been a source of policy concern because they imply inefficiencies and inequities in resource use. Technical efficiency refers to the use of resources in a manner that optimizes desired outputs or outcomes. To date, most health-related technical efficiency analyses have focused on hospitals and health facilities, with relatively few studies analyzing government-level efficiency. The study addresses this gap by using two non-parametric techniques – free disposal hull (FDH) and data envelopment analysis (DEA) – to assess the technical efficiency of the 50 largest cities in the United States of America during the first year of the COVID-19 pandemic.

Local-level public health expenditure data were collected from the Lincoln Institute’s Fiscally Standardized Cities Database, which estimates local government expenditures by considering the expenditures of municipal governments, county governments, school districts, and special districts to facilitate comparisons between cities existing in different governance contexts. These data were combined with COVID-19 testing data and excess mortality data to calculate technical efficiency scores. Sensitivity analyses were conducted using jackknife methods.

When considering the number of COVID-19 tests conducted per 100,000 persons, FDH results showed that Oklahoma City, Boston, and Miami were the most efficient cities, while San Francisco, San Jose, Fresno, and Philadelphia were the least efficient; DEA yielded similar results, with Oklahoma City and Boston ranking as the most efficient, and San Francisco, San Jose, Fresno, and Philadelphia the least efficient. For excess mortality, FDH results showed that Oklahoma City, Boston, Miami, Omaha, Colorado Springs, and Raleigh were the most efficient cities, while Philadelphia, Washington, and Fresno were the least efficient; DEA showed that Oklahoma City, Raleigh, and Omaha were the most efficient cities, while Philadelphia, Fresno, and Washington were the least efficient. Sensitivity analyses suggested the results were robust.

These results are informative from both research and policy perspectives, as they identify cities and health systems that used resources most efficiently and performed relatively better when compared to other cities. Future research should seek to identify drivers of the efficiency rankings as a means of informing revisions and reforms to public health policy and systems.

101 Urban parks and the COVID-19 pandemic response: Results from a mixed-methods study of large cities in the United States of America

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Abstract

Various forces – such as climate change, ecosystem change, and globalization – are likely to increase the frequency of infectious disease outbreaks in the future, and better knowledge is needed regarding how urban design may promote the response to these events. In this regard, the COVID-19 pandemic offers an unprecedented opportunity to better understand the relationship between urban design, infectious disease outbreaks, and urban resilience. Accordingly, this study uses a mixed-methods

approach to investigate how urban parks were used to support the response to the COVID-19 pandemic and the association between green spaces and pandemic mortality outcomes.

The study population included the 50 largest cities in the United States of America. The qualitative portion of this study used data from the Trust for Public Land's City Park Facts Survey. Survey respondents were asked about whether parks were used to support the COVID-19 pandemic response and what purpose they served. An iterative, binary coding scheme was used to review responses and identify alternate functions and services provided by urban parks. The quantitative portion of this study combined data from the Trust for Public Land's City Park Facts Survey, the US Census Bureau, the US CDC, and other sources to investigate the relationship between urban parkland acreage and excess mortality rates. A series of linear regression models progressively added blocks of control variables to account for other factors that may be related to excess mortality.

All 50 cities reported that at least some parks were temporarily closed at some point during 2020, 46 reported that their parks were utilized for alternate uses, and 48 reported collaborations between park and public health authorities. Seven alternate functions supported by urban parks were identified: diagnostic testing, immunization campaigns, personal protective equipment distribution, housing and shelter, meal distribution, and childcare and education. The univariable linear regression model showed a negative, statistically significant relationship between excess mortality and parkland acreage. This result remained when incorporating demographic control variables, but results were not significant when accounting for health considerations and socioeconomic considerations. These results hold implications for future policy and research focused on urban design, resilience, and equity.

519 Gentrification or Health-Promoting Resource? Legacy Residents' Perceptions and Use of the Atlanta Beltline

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Abstract

Multiuse urban greenways continue to receive plenty of attention in the popular and academic literature due to their benefits for urban populations' health and well-being. While much of the academic literature focuses primarily on trail users, there is limited research on the residents living adjacent to urban trails, who are arguably the most affected due to their proximity to the greenway. This study seeks to fill this gap by focusing on long-term residents living next to the Atlanta BeltLine Trail. While it is expected that BeltLine positively affects well-being by bringing amenities into historically disadvantaged neighborhoods that suffer the greatest health disparities, BeltLine has also become a catalyst for green gentrification.

This study was done in two parts; first, a quantitative Gentrification index was developed to determine the ranges and types of neighborhood transformation. The index results were mapped and visualized using ArcGIS, and it was found that the neighborhoods within one-half mile of the Beltline are gentrifying faster than the rest of the city of Atlanta. In the second part, the study looked closely at two historically black greenway-adjacent communities in the early stages of gentrification. The in-depth interviews were used to elicit legacy residents' perceived physical activity (PA) since they gained access to a new community trail. The study also examined residents' perceptions about their experience and use of the BeltLine, specifically around environmental barriers and facilitators to PA.

The analysis revealed that the residents recognized the numerous benefits of having the greenway in the neighborhood. Many participants believed they had adopted a more active lifestyle with the arrival of the new trail and trailside amenities. However, the conversations also highlighted that trail is not equally enjoyed by all and that elderly black legacy residents are mostly absent from it.

This research identifies the environmental design interventions that can promote or discourage the use of trails and healthy outdoor activity. Many of those design interventions are inexpensive and simple to implement. This study also suggests that the

creation of free places for physical activity should be paired with an effort to promote their use, especially amongst under-represented groups.

495 The Innovation and Adoption of Equitable Telemedicine in Resource-Poor Countries

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Abstract

The acceptance and adoption of telemedicine in resource constrained environments is a poster summarization of a capstone project completed for the Massachusetts College of Pharmacy and Health Sciences (MCPHS). It explores how the global medical community has been transformed by the recent digital information and communication technology (ICT) revolution, catalyzed by the SARS-CoV-2 pandemic via telemedicine, telehealth, mHealth, and eHealth, and how bridging gaps is essential in promoting equitable access to healthcare services.

To address the PICO question of whether training frontline practitioners (P) in digital technology (I) versus no training (C), increases utilization of telemedicine (O) in resource-poor or low-to-middle-income (LMIC) countries, a literature review of 83 articles was extracted from the following search engines and databases: Google Scholar, PubMed, CINAHL, and EMBASE. Utilizing comparison in adoption and acceptance of telemedicine and other digital health platforms during the periods before and after the outbreak of COVID-19, four qualitative subthemes materialized. (1) The emergence of telemedicine and other ICT-driven technologies through a global lens; (2) workforce training needs and issues within developing countries; (3) successful examples of technology-driven models previously implemented or currently in use within these LMICs; and (4) future challenges in adopting virtual global health education and equity within resource-constrained countries.

Findings concluded utilization of telemedicine along with these other digital platforms has fundamentally transformed basic healthcare delivery, altered conventional patient-provider relationships, and significantly impacted healthcare decision-making across all strata of government. Additionally, telemedicine has presented itself as a mode of healthcare that is now universally recognized, convenient, accessible, economical, and patient-centered within spaces that are financially resourced to do so. However, telemedicine may not bridge all health gaps, as it relies on the access to digital connectivity and technology of LMIC's, which may lead to hinderances in equity. This emphasizes the notion that as telemedicine becomes more mainstream, security, privacy, equity, and infrastructure issues must also be addressed. It is imperative to address the challenges associated with telemedicine implementation and prioritize the needs of underserved populations, ensuring that the benefits of digital healthcare reach everyone, regardless of their socioeconomic status or geographic location.

477 Can the Urban financial environment influence healthy food choices? A realist evaluation of Rotating Savings and Credit Associations (ROCSA's)/Stokvels in Cape Town, South Africa

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Abstract

Obesity is caused by largely preventable risk factors linked to unhealthy diets and physical inactivity. It is estimated that 1.9 billion adults have overweight or obese globally and predictions estimate that by 2035, the global annual cost of obesity will reach \$4 trillion, or 2.9% of global GDP. Obesity reduction fits with all the UN Sustainable Development Goals (SDGs) as attention to 14 of the 17 SDGs would have a positive impact on obesity levels.

South Africa has one of the highest rates of obesity globally with a projected increase in obesity by 47.7% in females and 23.3% in males by 2025. The food environment, particularly within the urban context in South Africa perpetuates obesity through the increased availability and affordability of junk food. Promoting healthy dietary and physical activity behaviours through changing the financial environment can be a vital entry point to behavioural change. Rotating Savings and Credit Associations (ROSCAs)- informal financial cooperatives based on trust and social relations, exist in almost every LMIC to hedge against social and economic insecurity. In South Africa, there are over 800,000 ROSCAs (stokvels) with over 11 million members and wealth worth around R50 billion. Harnessing the social capital and economic leverage of ROSCAs can be a potentially effective strategy for increasing demand for access to affordable, healthy food. Drawing on the principles of the realist evaluation framework, and asking the guiding questions of what works, for whom and under what circumstances, this study identified the specific contexts in which ROSCAs' social character and collective agency are effective in influencing food choice decisions within an urban context. Engagement with twenty-six stokvels exposed mechanisms driving the effort of ROSCAs: networking, extending the range of services to include social support apart from food purchases, finding cheaper food sources and self-support. The realist analysis identified various specific contexts resulting in both intended and unintended outcomes. This study is one of the first applications of realist evaluation to unlock the potential of ROSCAs as a social agent of change for healthy food choices.

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476 Poverty, COVID-19, Lone Mothers and Public Health: Intersections of Risk

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Abstract

Poverty, COVID-19, Lone Mothers and Public Health: Intersections of Risk

Lea Caragata, Zeynya Alemayehu, & Viveca Ellis

The COVID-19 pandemic had wide ranging impacts and changed our daily lives. We know too that the health-related impacts were not equally and equitably distributed. This paper reports on how COVID-19 affected low-income lone mothers across the province of British Columbia in all aspects of their lives, including their health and that of their children.

Utilizing survey, focus group and individual interview data, we examined lone mothers' experiences of precarious work, managing child care amidst school and daycare closures and the overwhelming stresses of financial insecurity that created new health problems and exacerbated those that were pre-existing. Many of the digital health innovations that were enabled for those with privileges, including virtual access to health care providers, were unavailable to those with low incomes.

While much attention has been paid to the significant society-wide mental health challenges associated with the pandemic, inadequate attention has been given to the impacts of social isolation on low income, lone mother-led families. Research participants reported lacking the resources to ameliorate, in even modest ways, illness, overwork, family stress, poverty and the debilitating worry and anxiety deriving both from trying to keep their families safe and healthy while also trying to earn a living sufficient to feed their children.

These analyses point to systemic issues in our health systems the addressing of which must be attended to now, in advance of another global health crisis.

457 Bridging action and research to develop and apply graded building codes to make them relevant for affordable housing programs- case study from India

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Mahila Housing Trust, Ahmedabad, Gujarat, India

Abstract

In Indian cities, such as Delhi, Indore, Rajkot, Ahmedabad and Chennai, peak indoor housing temperatures typically vary between 36.5°C and 42°C during the summer period. While a building code was endorsed in India for energy conservation in 2017, the code was conceived for housing sizes 10 times larger than typically those of poor dwellings.

[Mahila Housing Trust \(MHT\)](#), an India based not for profit aims at reducing this temperature to 30°C - 35°C through low-cost design for affordable housing. To this end, MHT advanced evidence-based research on thermal comfort in dense settlements. This allowed MHT to test suitable design modifications and building codes for poor dwellings. Furthermore, MHT conducted live demonstrations to promote adaptation designs. Lastly, the case study informed advocacy actions at national and state levels to influence urban master plans and policy.

MHT followed a socio-technical approach in this initiative. It bridged action and research by placing at the centre of the design process marginalised urban dwellers and facilitating a conversation between them and government, academics and private innovators. The process involves a) working with slum dwellers to design affordable and efficient adaptation designs; b) facilitating a conversation with innovators and service providers to strengthen the supply side; and c) establishing a dialogue with policy-makers to inform policy.

This piece of research identified, tested and contributed to scaling up housing solutions compliant with the Energy Conservation Building Code for Residential Buildings (ECBC-R) while being beneficial for low-income communities. Through this research, MHT pioneered an advocacy process that made housing standards inclusive of the urban poor. Research findings were presented to the Climate Change Department of Gujarat, Ministry of Housing and Poverty alleviation, leading to the endorsement of graded codes and design modifications into Gujarat's housing policy. Knowledge materials produced by the project served as resources for other government and non-government organizations.

444 Victims or change agents? Rethinking role of women in building climate resilience in urban slums

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Abstract

The dense urban populations in South Asia, are particularly susceptible to negative climate changes (World Bank 2013)[1], and the most vulnerable would be the estimated 190.7 million people living in informal settlements (IPCC, 2013)[2] as their informality often leaves them out of the ambit of public sector response. The women in these settlements are further burdened with the additional caregiving, housekeeping and loss of productivity and income as home is often their workplace too. The International Labour Organization projects[3] that India will lose the equivalent of 34 million full time jobs in 2030 due to heat stress alone[4].

Mahila Housing Trust's model focusses on promoting Community Action Groups of Poor women, in informal settlements who are scientifically trained to work on slow onset but potent disasters at three levels – individual, community and/state level ensuring inclusion of the voices of the most vulnerable, promoting adaptation of resilience technologies and forming multistakeholder groups with government. 1.9 million individuals, led by 15000+ plus poor women climate champions have directly benefitted across 8 Indian cities. Climate loans have aided uptake of climate resilient technologies like cool roofs, a heat insurance product is being rolled out and city's heat action plans are being co-created by the urban poor women. The interventions have led to reduction of indoor temperatures upto 5 degrees, productivity increase by 4 hours a day and energy reduction of between 10 - to 50 percent [5].

Video link to the MHT model can be found [here](#)

416 Community Based Approaches to Identifying Policy Interventions and Building Capacity

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Abstract

Communities experiencing inequities are typically exposed to a complex set of unhealthy environmental conditions. Public health interventions often focus on a particular health determinant or outcome. These strategies may not be effective within the larger structural inequities experienced by many communities, and can even create unintended effects such as displacement, inequitable access to jobs, and new environmental health and safety hazards. Addressing health inequities through community investment requires a more thoughtful approach between health, transportation, economic development, natural resources and other infrastructure stakeholders, including communities and community-based organizations (CBOs). This presentation will describe two approaches to community participation and capacity building to strengthen meaningful community investments for health.

One approach draws from a community of practice of infrastructure, environment, and public health professionals and community stakeholders collaborating to better address health equity through infrastructure planning. It included a multisectoral workshop and tour of Atlanta infrastructure projects that have impacted health equity. In partnership with a community-based environmental health organization, it assessed capacity development for CBOs, and identified funding practices to increase collaboration between sectors and community stakeholders in order to integrate health and equity into infrastructure decision-making.

The other approach draws from an initiative to engage affected community members in healthy investment planning. This initiative resulted in convening a community health advisory group to assess the systemic inequities faced by their Atlanta neighborhoods, and identify leverage points that acted on multiple determinants of health equity. After identifying urban agriculture as a key intervention area that addresses healthy food access, job growth and entrepreneurship, environmental sustainability, social cohesion, and more, it engaged urban agriculture CBOs to further identify investment opportunities.

This session will contrast these approaches and discuss the ways that public health professionals, public agencies, funders, and other multisector partners can engage communities and CBOs to more effectively promote health equity. It will describe some ways that community participation and capacity building around public and private investments holds significant potential to bring a holistic community health perspective into sector-specific policies. Structural barriers to engagement will be addressed.

393 Environmental awareness in a brick-production community in Puebla, Mexico.

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Abstract

This proposal presents a case study of a rural community located in Cholula, Puebla in central Mexico called San Matías Cocoyotla (SMC). The main economic activity in SMC is artisan brick production with 230 brick kilns. Artisan brick production is responsible for CO2 emissions and deforestation since kilns need to reach around 1000 degrees C during 35 continuous hours to produce around 30,000 bricks. Air quality in the area is bad, it causes several respiratory problems among locals. However, people from SMC believe there is not a health problem related to artisan brick production. This work presents a strategy that intends to create social relationships between women and children from SMC, which will learn about air pollution, healthy housing, and environmental health through a series of knitting and drawing workshops. So far, women that have attended the knitting workshop, declared that it is a space where they feel relaxed and can talk freely about different topics. These type of approach to a rural community allow researchers to get close to people in order to discuss topics that can be sensitive, such as the pollution and health problems produced by their main economic activity.

360 Female-led work organizations and their territorial impact in Brazilian peripheral neighborhoods: achieving community health and wellbeing improvements, addressing environmental sustainability, and moving towards gender equity through economic female emancipation

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Abstract

This paper deals with the implications that female-led work organizations have on the territories where they are inserted when in Brazilian peripheral neighborhoods. Gender and territoriality are social markers of disparity that have deep effects on how cities are accessed: overlapping violence against women tends to maintain them in the domestic environment where they are overwhelmed with care work, and when they leave the domestic territory, streets are unsafe and jobs are underpaid. When women are from peripheral territories, there is also the social distancing that living far away from centralities with low or no income can cause, which also comes back as a impediment to accessing work.

The research that this paper refers to explores a case study of a women-led cooperative that was created in 1996 from a close relationship between the community and the participatory budgeting process in Porto Alegre. In this cooperative, women got to work with other women in a non-hierarchical structure, addressing environmental issues, outside of the domestic environment, but inside their own communities. These work conditions created the possibility of participation in community political struggles, access to education, economic-financial improvements to the community, participation in city life and access to urban spaces. All these transformations affect the territory where these women are inserted while they are acting on it, and at the same time, these effects help to strongly improve their health and well-being.

The ongoing research consists in interviews with the women from the cooperative, including the production of cognitive maps and ethnography driven in their neighborhood, in order to have a spatialized sociobiography of them. This sociobiography will make it possible to analyze the impacts that having an equitable work environment, and social-community roles have on the way they move around their territory and the city and how it impacts their health and wellbeing.

It also matters in this paper to analyze the relation between the territorial and health effects that occur in the community environment when women from peripheral territories of great cities, particularly in Porto Alegre - Brazil, have the possibility to work on self-employed cooperatives on their own communities.

344 Geographic and Racial Disparities in Heart Disease Mortality in Philadelphia

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Abstract

Geographic and Racial Disparities in Heart Disease Mortality in Philadelphia

Heart disease has been the leading cause of death in Philadelphia over the past decade, with minimal progress towards decline. Moreover, Philadelphia has experienced sizeable and persistent racial disparities in heart disease mortality rates, with non-Hispanic African Americans dying of heart disease at rates 40% higher than non-Hispanic White Americans in 2021. Given the high burden of heart disease mortality in Philadelphia – and the city’s high degree of racial residential segregation – it is essential to study geographic and temporal trends in heart disease, stratified by demographic factors like race and gender, to identify factors that may contribute to the disparities in heart disease mortality in Philadelphia, thereby allowing state and local health departments to better determine which interventions might be most impactful at reducing morbidity and mortality of heart disease and where they should be implemented.

In this study, we explore trends in heart disease mortality in Philadelphia census tracts by age, race, and sex beginning in 2010. For our analysis, record-level death data were obtained through the Pennsylvania Department of Health and population information was obtained from the American Community Survey. Tract-level heart disease mortality rates by age, race, and sex were estimated using a Bayesian statistical model that accounts for spatial and temporal dependencies and correlations between demographic groups. In doing so, we produce more reliable and precise estimates than the data alone would provide.

The findings of the analysis suggest that not only do rates of heart disease mortality differ geographically in Philadelphia, but so do the racial disparities. Results of this study will be published in a report in collaboration with the Philadelphia Department of Public Health, to inform targeted interventions for reducing heart disease mortality in Philadelphia.

306 Partnering with Private Clinics to Expand Access to Post-Partum Family Planning Services within the Kampala Urban Slum Areas

Mrs May Namukwaya, Mr. Baker Lukwago

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Abstract

Background: Over 60% of the population in Kampala, Uganda lives in slums, and only 2% of pregnant women who deliver in metropolitan areas receive immediate postpartum family planning (PPFP) services. Low uptake of PPFP contributes to high maternal mortality in Uganda, with a rate of 336 maternal deaths per 100,000 live births[1]. Targeted interventions are necessary to increase equitable access to PPFP services and improve maternal health outcomes.

Intervention: From October 2021 to March 2023, MOMENTUM Private Healthcare Delivery partnered with 40 health facilities affiliated with a private midwives’ association to provide quality PPFP within the Kampala metropolitan area. The approach

included strengthening the association's clinical capacity through training and mentorship, and utilizing human-centered design to develop innovative strategies for generating demand for PPFP services. Strategies included a facility-based saving scheme to address cost barriers to services, mapping of pregnant and breastfeeding women in the community for referral to PPFP services, integrating family planning with immunization services, and using recorded testimonials from PPFP users.

Results: A total of 12,915 women accessed PPFP services, of whom chose: IUDs (17%), implants (33%), injectables (44%), and oral contraceptives (17%). Supported clinics saw a 28% increase in the use of immediate PPFP compared to 3% increase in non-supported clinics within the same districts. Of the women who enrolled in the saving scheme and delivered (67 women), 64% chose immediate PPFP. Additionally, 28% of the 1,927 pregnant and breastfeeding women mapped in the communities obtained PPFP. More than 80 health providers were trained in PPFP service provision and person-centered counseling approaches using classroom and onsite coaching.

Program implication/lessons learned: Addressing provider capacity through training, onsite mentorships and person-centered approaches contribute to increased uptake of PPFP. Strong private health sector capacity and innovative demand creation strategies can address inequities in accessibility of PPFP health services in urban areas of Uganda.

[1] Uganda Bureau of Statistics (Ubos) Uganda Demographic and Health Survey 2016: Key Indicators Report. Kampala, Uganda and Maryland, USA: UBOS and Rockville; 2017.

297 Exploring Neighborhood Characteristics and Pediatric Violent Injury in Philadelphia

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Abstract

Community violence exposure (CVE) is associated with long-term mental and physical health outcomes among youth. Research regarding risk and protective factors for CVE often focuses on individual-level characteristics. However, use of neighborhood-level data is urgently needed to examine contextual factors and inform community-wide interventions to reduce risk of violence. The study objective was to use the novel Child Opportunity Index (COI) 2.0 to examine the relationship between pediatric violent injury, recovery needs, and neighborhood opportunity in Philadelphia.

The COI is a composite data source of neighborhood resources and conditions at the census tract level across 3 opportunity domains—(1) education, (2) health and environment, and (3) social and economic.

To explore associations between neighborhood-level characteristics surrounding a local pediatric level-1 trauma center, we linked census-tract COI indicators with data from 317 youth (ages 6-18) who enrolled in a hospital-based violence intervention program (HVIP) between 2018-2022 following injuries from interpersonal violence. We conducted Getis-Ord Gi* analysis to identify hotspots—census tracts with low child opportunity and high burden of violent injury. We compared the hotspot census tracts to non-hotspot tracts based on (1) number of program encounters and (2) number of post-injury recovery goals (number of discrete client-identified goals in domains including medical care, legal support, mental health care, and housing).

We identified 8 tracts in West Philadelphia as priority for low child opportunity and high burden of injury. Clients in hotspots (n=26) averaged 70.2 (95% CI: 39.5, 101.1) encounters, whereas those outside of hotspots (n=291) averaged 60.7 (95% CI 53.6, 67.7) encounters. Clients in hotspots had a mean of 11 (95% CI: 7.1, 15) recovery goals whereas those outside hotspots had a mean of 8.3 (CI 7.4, 9.1) goals. Though these differences in number of encounters and goals suggest possible differences between case intensity within and outside of identified hotspots, they did not reach statistical significance at p<0.05. Maps of the results illustrate variation in child opportunity and post-injury recovery goals (by quantity and domain) across West Philadelphia. These results highlight how neighborhood-level factors may influence recovery after violence and help inform services provided by HVIPs and similar community-based programs.

185 Urban-Rural disparities in routine immunization coverage among children aged 12-23 months in Pakistan: results from a national cross-sectional survey

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Abstract

Background: Pakistan has 1.2 million unimmunized children, ranking third in the world after Nigeria and India. The country has high under-five mortality rates of 65 per 1000 live births, with the majority of deaths caused by vaccine-preventable diseases (VPDs). This study examined disparities in immunization coverage among children aged 12–23 months across urban and rural areas, focusing on full immunization and Penta3 coverage.

Method: The analysis was based on data from a descriptive cross-sectional national household survey; the Third Part Verification Immunization Coverage Survey (TPVICS), conducted across Pakistan in 2022. TPVICS employed a stratified cluster sampling approach, designed to yield a sample representative at the district level. The sampling frame provided by the Pakistan Bureau of Statistics based on the Population and Housing Census 2017.

Results: Altogether, a total of 108,089 children aged 12-23 months from 106,732 households across the provinces and regions of Pakistan were covered by TPVICS. At the national level, excluding Azad Jammu and Kashmir (AJK) and Gilgit Baltistan (GB), 77% of children were fully immunized, and 84.4% of children received the Penta3 dose. Fully immunized coverage (FIC) was slightly higher in urban areas (78%) than in rural areas (76%). Similarly, Penta3 coverage was higher in urban areas (86%), compared to rural areas (84%). Children in the richest quintile were more likely to be fully immunized (85%) compared to those in the poorest quintile (57%). Similarly, a higher proportion of children in the richest quintile (91%) received the Penta3 vaccine compared to those in the poorest quintile (66%).

Conclusion: The immunization coverage rates provide a direction to strategize the progress needed to improve the vaccination rates in Pakistan. The country needs to outline the immediate and long-term actions to combat VPDs, such as escalating integrated immunization campaigns and outreach activities, provision of mobility support, and deploying behavioral interventions as a cross-cutting strategy to improve awareness and reduce misconceptions.

Key words: immunization coverage, Pakistan, national survey, vaccination, expanded program on immunization

249 Harnessing Collective Experiences for Urban Resilience Planning: An Approach by Asia Resilient Cities

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Abstract

Urban resilience is crucial in today's rapidly changing world, where cities face various risks and challenges such as climate change, natural disasters, and social and economic disruptions. Building resilience helps cities prepare for and adapt to these challenges, ensuring that they continue to function and thrive in the face of adversity. The USAID-funded Asia Resilient Cities (ARC) Project aims to enhance the resilience of four rapidly growing, diverse Asian cities vulnerable to such risks. The first step towards this goal is collaboratively defining problems and potential solutions with city stakeholders and residents.

In order to mutually define goals, opportunities, and a plan of work with city governments, ARC undertook a 13-week ARC co-creation process, which utilized a systems thinking approach. The process is evidence-based, participatory, and inclusive of all the major stakeholder groups in each city. The steps of this process produced a visual backbone for the project and involved developing a shared understanding of the city context; defining the best opportunities for engagement; and co-creating an actionable joint work plan. The process involved participatory qualitative data collection and analysis. Participants gained valuable systems thinking skills and capabilities along with the critical social infrastructure needed to maintain these efforts. Additionally, co-creation groups will be actively involved in the Plan-Do-Study-Act (PDSA) cycle and subsequent work planning, ensuring a collaborative and effective approach to building resilient cities.

The resulting systems map, work plan, and MERL plan will be used by both ARC and partner municipal government offices as a way forward for urban resilience work. This process will create an important, mutual, accurate understanding of the intersections of behaviors and structures that define politics and power; privilege and exclusion; and economic, social, and environmental risks and adaptations. ARC will work closely with stakeholders to adapt and refine the work plan and map as we gather new evidence and make progress. This continuous feedback allows ARC and the city to incorporate new information into our work and ensure it fits well within the overall system context.

518 Exploring The Relationship Between the Level of Socioeconomic Development And The Air Pollution In China Cities - Environmental Kuznets Curve Under Modern Context

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Abstract

This paper explores the relationship between the level of socio-economic development and air pollution in cities with the understanding of the validity and practical value of the Environmental Kuznets Curve (EKC) under the modern context. The results suggested that GDP, Population, Manufacturing Industry ratio, and Energy Intensity are most related to every type of air quality indicator, an invert-U-shaped correlation pattern is presented, while the level of correlation is not very strong, manifesting a limited practical explanation of the power of EKC. CO, NO₂, PM_{2.5}, and SO₂ can be best described by the socioeconomic variables. Generalized air quality indicator AQI cannot be well-described by the socioeconomic variables. To answer the question of whether the EKC can explain this relationship between air pollution and socioeconomic development levels, 351 cities in China are analyzed due to the fast-developing nature and the tension between urban dwellings and the natural environment in China. Data on GDP, Population, Urbanization rate, Industry structure, Employment structure, Electricity Consumption, Energy Intensity, Road Length, and Road Density are collected to represent socioeconomic developments and atmospheric pollution was used as a proxy representing environmental pollution, Air Quality Index (AQI), NO, NO₂, CO, CO₂, SO, SO₂, PM₁₀, and PM_{2.5} are used as the main indicators. Quadratic Regression model and Moran I analysis are applied to understand the relationship between the dependent and independent variables, both statistically and spatially. The limited capability of EKC in describing the relationship between air quality and socioeconomic variables can be explained that the environmental improvements and the reduction of total carbon emissions in some cities and regions are accomplished by moving heavy polluting industries to less developed areas, instead of by improving production techniques, reducing the pollution elements during the production processes, and using clean green energies, such as solar energy, tidal energy, and nuclear energy, etc. More studies could be conducted to further investigate the relationship between socioeconomic factors and air pollution to better guide our city to a more sustainable and greener future.

198 Exploring Factors Influencing Access to Green Space in a Disadvantaged Community: Implications for Health Equity

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Abstract

Background

Urban green open spaces, such as parks, offer a common area for physical activity (PA) that can benefit a diverse range of individuals and improve their overall health. However, research indicates that the availability of green space is notably lower in areas with a higher proportion of low-income residents. This unequal distribution of urban green space may contribute to health inequities, particularly among vulnerable communities.

Aim

This study aimed to explore supply and demand factors influencing access to green space in a locational disadvantaged community and to identify opportunities for future action.

Methods

The Centre for Health Equity, Training, Research and Evaluation (CHETRE) adopted and implemented a mixed methods approach, using the confluence model, Quality of Public Open Space Tool (POST), in conjunction with consultation consultations, to identify factors affecting green space access and priorities for improvement in a locational disadvantaged community.

Findings

Eleven parks were audited in the area, with eight having walking tracks, six with sporting fields, and six with children's playgrounds, showcasing supply strengths. All parks had nearby bus stops, with most having seating and lighting, and all had trees. While residents were content with the current supply of greenspace, the quality was subpar. Significant barriers to green space use included uninteresting playgrounds, overgrown grass, poor footpath quality, inadequate shade, and the absence of public toilets and water fountains.

Conclusion

Assessments do not need to be costly or complicated to yield useful information for improving green spaces in disadvantaged communities. The adoption and use of the confluence model offers a structured approach encompassing physical, socioeconomic, and cultural factors. However, its limitations in evaluating the complex relationships between supply and demand factors and green space use and benefits need consideration. Improving green space quality in disadvantaged communities can reduce access barriers and health inequities. Therefore, practitioners, researchers, and policymakers must prioritize green space quality as much as quantity. This study provides valuable insights into the factors affecting access to green space in disadvantaged communities and can inform future action to promote health equity.

405 Patient's Preference for Outpatient Care Providers in Urban Areas of Bangladesh: Evidence from a National Survey

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Abstract

Background: Reforming the urban healthcare system is essential to efficiently deliver need-based healthcare services to the rapidly increasing urban poor population. Such reforms of healthcare need to emphasize the opinion of patients in co-designing services to ensure that healthcare services can be accessed effectively by the urban population in a timely and low-cost way. Hence, it is important to identify the preference of urban population when choosing healthcare providers. This study aimed to assess patients' preferences for outpatient-care providers in urban areas of Bangladesh.

Methods: We analyzed a sample of 9,432 patients who received outpatient-care in urban areas. The sample was drawn from the latest available Household Income and Expenditure Survey:2016-2017. A multinomial-logit model was used to analyze the impact of various factors on patients' choice of healthcare provider where the dependent variable was the main reasons for choice of provider and independent variables included patients' socioeconomic and illness-related characteristics.

Results: The most common reasons for choosing outpatient-care providers were closeness to facilities (35%), quality of treatment (25%), affordability of services (21.6%) and availability of doctors (10.8%). Patients with diarrhoea had a significantly higher preference for healthcare affordability (relative risk ratio [RRR]=1.64; 1.10–2.43) and short distance (RRR=1.64; 1.07–2.51) compared to quality of healthcare services. Patients with emergency conditions, such as injury/accident (RRR=1.81; 1.00–3.27) and heart disease (RRR=1.95; 1.00–3.78) were more likely to prefer the availability of doctors. Patients who received health care from a private provider had a lower preference for affordability (RRR=0.26; 0.20–0.35) over the quality of treatment when compared to patients who went to public providers. In contrast, patients who received healthcare services from pharmacies or dispensaries were more likely to prefer nearer facilities (RRR=3.42; 2.74–4.26) or affordability of healthcare services (RRR=3.82; 2.98–4.89).

Conclusion: Understanding and accommodating patient preferences in healthcare delivery system is essential for ensuring equitable access to healthcare in urban areas, especially in limited resources settings. The findings will guide the policymakers in reforming urban healthcare service delivery systems that are responsive to patient needs and may improve access to affordable quality healthcare services.

168 Assessing the types, mechanisms and effects of collaborative partnership in service delivery between formal and informal health providers in urban slums in Nigeria

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Abstract

Urban slum dwellers usually have poor access to quality care due to inadequate facilities and trained health providers in such locations. Informal health providers (IHP) represent a significant portion of and bridge gaps in healthcare delivery systems in urban slums in Nigeria. Collaboration between IHPs and formal health institutions is important for strengthening urban health system. The paper examines types, mechanisms of engagement, and effects of the relationship existing between IHPs and formal health systems on service delivery in urban slums in Nigeria.

The study was undertaken in Anambra and Enugu states, Nigeria. We employed a qualitative research method to explore relationships between IHPs and formal health systems and their effect on service delivery in eight urban slums. Sixty stakeholders including policy-makers/implementers, formal providers, and IHPs were purposely selected and interviewed. Data were collected using in-depth interview guides and analyzed thematically using NVivo.

Collaborative relationships either currently existing or previously existed between the formal health system and IHPs. These include (i) referral of clients between IHPs and formal providers for immunizationservices, purchase of medicine and treating persistent illnesses, (ii) involvement of IHPs in immunization/other services outreaches e.g. sharing insecticide-treatednets to

the targets groups, (iii) training for IHPs (traditional birth attendants) on danger signs of pregnancy/childbirth to improve quality of maternity care, case definitions of ailments to patent medicine vendors e.g., measles to reinforce knowledge on scope of practice and approved-medicines list. The mechanism of engagement between IHPs and formal health system in service delivery is somewhat not formally instituted/recognized. There is no system in place for documentation of collaboration between the two groups of providers (e.g. signing of memorandum-of-understanding) and the collaboration is not regulated. Respondents perceived services provided by IHPs and the collaborations to have contributed significantly to improving the quality of care (safety, timeliness, relevance) and access (affordable, acceptable) to quality healthcare in urban slums.

The study underscores how effective these relationships have contributed to improved access to quality healthcare in urban slums. However, the mechanism of engagement between the providers is not formally institutionalized. Hence, the need to establish and strengthen such collaboration to enhance quality service delivery.

277 Examining the complexities of 'formalizing' informal health providers to advance urban health systems that are more inclusive and pro-poor

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Abstract

Linking informal health providers (IHPs) with the formal urban health system is desirable and would contribute to ensuring better access to quality essential health services for the urban poor and other vulnerable groups. However, the official or formal recognition of IHPs by policymakers, and their inclusion in the urban health system (that is 'formalizing') could be undermined by institutional and political complexities. We examined these complexities from the perspectives of policymakers, health providers (formal and informal), and community representatives in two south-eastern Nigerian states.

Data was collected through in-depth interviews with 76 key stakeholders at the state level and across eight informal settlements (urban slums). The transcripts were coded inductively (using a predetermined coding framework). Six themes that represent the complexities of formalizing informal health providers (IHP) were identified through deductive analysis.

These are, (i) Due to weak regulation and lack of training, IHPs deliver substandard (and oftentimes poor) quality of healthcare to the urban poor; (ii) IHPs will only accept formalization that does not significantly disrupt the status quo of lax supervision and regulation, whereas stakeholders in the formal urban health system propose formalization that relies on effective regulation; (iii) IHPs compete with primary health centers for clients, and are therefore perceived as 'unworthy' rivals by the formal health professionals in urban slums; (iv) Supportive government policies for task shifting and task sharing with IHPs exist but there are no provisions – financial and human resources – to support implementation, scale-up and sustainability; (v) IHPs crave the formal recognition and branding that may accompany formalization, but fear they may fall short of the increased demand/expectation for better quality of care; (vi) Communities desire the improved access to quality healthcare that formalization portends but they do not trust the public health system to maintain accessible and affordable healthcare thereafter.

Interventions for linking IHPs into the formal urban health system should be designed with careful attention to these complexities. Aligning stakeholders' interests through effective engagement and collaboration could unravel these complexities and ensure that the formalization of IHPs succeeds and contributes to equitable access to quality healthcare in urban settings.

76 Together We Will: Grants and Technical Assistance for Grassroot Change Efforts

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Abstract

The Indiana Department of Health (IDOH) received funding from the Centers for Disease Control and Prevention (CDC) to help reduce the burden disproportionately experienced by racial and ethnic populations as a result of the COVID-19 pandemic. Recognizing that this funding needed to get directly to those who were working at the grassroots level, IDOH's Office of Minority Health implemented the "Together We Will" grant and technical assistance initiative. The aim was to quickly infuse \$7 million in grant funding directly into community-driven initiatives that addressed health inequities for disparate and marginalized populations of color and indigenous people.

The reality is that while local organizations are usually well intentioned, many are not equipped to develop strong grant proposals or to manage larger-scale projects. Since 2021, TechServ has been developing and facilitating a process that includes grant funding review, technical assistance for grant writing, and progress report review targeted directly at community organizations. Together We Will is about funding ideas for the community by the community. Local organizations can apply for funding consideration in 8 areas, including: Environmental Justice, Substance Use Disorder, COVID-19 Vaccine Hesitance, Violence, Access, Mental Health, Structural and Systemic Barriers, and Infant and Maternal Mortality.

One key difference from traditional granting efforts is that the organizations who submit grant applications that fail to reach a fundable score are referred for free technical assistance, given support in improving their proposal, and encouraged to resubmit their application. This poster will highlight the process, share success stories, and present challenges that have emerged.

77 A PLACE for Healthier Living: Co-producing the Future at the ROCK Community Center

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Abstract

The Rock Community Center for Youth and Children is a community-facing project of Jewel Human Services at Eastern Star Church. New building construction of a two-story, 60,000 square-foot, state of the art facility was followed by a soft opening in the summer of 2022, and an official opening the following September. The facility was built to house Bright Stars Programming designed to enhance community, economic, educational, and workforce development opportunities in a safe environment in this low resourced community.

The Arlington Woods Neighborhood and the greater 46218 community continue to experience (1) high adverse childhood experiences due to poverty; (2) increased health risk for long-term chronic conditions due to lack of access to healthy foods and food insecurity; (3) decreased talent pipeline with a risk of employment leaving the region; and (4) the need for creative and innovative solutions that can only be driven from within the community to transform the community.

With the mission "to develop whole, healthy resilient youth and families" and a vision "for our youth to be the future leaders of Indianapolis," the groundwork for Bright Stars programming began evolving as the building was being constructed. Using an evidence-informed approach, we created a foundation on which to build the social environment and model of care that was based on co-production principles, engaged/participatory practices, and a focus on assets and strengths.

Community-building is always challenging, and the work we are undertaking is just in its beginning phases. In this presentation, we will highlight the evidence that informed our work, the model of care that has evolved, early successes and challenges, the plan for evaluation, and future aspirations.

Breakout Session 30: Food, Nutrition, & Resilience

15:00 - 16:15 Wednesday, 8th November, 2023

Location Home Park

Presentation type Oral

318 A cross-sectional analysis of the associations between historical discriminatory mortgage lending, food environment, and dietary inflammation

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Abstract

Background: Structural racism describes ways in which societies foster racial bias and discrimination through institutions. One form of structural racism is redlining that occurred in the 1930s, when the Homeowners Loan Corporation (HOLC) graded urban neighborhoods from A-“best” to D-“hazardous,” indicating the risk for loan approval based on the neighborhood’s racial composition. Previous research indicates that historically “hazardous” neighborhoods may be associated with modern-day spatial patterning of race-based deprivation of resources. However, there has been limited literature elucidating the role of redlining in producing race-based inequities in dietary outcomes and how these inequities may be further driven by the food environment.

Methods: We conducted a cross-sectional analysis of the national REasons for Geographic And Racial Differences in Stroke (REGARDS) cohort. Our sample included 3,602 Black and White adults aged ≥45 years, enrolled between 2003 and 2007 from the contiguous US, and our study outcome was the Dietary Inflammation Score (DIS) measured at baseline. We dichotomized DIS into two categories (‘high’ and ‘medium/low’) at the 75th percentile, with high DIS indicating greater pro-inflammatory exposure. We defined food environment at the US census tract level as the percentage of supermarkets (out of all food stores) and the percentage of fast-food restaurants (out of all restaurants). We used HOLC residential security grades and areal weighting to identify historically redlined neighborhoods using 2010 census tract boundaries.

Results: The analysis included participants from 2,091 unique tracts from the contiguous US. Participants with high DIS resided in tracts with a mean historic redlining score of 3.13 ± 0.74 while participants with medium/low DIS resided in tracts with a mean score of 2.84 ± 0.83 ($p < 0.001$). The mean percentage of supermarkets did not differ for participants with high versus medium/low DIS (6% for both, $p = 0.29$), but participants with higher DIS resided in tracts with a higher percentage of fast-food restaurants (28%), compared to those with medium/low DIS (25%) ($p < .01$).

Conclusion: Our preliminary results suggest that food environment and dietary inflammation may be related to a past indicator of structural racism (redlining).

469 Determinants and equity of food insecurity among pregnant women in urban Nigeria

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Abstract

Background: Despite being essential for improving pregnant women's health and pregnancy outcomes, the socioeconomic disparities in food insecurity among pregnant women in urban areas of sub-Saharan Africa are under-studied. This study assessed the factors associated with food insecurity and the socio-economic inequalities in food insecurity among pregnant women in urban Nigeria.

Methods

Data from the 2018 Nigeria Demographic and Health Survey were used in this study (n = 1,515). We included only women residing in urban areas who were currently pregnant at the time of the survey. The outcome variable was food insecurity defined as minimum dietary diversity (consumption of less than 5 of 10 food groups). The predictor variables were women's socio-demographic and household characteristics. We adjusted the data for sampling weight, stratification, and cluster sampling design. The association between the outcome and predictor variables was evaluated with the test of differences in proportion (Pearson's chi-square statistics) and complex sample logistics regression at a significant p-value < 0.05. Four equity measures were calculated: equity gaps, ratios, concentration curves and indices.

Results: The prevalence of food insecurity among urban pregnant women was 38.7%. Age 15-24 (AOR: 1.84, CI: 1.22-2.79, p = 0.004), residing in the South-east region (AOR: 2.03, CI: 1.32-3.11, p = 0.001), having no formal education (AOR: 2.09, CI: 1.22-3.56, p = 0.007), being in the richer quintile (AOR: 1.81, CI: 1.07-1.97, p = 0.027), and having a big problem getting medical help (AOR: 1.57, CI: 1.16-2.13, p = 0.003) increased the likelihood of food insecurity among pregnant women in urban Nigeria. The equity gap in food insecurity among pregnant women is -19.4%, while the equity ratio is 0.554. The concentration index of minimum dietary diversity is positive and lies below the line of equality (concentration index = 0.0489).

Conclusion: Food insecurity among pregnant women is high and pro-poor in urban Nigeria. The study highlights the social determinants that can be considered in interventions to improve food security among pregnant women in urban areas in Nigeria.

434 Socioeconomic Deprivation Index for studies on Food Insecurity in vulnerable urban territories in Brazil

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Abstract

In Brazil, food insecurity is deeply intertwined with historically structured inequities that are produced and reinforced by unequal access to health, education and resources, concentration of land and labor exploitation. This leads to persistent disparities in access to nutritious food, the exacerbation of food insecurity, hunger, and poverty. Although the relationship between race, gender and class inequities and food insecurity has been documented, health research has largely failed to adequately operationalize the multiple and complex dimensions of socioeconomic vulnerability in relation to food insecurity. This study aimed to create an Index of Socioeconomic Deprivation to be used in urban health research on food insecurity in cities of the Global South. The Index was created based on an adaptation of Bittencourt et al. (2013), and is composed by 14 variables including income, mother's education, water supply, garbage collection, overcrowding, and presence or absence of a refrigerator in the household and other home appliances, categorized into three dimensions: income, education, and housing conditions. We applied the Index to the "BH-Viva" household survey on urban transformations and health (Friche et al 2015) carried out in Belo Horizonte, Brazil. In Serra 553 complete questionnaires were applied and 663 in Cabana. Each variable was categorized into "favorable" and "unfavorable" for food security, and the Deprivation Index was defined by how many unfavorable indicators were present in a household, with a count of 4 and less being considered favorable for food security. According to the Deprivation Index, in Serra 94.22% of households were in a favorable situation and 5.78% in an unfavorable situation, and in Cabana 92.82% of households were in a favorable situation and 7.18% in an unfavorable situation. The Index of Socioeconomic Deprivation proved to be a useful instrument in identifying socioeconomic vulnerabilities relevant to food insecurity. It further makes a contribution to the much-needed research on food insecurity in cities of the Global South by

considering poverty, lack of infrastructure and public services, informal economy, and housing conditions that specifically shape vulnerability to food insecurity in cities of the Global South.

42 Barriers to accessing healthcare among women in urban West Africa: a multi-level modelling

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Abstract

Background: Leaving no one behind remains a key concern of universal health coverage globally, particularly for the urban poor in sub-Saharan Africa. This study, therefore, assessed the individual and contextual factors associated with barriers to accessing healthcare among women in urban areas of West Africa.

Methods: The study was conducted among 32,971 women aged 15-49, using data from the most recent demographic and health surveys in 13 West African countries. The outcome variables were four barriers to healthcare access including permission, money, companionship, and distance from a health facility. If a woman faces one of these barriers, she is considered to have a barrier to accessing healthcare. The explanatory variables were women's individual and household characteristics. Descriptive and complex sample logistic regression was conducted. The fixed effects results of the regression were presented using adjusted odd ratios at p-value < 0.05.

Results: About 48.8% of urban women had at least one form of barrier to accessing healthcare. Specifically, 11.7%, 13.7%, 21.0% and 43.1% of women had problems with companionship, permission, the distance to health facilities, and money correspondingly. Residing in Ivory Coast (AOR=1.26, CI:0.97-1.64, p<0.001), having no education (AOR=1.58, CI:1.34-1.86, p<0.001), primary education (AOR=1.53, CI:1.30-1.81, p<0.001), secondary education (AOR=1.30, CI:1.12-1.51, p=0.001), not reading a newspaper (AOR=1.25, CI:1.07-1.45, p=0.005), not watching television (AOR=1.18, CI:1.08-1.29, p<0.001), being poorest (AOR=2.89, CI:2.33-3.59, p<0.001), poorer (AOR=2.69, CI:2.22-3.08, p<0.001), middle (AOR=2.01, CI:1.79-2.24, p<0.001), richer (AOR=1.70, CI:1.56-1.85, p<0.001), multiparity (AOR=1.10, CI:1.02-1.19, p<0.001), grand multiparity (AOR=1.23, CI:1.12-1.34, p=0.003), not covered by health insurance (AOR=1.74, CI:1.49-2.03, p<0.001) increased the odds of facing a barrier to accessing healthcare. Women who do not participate in deciding their healthcare (AOR=0.90, CI:0.83-0.98, p=0.012), and those residing in Burkina Faso, Gambia, Liberia, Nigeria, and Niger have lower odds of facing barriers to accessing healthcare.

Conclusion: The study highlights the social and demographic factors that significantly predict barriers to healthcare access in urban West Africa. The factors can be incorporated into health financing policies and interventions intended to achieve universal health coverage in the setting.

246 An Overview of Urban Resilience Literature Review: Moving Beyond Fragmented Sector-Based Approaches

Amanda Pomeroy Stevens¹, Lauren Azmon¹, Micaela Arthur²

¹Asia Resilience Cities, JSI, Arlington, USA. ²USAID, Washington D.C., USA

Abstract

In the face of growing global uncertainty, the term resilience and related frameworks have gained popularity over the past decade. These frameworks aim to build resilience against shocks such as climate change, natural disasters, social upheaval, and

some focus specifically on urban areas. However, there is a lack of coherence in the definition of resilience, and many frameworks focus on resilience to one specific type of shock or sector-based impacts (including health).

The USAID-funded Asia Resilient Cities project reviewed over 20 resilience frameworks, tools, and checklists published since 2010 either globally or in Asia to explore the current state of the literature on urban resilience. 16 of the reviewed tools were theoretical frameworks and 12 were tools/checklists. We only included those that were aimed at multiple sectors (2 focuses included urban as either a component or the primary geographic focus and were prefaced with the idea that the framework/tool/checklist would be able to be used in a practical setting (eg beyond academia).

The literature review revealed a lack of coherence in the definition of resilience, and within urban frameworks they often did not explain why this approach might be different than in non-urban areas. While many frameworks incorporate aspects of systems thinking, multisectorality, and the idea of maintaining normalcy or recovering quickly after a shock, they tend to focus on resilience to a specific type of shock or defining sector-based impacts. Few specifically address learning or the inclusion of poor and vulnerable populations in their definitions of resilience. When we looked for empirical evidence to validate these frameworks, we found a few examples around ecosystem resilience. More empirical research is required to fully test these frameworks' efficacy in cities and other complex systems.

The findings from the ARC resilience framework literature review emphasize the need for adopting a coordinated and integrated approach to urban resilience planning across governments and partners which can capture interconnections and interdependencies present within urban systems. By adopting evidence-based frameworks, cities can build resilience to a range of shocks and ensure that they are better prepared for the challenges of the 21st century.

513 Fostering Sense of Community and Healthy Communities: Exploring Participatory Planning Processes for Cultural Diversity in Aotearoa New Zealand

Dr Yiwen Cui¹, Dr Morten Gjerde², [Dr Bruno Marques](#)¹

¹Victoria University of Wellington, Wellington, New Zealand. ²Norwegian University of Science & Technology, Trondheim, Norway

Abstract

In the island nation of Aotearoa New Zealand, the reality of cultural diversity brought about by the history of migration and increased globalization places more diverse demands on social and cultural frameworks. These diverse demands in relation to different cultures represent a range of community interests and needs, which participatory planning processes can respond to and draw out for representation in public open space planning and design, thereby promoting healthy, active, and equitable communities. It is also the community participation that is trying to create a higher sense of community and enhance health/well-being for a wider range of population and ethnicity. Society should not only accept and maintain this cultural difference; it is also necessary to effectively incorporate these different perspectives from multiple ethnic groups into the community participation process.

This research aims to investigate preferences for different participatory planning processes among New Zealand European, Māori, Chinese, and Pasifika community members, with the objective of identifying the most effective approaches. To achieve this, a series of focused discussions were conducted through independent focus groups representing each ethnic group. Through these discussions, the study explored participants' experiences with participatory planning processes and their outcomes, while also examining the influence of cultural backgrounds on their preferred methods of community participation. This focus on equity ensures that health-promoting strategies are tailored to the specific cultural contexts, promoting fairness in the distribution of resources and opportunities for health and well-being. By analyzing and discussing the similarities and differences in preferences across the different ethnic groups, this research aims to provide insights into effective strategies for encouraging a sense of community in Aotearoa New Zealand.

This research will shed light on the critical role of participatory planning processes in creating healthier, more active, and equitable communities. It will emphasize the need to embrace cultural diversity and effectively incorporate the perspectives of

multiple ethnic groups into community participation processes. Ultimately, the study's findings will offer practical guidance for policymakers, planners, and practitioners in fostering healthy, active, equitable, and vital communities as integral components of government policies and community development practices.

Breakout Session 31: Climate Change

15:00 - 16:15 Wednesday, 8th November, 2023

Location Centennial

Presentation type Oral

396 Follow up of heat illness presentations to emergency departments in western Sydney: surveillance for environmental, personal and behavioural risk factors

Dr Stephen Conaty BA, MBBS, MPH¹, Dr Sayontonee Ghosh MBBS, MPH², Dr Khizar Ashraf MBBS, MPH¹, Karin Taylor³, Dr George Truman BSc(Hons), MPH⁴, Helen Noonan⁵, Mithilesh Dronavalli MBBS, BMedSc, MBIostat, MPhil⁶, Bin Jalaludin MBBS, MPH, PhD²

¹South Western Sydney Local Health District, Sydney, NSW, Australia. ²UNSW, Sydney, NSW, Australia. ³Illawarra Shoalhaven Local Health District, Wollongong, NSW, Australia. ⁴Nepean Blue Mountains Local Health District, Sydney, NSW, Australia.

⁵Western Sydney Local Health District, Sydney, NSW, Australia. ⁶Sydney Local Health District, Sydney, NSW, Australia

Abstract

Objective

To pilot enhanced surveillance to describe environmental, personal and behavioural risk factors for people presenting to emergency departments with heat illness.

Methods

We conducted a retrospective case-series and telephone interview study of people presenting to emergency departments across South Western Sydney, Western Sydney and Nepean Blue Mountains Local Health Districts over the 2017/18 and 2018/19 summer periods (1 December to 28 February) with heat illness. We used the Public Health Rapid Emergency Disease Syndromic Surveillance (PHREDSS) 'heat problems' syndrome to identify persons with heat illness and medical records to find contact details. We developed a detailed questionnaire instrument to guide the telephone interview.

Results

There were 129 individuals presenting with 'heat problems' (57 in 2017/18 and 72 in 2018/19). The median age was 44 years (range 1-89 years). Most attended hospital via the NSW Ambulance Service (58%) or private car (40%). 53% were in triage category 3, 27% in category 4 and 16% in category 2. The main supplementary codes were heat exhaustion (35%), heat syncope (39%), and heat stroke (30%). The majority were able to be discharged from the emergency department after completing treatment (73%), with 21% requiring admission. 38 follow-up interviews were completed (29% response rate). Almost all were exposed to heat outside their own home environment: 11 (29%) were engaged in paid work, 5 (13%) outdoor housework, 10 (26%) outdoor recreational activities.

Conclusion

We found an active working or middle-aged group with a clear history of heat exposure mainly in an outdoor environment engaged in work or recreation. We collected extensive home and environment risk factors, but most people were not in their home when exposed.

Key points

- People presenting with 'heat problems' to emergency department were an active working or middle-aged group exposed mainly through work or outdoor activity. Specific messaging may be needed to modify behaviour.
- Older people exposed in their home environment were not identified. Further work will be required to identify if this group is missed.
- There may be too few people with heat problems to identify risk factors in the home or built environment for surveillance or intervention.

377 The gap between public's low-carbon awareness and behaviour in the view of low-carbon city transformation in China

Yan Wu, Prof. Dr Pim Martens, Prof. Dr Thomas Krafft
Maastricht University, Maastricht, Netherlands

Abstract

Background: Responding to global climate change is not only a national responsibility but also an individual responsibility and very much depends on societal participation and acceptance. As the increase of extreme weather and global warming, more people are realising the impact of climate change on their life. However, there is a gap between awareness and climate action. Low-carbon city transformation requires the development of low-carbon production and low-carbon consumption, as well as saving energy towards sustainability. Reducing carbon emissions also requires individuals to change their behaviour and lifestyle. Despite the efforts invested in analyzing low-carbon conception and urban transformation, there is still insufficient research on citizens' low-carbon attitude and lifestyle in China.

Approach and Method: This research adopted purposive sampling technique to conduct interviews with 36 participants based on the context of low-carbon city transformation from stakeholders perspective in China. All of these participants are stakeholders from different sectors and industries involved in low-carbon city transformation in China, who are government officer, company managers, professors or researchers, reporters, and managers in NGOs, and residents. The interview data was analysed through ATLAS.ti 22.2.0.

Results and Discussion: There are four main results from our research: (1) People are more familiar with terms such as smog, heatwaves, and waste sorting, their understanding of low-carbon is often limited to the concept or impression of the term (2) The use of big data algorithms on social medias can influence whether the public will receive recommendations for low-carbon content, which in turn affects their level of concern about low-carbon issues; (3) The sense of limited ability and a lack of trust in collective action affect public to taking action on climate change; (4) Public's participation in low-carbon actions can be strengthened through reward or punishment mechanisms, but this requires reasonable policy-making and cooperation from stakeholders.

The research combined with planned behaviour theory indicates that public low-carbon awareness in China has significantly improved over the past decade. However, a deeper understanding of low-carbon concepts is still needed among the public.

407 Impact of Heat Waves on Urban Health in the Four Major Metropolitan Cities in India

Mr Sk Karim PhD Scholar
International Institute for Population Sciences, Mumbai, Maharashtra, India

Abstract

Background: Climate change is arguably the most alarming global concern of the twenty-first century, particularly due to the increased frequency of meteorological extremes, e.g., heatwaves, droughts, and floods. Cities are becoming hotter day by day because heat is trapped near the earth's surface due to a decrease in green cover, rapid urbanization, and concrete structures. Heatwaves have claimed more lives in India than other natural hazards, with the exception of tropical cyclones (IMD) from 1961-2020.

Objective: To examine the association between heat waves and population health in the four major cities in India.

Data Source & Methodology: This study analyses heat waves and heat patterns in the four major cities (Delhi, Kolkata, Mumbai, and Chennai) using 20 years of data from 2000 to 2020 during the summer season. We used daily maximum temperature, relative humidity, wind speed, and solar radiation datasets for the above-mentioned period in this study. To understand the episode of a heat wave, we have used the 95th percentile method. Furthermore, we have also used Humidity Index (HI) to evaluate the degree of discomfort and the Universal Thermal Climate Index (UTCI) to categorize the level of heat stress.

Results & Findings: The analysis indicates that the number of heat wave events in the Delhi region is 26.3%, 31.6%, and 63.2% higher than Kolkata, Chennai, and Mumbai regions, respectively. The risks of extreme heat stress and dangerous-heat stroke events in the Chennai region during heat wave periods are higher than that experienced in other cities because of high temperatures with higher relative humidity values. The risk of extreme heat stress is lower in Delhi because of lower relative humidity than in other metropolitan cities. The likelihood of experiencing great discomfort during heat wave periods in Kolkata city is higher than that experienced in other metropolitan cities in India; however, during non-heat wave periods, the probability of extreme discomfort is higher in Chennai.

Conclusion: The findings could provide valuable information to people from various disciplines like Climate scientists, landscape designers, architects, and all relevant stakeholders to develop a heatwave action plan against adverse heat stress.

129 The Assessment of the Intra-Urban Vulnerability to Heat Waves Based on the 15-Minute City Framework

Dr. Natalia Shartova¹, Elizaveta Mironova², Dr. Mikhail Grishchenko², Dr. Mikhail Varentsov²

¹Higher School of Economics, Moscow, Russian Federation. ²Lomonosov Moscow State University, Moscow, Russian Federation

Abstract

The synergies between heat waves and urban heat islands could affect the intra-urban population vulnerability that is a crucial factor for developing effective heat prevention strategies. We performed the intra-urban vulnerability assessment during two heat waves in Moscow (Russia) in June and July in 2021. Moscow is a densely populated city with a symmetrical, almost elliptical shape within the Moscow Ring Road boundaries. Although it inherited the Soviet-era style of urban planning, the city is currently undergoing active redevelopment. Due to its location on the plain and persistent urban heat island, Moscow is particularly vulnerable to heat waves.

First, we used a bioclimatic index, Physiologically Equivalent Temperature (PET), and COSMO regional climate model to assess intra-urban heterogeneity thermal stress with high spatial resolution of 500 m. Second, we considered vulnerability framework in terms of relationships among three key concepts: “exposure,” “sensitivity,” and “adaptive capacity”. Lastly, we adopted the concept of 15-minute city as a territorial unit to evaluate the intra-urban heat impact and spatial patterns. However, the lack of the economic, social and demographic data on individual or community level in Moscow make it difficult to use indicators of population sensitivity. The social stratification of Moscow was assessed through the means of such an indirect income parameter as the number of service facilities of the premium business model. The adaptive capacity of the urban environment was assessed through healthcare facility proximity and green space availability.

The population-weighted June PET indicator takes the highest values in the center of Moscow, with the high value area clearly expanding in the southeast and northwest directions. In the outskirts of Moscow, average population-weighted PET in June can be as low as 25.3 °C, while in the central districts of Moscow, it can reach up to 30.2 °C. At the same time, the heat wave exposure shifted in July in the southeast direction. Despite the different spatial patterns of heat waves, the most vulnerable areas were in the central part of the city with a shift towards the east direction. The use of 15-min walkability units could give more detailed information for urban policies.

445 Climate Change and Health in Latin America: A Systematic Assessment of Evidence Gaps and Emerging Policy Questions

Katherine Indvik¹, Anne Dorothée Slovic², Amanda Silva Magalhães³, Martha Herrera⁴, Karla Fabiola Rangel⁴, Francisco Canto⁴, Josiah Kephart¹, Roxana Valdebenito⁵, Hansel Ochoa-Montero⁶, Vanderlei Pascoal de Matos⁷, Gabriel Carrasco Escobar⁸, Olga Lucia Sarmiento⁶, Tonatiuh Barrientos⁴, Alejandra Vives⁵, Waleska Caiaffa³, Fernanda Kroker⁹, Ana V. Diez Roux¹

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Abstract

Evidence of the health impacts of climate change in Latin America remains limited, and health considerations are rarely included in climate related policymaking and planning across the region. In-depth documentation of existing evidence and specific gaps is required to support health and climate planning and policy making and to inform future research priorities.

We performed a systematic literature review to identify evidence of the impacts of climate change on health in Latin America and specifically in Latin American cities. We searched for peer-reviewed research studies published in English, Spanish, or Portuguese up until January 2023 and available within three electronic databases: MEDLINE (via Ovid), SciELO, and Embase. Of 2,400 unique records identified, 145 provided an explicit quantification of the health impacts of climate change in Latin America and were included for review. Our reviewer team extracted content related to specific climate exposures and health impacts, as well as information on authorship and funding sources, study setting, design, methods, and data sources.

We will present the most frequently studied climate exposures and health outcomes, the temporal and geographic distribution of publications, their documentation of impacts in urban areas, and the explicit identification of vulnerable populations within the context of specific exposures and outcomes. We will describe studies' methodological approach to quantifying health impacts, data sources, and data availability. Finally, we will present the geographic distribution of available evidence, which academic disciplines are represented within this evidence base, and patterns of multidisciplinary and multi-country collaboration.

This review confirms the relative lack of published evidence of the health impacts of climate change in Latin America. Though the volume of research being produced has increased over time, peaking in 2020, the overall body of evidence explicitly documenting and quantifying specific health impacts remains limited. Documenting the distribution of research to-date may shed light on the climate exposures, health impacts, and areas that have received the most attention to-date, and ways researchers and policymakers can advocate to shift these priorities.

325 Status of NCDs in Urban Areas of Bangladesh

Fatima Tuz Zahra Research Assistant, Dr. Shamim Haider Talukdar Chief Executive Officer, Shuhail Hussain Research Assistant, Ehsanul Kabir Nahid Research Assistant, Ummay Farihin Sultana Sr. Research and Knowledge Management Officer Eminence Associates for Social Development, Dhaka, Bangladesh

Abstract

Background: Despite medical intervention, NCDs are non-infectious, non-transmissible, and often chronic. In urban Bangladesh, NCDs account for 67% of annual mortality as well as more than half of the disease burden. Bangladesh's rise in non-communicable diseases (NCDs) is ascribed to urbanization, lifestyle changes, and Western diets. This literature review addresses non-communicable diseases (NCDs) in urban Bangladesh and their main causes.

Methodology: A comprehensive literature search focused on urban Bangladeshi studies on non-communicable diseases and related risk factors. Using PubMed, Google Scholar, and Bangladesh Journals Online, a comprehensive literature search was conducted. The search included just 2010–2021 scholarly articles with the key phrases being "non-communicable diseases," "urban," and "Bangladesh." The sources included cross-sectional surveys, factor analysis methods, and studies on the knowledge of NCDs among the urban population which assessed lifestyle, socioeconomic, and demographic factors.

Result: Findings indicate that non-communicable diseases are highly prevalent in urban Bangladesh. Cardiovascular, diabetes, chronic respiratory, and cancer are among the most prevalent non-communicable diseases. Urban Bangladeshi adults have high NCD risk factors due to Smoking, poor diet, obesity, hypertension, diabetes, dyslipidemia, and air pollution. Diabetes and hypertension rates are significantly higher among urban poor than the national average. Socioeconomic factors, such as education, occupation, and income, play an important influence on the incidence of non-communicable diseases. Effective NCD management requires knowledge of NCDs and appropriate NCD-related practices. Since urban school students NCD knowledge was mixed, NCD awareness campaigns are needed. Lifestyle changes, risk factor identification, and control can reduce the burden of non-communicable diseases (NCDs) in urban Bangladesh. However, insufficient healthcare infrastructure, knowledge transmission, and economic hardship restrict said strategies.

Conclusion: Urban Bangladesh's high-risk factor prevalence makes non-communicable illnesses a major health issue. This analysis shows that urban Bangladesh needs targeted interventions to reduce the prevalence of NCDs. Comprehensive community-based health education initiatives are needed to raise awareness and promote healthy lifestyles due to socioeconomic and lifestyle variables. Targeted interventions for the urban poor and youth education on non-communicable illnesses are essential to addressing this expanding public health issue.

Breakout Session 32: Four Integrative Policy Areas to Support a Strategic Approach to Urban Health

15:00 - 16:15 Wednesday, 8th November, 2023

Location Sweet Auburn

Presentation type Panel

526 Four Integrative Policy Areas to Support a Strategic Approach to Urban Health

Nathalie Roebbel, José Siri

WHO, Geneva, Switzerland

Abstract

Recognizing the complexity of cities and their linkages to health, the World Health Organization (WHO) is committed to presenting a clear strategic vision for a coordinated and holistic approach to urban health. This workshop will be shaped around four cross-cutting policy areas essential to integrated urban health approaches by national and city-level decision-makers: 1) Observation and Analysis; 2) Governance and Financing; 3) Innovation; 4) Partnerships and Participation. These enabling factors are crucial to initiating, scaling up, and sustaining holistic action on urban health. The session will introduce integrated approaches to urban health and the four policy themes, featuring concrete examples and best practices from the global and regional experience of a diversity of WHO and its partners' urban health initiatives and networks.

Moderator and Speakers

Moderator

- Nathalie Roebbel, Cross-cutting lead (Urban Health), WHO

Strategic Guide for Urban Health and its four key cross-cutting policy themes

- José Siri, Consultant (Urban Health), WHO

Observation and Analysis (Using data to lead multisectoral actions at the municipal level)

- Fabio Alberto Medrano Reyes, Mayor of Paipa, Colombia

Governance and Financing (An action-oriented Framework for urban actions to promote health)

- Hyunji Lee, Urban specialist, World Bank

Innovation (Multisectoral collaboration facilitated by the Global NCD Platform)

- Katia de Pinho Campos, Technical Officer, Global Noncommunicable Diseases (NCD) Platform (GNP), WHO

Partnerships and Participation (A whole-of-society approach to improve health, equity, and wellbeing in South-East Asia)

- Dr Suvajee Good, Regional Adviser, Health Promotion and Social Determinants of Health, Regional Office for South-East Asia (SEARO), WHO

Breakout Session 33: Advanced Methodologies

15:00 - 16:15 Wednesday, 8th November, 2023

Location Buckhead

Presentation type Oral

321 A Multivariate Spatial Bayesian Framework for Age-Standardized Estimates

Jihyeon Kwon, Harrison Quick PhD
Drexel University, Philadelphia, PA, USA

Abstract

Due to disparities in mortality rates by age group and in the age distribution within geographic regions, rates should be age-standardized prior to making comparisons between rates from different regions. Traditionally, age-standardized rates can be calculated using a weighted average of the age-specific rate estimates, however, due to small population sizes – or in the case of rare events, small event counts – these age-specific rates may be unreliable. While the challenges posed by limited data can (to a degree) be mitigated by aggregation – e.g., by combining data into 5-, 10-, or 20-year age groups – doing so can preclude inference on important within-age group disparities. Alternatively, one can consider the use of statistical models – e.g., the popular conditional autoregressive (CAR) model from the spatial statistics literature – to produce more stable estimates by accounting for dependencies in the data. Unfortunately, these methods, too, have their drawbacks, as recent work has demonstrated the degree to which these models can overwhelm the information contained in the data and produce estimates that are overly smooth.

The objective of this work is to propose a framework for producing age-standardized estimates using multivariate Bayesian models that simultaneously account for spatial- and between-age dependencies while also controlling the informativeness of the model. To illustrate our approach, we consider a dataset comprised of tract-level heart disease death data from Philadelphia. Standard multivariate spatial Bayesian models will be fit to the data at various age groupings to demonstrate the degree to which the age-standardized estimates are sensitive to the level of aggregation with connections being made to the informativeness of the underlying statistical models. We will then repeat our analyses using our proposed framework where the models' informativeness is controlled a priori.

450 SALURBAL: An International Collaborative Experience to Advance Urban Health and Research Capacity in Latin America

Ana V. Diez Roux¹, Olga Lucia Sarmiento², Ran Li¹, Kevin Martínez-Folgar¹, Waleska Teixeira Caiaffa³, Katherine Indvik¹
¹Dornsife School of Public Health, Drexel University, Philadelphia, PA, USA. ²Universidad de los Andes, Bogotá, Colombia.
³Universidade Federal de Minas Gerais, Belo Horizonte, Brazil

Abstract

Launched in 2017, the Urban Health in Latin America (SALURBAL) Project has created and maintained a diverse, interdisciplinary research network and set of systems that promote multi-country and multidisciplinary innovation, capacity strengthening, and South-South collaboration. The SALURBAL team includes over 200 investigators across the United States and 11 countries in Latin America. SALURBAL has published more than 100 papers in leading health, science, environment, land use, transportation, and geography journals, with over half of lead authors based in the region and over 80% of publications led by junior researchers. The breadth and depth of the project, and the systems and processes implemented to promote collaborative, rigorous, and impactful research with meaningful and sustained engagement of researchers and trainees from LMICs countries is unprecedented.

This panel will convene SALURBAL team members to discuss core features of the project's structure and functioning that have supported effective multidisciplinary, policy-relevant, and community-engaged research on urban health and health equity in over 350 Latin American cities. Specifically, panelists will present the SALURBAL approach and lessons learned surrounding:

- Establishment of a system and platform for shared governance and engagement, and an organizational structure to support collaborative and inclusive research partnerships across the region, including a team composed of over 30% junior researchers.
- Creation of an unprecedented harmonized data resource and public data portal linking thousands of health, social and environment variables to all cities with 100,000 residents or more in 11 countries, at multiple geographic levels (city, subcity, neighborhood, and individual).
- Development of capacity building activities, structures, and resources to support researchers at all career stages, including analysis workshops and other training opportunities to build capacity within and beyond the project research team.
- Engagement and dissemination efforts developed throughout the project lifecycle, including the engagement of policymakers, community members, and other stakeholders in policy evaluation studies, group model building workshops, and other events and materials driven by local priorities and needs.

The SALURBAL experience provides lessons for the design and implementation of successful research partnerships and multi-country, multidisciplinary, and multilingual collaboration and exchange to drive evidence-based policymaking for health and health equity.

370 Examining neighborhood characteristics in Belo Horizonte, Brazil: An intraurban analysis using the Systematic Social Observation method

Amanda Magalhães^{1,2}, Amanda Andrade^{3,2}, Bruno Moreira^{1,4}, Solimar Rocha^{1,2}, Débora Coelho^{1,2}, Adalberto Lopes^{1,2}, Aline Sales^{1,2}, Amélia Friche^{1,2}, Waleska Caiassa^{1,2}

¹Federal University of Minas Gerais, Belo Horizonte, Brazil. ²Belo Horizonte Observatory for Urban Health, Belo Horizonte, Brazil.

³Federal University of Mato Grosso, Cuiabá, Brazil. ⁴Center for Studies in Public Health and Aging, Belo Horizonte, Brazil

Abstract

Background: Systematic social observation (SSO) is an objective method of evaluating the physical and social conditions in the neighborhood. It has the advantage of being the best option for hard-to-reach urban areas. This study aims to construct indicators for neighborhood characteristics using data from the SSO method and compare them between two informal settlements and their surroundings' formal areas. Methodology: In-person SSO data were collected in Belo Horizonte, Brazil (2019). Firstly, an exploratory analysis was performed to define the items to compose the simple indicators, which were selected according to the practicality, prevalence, and discriminatory power of spatial inequalities. These indicators were calculated using the ratio estimators method and then grouped into street, sidewalk, traffic, aesthetic, social, safety, physical disorder, and services domains. The principal component analysis method generated the composite indicators via the covariance matrix. The number of components was defined based on the percentages of total variance explained, and subdomains were created when two or more components represented domains. Internal consistency was verified by Cronbach alpha, and the composite indicators were transformed into scales ranging from 0 to 5. Comparisons between informal settlements and formal areas were performed by the Mann-Whitney U Test, considering a 5% significance level. Results: About 373 street segments in 69 neighborhoods (administrative units defined as census tracts) were assessed. Significantly higher medians were observed on the street, sidewalk, traffic, aesthetic, and safety scales in formal areas than informal settlements ($p < 0.05$). The informal settlements exhibited a significantly higher median in the social scale (3.7 vs. 2.6) and in one of the subdomains of the physical disorder scale (3.2 vs. 2.3) when compared with formal areas (both $p < 0.001$). No differences between areas were observed in the service scale. Discussion: These results reveal that the scales can identify disparities among different city areas, which is crucial in guiding interventions to improve residents' living conditions and health.

490 Moderating effects of homelessness and food insecurity on a behavioral HIV/STI prevention intervention among Black women in community supervision in New York City, NY

Dr. Nishita Dsouza PhD, MPH^{1,2}, Dr. Louisa Gilbert PhD¹, Ms. Mary Russo MSW¹, Dr. Anindita Dasgupta PhD, MPH¹, Dr. Nasim Sabounchi PhD³, Dr. David Lounsbury PhD⁴, Dr. Elwin Wu PhD, LMSW¹, Dr. Nabila El-Bassel PhD¹, Dr. Dawn Goddard-Eckrich PhD¹
¹Columbia School of Social Work, New York, NY, USA. ²International Society of Urban Health, New York, NY, USA. ³City University of New York Graduate School of Public Health & Health Policy, New York, NY, USA. ⁴Albert Einstein College of Medicine, New York, NY, USA

Abstract

Background: Women in community supervision programs (CSPs) have high rates of HIV and STIs. While there is evidence of feasibility and effectiveness of culturally tailored HIV/STI interventions for Black women in CSPs in reducing unprotected sex and STI incidence, retention of women in intervention programs is lower if they are food or housing insecure. Homelessness of those in CSPs is associated with higher rates of sexual risk behavior (resulting in higher rates of HIV & STIs), and individuals who are housing insecure also tend to be food insecure. The inability to meet basic daily needs prevents people from participating fully in behavioral health promotion intervention programs.

Methods: We conducted a secondary analysis of data from the Empowering African-American Women on the Road to Health (E-WORTH) randomized control trial, a 5-session culturally tailored group-based intervention with demonstrated success in reducing STIs and condomless sex among substance-involved Black women in CSPs in NYC. Mixed-effects negative binomial regression models were used to calculate incident rate ratios (IRRs) of the continuous outcome variables, counts of unprotected sex in past 90 days, and counts of any STIs, both measured at the 12-month follow-up point. Moderator variables are housing instability (measured as instances of homelessness in the past 90 days) and food insecurity (measured as inability to buy food in the past 90 days). Covariates adjusted for in the model include age, high school education, employment status, marital status, any baseline measure of the outcomes (i.e., counts of unprotected sex or confirmed STI at baseline, respectively).

Results: Regression models with the outcome of counts of unprotected sex identified a statistically significant moderation effect of housing instability, but not food security, on the intervention. The E-WORTH intervention had a greater effect on individuals that reported any instances of homelessness in the past 90 days at baseline (IRR=0.367, $p<0.05$). Regression models with the outcome of prevalence of STIs and either moderator (housing instability or food insecurity) were not statistically significant.

Conclusion: Our findings emphasize the importance of interventions designed for women in community supervision that account for and include service linkages to basic needs provisions.

Breakout Session 34: Using Thriving Foodscapes methodology as a novel approach to measure inequitable access to healthy food

15:00 - 16:30 Wednesday, 8th November, 2023

Location Highlands

Presentation type Workshop

530 Using Thriving Foodscapes methodology as a novel approach to measure inequitable access to healthy food

Thomas Rahbek

Novo Nordisk, Copenhagen, Denmark

Abstract

Brief description

City-level actions to address the increasing burden of obesity and NCDs are urgently needed, and structural interventions around access to healthy food are highlighted as a key part in tackling obesogenic environments. Unhealthy food environments are as widespread as the ways to measure them and comprehensive consistent assessments of these food environments are lacking, often show conflicting evidence, and fail to account for lived experience. A more holistic and consistent approach to measuring and reporting on urban food environments is needed.

In this workshop, we will discuss the use of the practical mixed-methods approach called Thriving Foodscapes, developed by Gehl and Cities Changing Diabetes. The intention is to discuss its applicability in various settings and uses and workshop around how to standardize measurements while being context specific to increase comparability and potential to scale across global geographies.

Breakout Session 35: CHORUS Oral Presentations

15:00 - 16:15 Wednesday, 8th November, 2023

Location Old 4th Ward

187 Assessing the preparedness of people living in slums to accept and support the linking of informal health providers to the formal health system in Nigeria

Dr Aloysius Odii^{1,2}, Professor Chinyere Mbachu^{1,3}, Professor Obinna Onwujekwe^{1,4}

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Abstract

Introduction

Informal Health Providers (IHPs) are an integral part of the health systems in developing countries. Linking them to the formal health system can improve health service delivery and promote health equity and reduce disparities, particularly for underserved populations like slum dwellers. However, for the linkage to be effective, successful and provide short to long-term public health benefits, community acceptance and support are essential. There is a paucity of evidence on the acceptability and preparedness of slum dwellers to support such linkages.

Aim: To assess the readiness to accept and support the linkage of IHP to the formal health system in urban slums.

Methodology

The study was conducted in eight urban slums located in Enugu and Anambra States, Southeast Nigeria. Eight (8) Focus Group Discussions (FGDs) and sixteen (16) in-depth Interviews (IDIs) were held with community members and leaders. The participants for the FGDs included adults who access healthcare services from formal and IHPs while the IDIs were held with knowledgeable community leaders. The data analysis was guided by the reflexive thematic analysis approach.

Findings

People living in urban slums are ready to accept and support the linkage because of the belief that it will improve health service delivery and in the long run, result in improved health outcomes. The readiness was hinged on the acknowledged limitations of IHPs in providing appropriate and optimal quality services and the cultural beliefs about health and illness. However, they expressed fear that the linkage may increase costs for health seekers as well as conflict among providers whose interests and views regarding health and illness do not align. Regardless, they were ready to support the initiative through the provision of resources, monitoring and reporting of non-complying providers.

Conclusions

People living in slums are ready to support the linking of IHPs to the formal health system because the strategy presents an important avenue for reducing the human resource gap for health services in their slums. However, policymakers and implementers must consider the possible negative effects of the linkages and develop ways and means of managing the interests of the slum dwellers, formal and informal providers.

352 Analysing the level of acceptability and perceived benefits of linkage between informal and formal health providers in urban slums in Nigeria

Uchenna Ezenwaka, Chinyere Mbachu, Obinna Onwujekwe
University of Nigeria, Enugu, Nigeria

Abstract

Background: In developing countries, informal healthcare providers (IHPs) present opportunities to improve provision and access to essential health services in underserved areas such as urban slums. However, the absence of a coordinated structure for IHPs contributes to weak enforcement of regulations and poor adherence to the limits of practising license, resulting in the provision of substandard quality of care. Institutionalizing and strengthening linkages between IHPs and the formal health systems could lead to improved access to quality essential healthcare services in urban slums. The study assessed the level of urban slum dweller's acceptability and perceived benefit of linking IHPs into the formal health system in urban slums in southeast, Nigeria.

Methods: A cross-sectional household survey was conducted in eight urban slums in Anambra and Enugu states, southeast Nigeria. A modified cluster sampling technique was used to select eligible households. A total of 1027 primary healthcare givers were randomly selected from the households and interviewed using a structured pre-tested questionnaire. Univariate, bivariate and multivariate regression analyses were undertaken.

Results: Majority (86%) of the respondents primarily accessed healthcare services from informal providers. There was a high level of acceptability (92%) of linking IHPs to the formal health system. The major perceived benefits of linkage include improvement in knowledge about illnesses and proper treatment procedures by IHPs, availability and access to quality drugs, and improvement in access to appropriate treatment. Predictors of acceptability of the linkage are number of persons living in a household ((AOR 0.51, CI 0.32-0.99), age (AOR 0.63, CI 0.48-0.91) and educational level (AOR 1.22, CI 1.03-1.29).

Conclusion: There is a high acceptance level of institutionalizing linkage between IHPs and formal health systems, with many perceived benefits, which will potentially lead to improved quality of services in urban slums. Urban planners and decision-makers should develop and implement interventions for such linkages in urban slums.

177 Role of Public-Private Partnership (PPP) Models in Addressing the Challenges of Urban Health Systems: A Systematic Review of Evidence from Least Developed, Low Income and Lower-Middle-Income Countries and Territories

Dr Aishwarya Vidyasagar Senior Research Associate¹, Dr Zahidul Quayyum Professor², Ms Baby Naznin Senior Research Associate², Ms Jannatun Tajree Research Assistant², Mr Swaksar Adhikary Research Assistant², Ms Deepa Barua Research Fellow³, Ms Maisha Ahsan Research Assistant³, Mr Deepak Joshi Manager: Operational Research and Evaluation⁴, Mr Sampurna Kakchapati Research Manager: Survey, Evaluation and Impact⁴, Ms Grishu Shrestha Research Officer⁴, Ms Florence Sibeudu Public Health Researcher⁵, Ms Juliana Onuh Public Health Researcher⁶, Dr Chukwuedozie Ajaero Public Health Researcher⁶, Mr Chinyere Okeke Public Health Researcher⁶, Dr Prince Agwu Public Health Researcher⁶, Ms Pamela daobi Ogbozor Public Health Researcher⁷, Ms Abena Engmann Public Health Researcher⁸, Dr Bassey Ebenso Associate Professor⁹, Dr Su Golder Information Specialist¹, Dr Noemia Siqueira Health Economist¹, Dr Helen Elsey Professor¹

¹University of York, York, United Kingdom. ²James P Grant School of Public Health, BRAC University, Dhaka, Bangladesh. ³ARK Foundation, Dhaka, Bangladesh. ⁴HERD International, Kathmandu, Nepal. ⁵Nnamdi Azikiwe University, Nnewi campus, Nnewi, Nigeria. ⁶University of Nigeria, Nsukka, Enugu, Nigeria. ⁷Enugu State University of Science and Technology, Enugu, Enugu, Nigeria. ⁸University of Ghana, Accra, Ghana. ⁹University of Leeds, Leeds, United Kingdom

Abstract

Introduction

In low and middle-income countries, the provision of Primary Health Care (PHC) solely through the public sector has limitations and challenges, such as inadequacy of trained human resources and, frequently, poor-quality services with insufficient

medicines and equipment. Evidence suggests that public-private partnerships (PPPs) can help to deliver PHC services more effectively and efficiently. Our systematic review aimed to assess the existing PPP models in urban health systems in the least developed, low-income, and lower-middle-income countries and to explore their contributions to improving urban health services and outcomes.

Method

We systematically searched a comprehensive list of databases. PRISMA reporting guidelines were followed. The screening was carried out independently by at least two reviewers on COVidence based on the review eligibility criteria. We extracted data on PPP features identified by Tabrizi et al. (2020) and health and health system outcomes. Data were synthesised narratively following the SWIM guidance, and the quality of the studies was assessed using the Mixed Methods Appraisal tool.

Results

Our review included 109 studies covering all WHO regions. Tuberculosis was the main focus in 51.4% of studies (n=56), while other identified PPPs covered other health conditions, including dengue, malaria, HIV, maternity, and sexual and reproductive health services. The main role of the public sector (in 70% of studies) was stewardship and support to the private sector, whose main role was service provision (in 85% of studies). We also found 23 PPPs that specifically targeted urban-poor populations. PPPs were categorised into three main purposes: increasing coverage, quality improvement of private providers, and networks for coordinated care. Further analyses on different health, process and system outcomes associated with PPP purpose and features are ongoing.

Conclusion

Studies identifying the impacts of PPPs on health outcomes in urban LMICs are limited. Given the plurality of providers and to meet the health needs of growing urban populations, further research into the implementation and impact of PPPs is needed to inform policy and practice. The findings of this review will help to understand the modalities of existing health-related PPPs in urban areas, their functionality, and their contribution to improving the urban health system.

270 Where does Bangladesh's urban poor go for NCD care, and do they receive adequate advice for NCD prevention and control?

Dr. Deepa Barua MPH MBBS¹, Masroor Salauddin BSS¹, Salma Anee MPH¹, Nabila Binth Jahan MDS¹, Tahzir Faiaz Chowdhury MSS¹, Fatema Kashfi MDS¹, Prof. Rumana Huque PhD^{1,2}

¹ARK Foundation, Dhaka, Bangladesh. ²University of Dhaka, Dhaka, Bangladesh

Abstract

Background: Despite an increase in NCD risk factors such as poor diet, physical inactivity, and alcohol consumption among urban dwellers, in comparison to rural residents in Bangladesh, NCD services are not widely available across urban primary health care (PHC) centres. We aimed to understand the NCD health-seeking behaviour of urban dwellers, and NCD lifestyle modification advice received by them.

Methods: We analysed the Bangladesh Demographic and Health Survey (BDHS 2017-18) and conducted In-depth interviews (IDI) within Dhaka North City Corporation. Out of 89,819 households in the survey, we analysed data of 1,885 individuals from 3,336 urban poor households. Additionally, we conducted 30 IDIs among urban slum dwellers (10 third gender, 10 females, 10 males), irrespective of their NCD status.

Results: Analysis of BDHS revealed that around 75% of 1,885 urban poor reported having blood pressure and glucose levels measured at private institution, especially private drug stores, which are operated by unqualified drug sellers. The interviews also revealed that factors such as awareness about available NCD services at urban primary health care centres, gender related stigma, attitude of health workers and operational timings played a major role in health seeking preference among urban poor.

Most of the respondents reported visiting private drug stores as their first point of seeking NCD healthcare, only visiting other health care facilities under unavoidable circumstances.

Only 18.94% of the 1,885 respondents reported having their blood glucose (BG) levels checked of whom 14.29% reported being informed about their high BG levels. Of the respondents aware about their high BG levels, 88.24% reported being prescribed with medications. Additionally, 85% reported being advised to control their diet and exercise, while only 41% were advised to quit smoking.

Meanwhile, 71.83% of the respondents had their blood pressure ever checked of whom 15.36% reported being informed about their high BP levels. Those aware about their high BG levels, 79.33% were prescribed with medications. Surprisingly, less than 35% were advised to exercise, lose weight, and stop smoking.

Conclusion: Making urban PHC centres accessible to all and focusing on provision of lifestyle modification advice for NCDs is vital to strengthen urban PHC system.

274 Changes in NCD Management within Urban Primary Health Care System: Analysis of 2014 and 2017 National Surveys

Dr. Deepa Barua MPH MBBS¹, Salma Anee MPH¹, Masroor Salauddin BSS¹, Nabila Binth Jahan MDS¹, Tahzir Faiaz Chowdhury MSS¹, Fatema Kashfi MDS¹, Prof. Rumana Huque PhD^{1,2}

¹ARK Foundation, Dhaka, Bangladesh. ²University of Dhaka, Dhaka, Bangladesh

Abstract

Background: Despite evidence from nationwide surveys showing an increase in NCD risk factors among Bangladeshi urban dwellers over time, there is an evident gap in the status of NCD management across urban primary health care (PHC) centres. We aimed to understand the changes in NCD management within urban primary health care system between 2014 and 2017 from nationally representative surveys.

Methods: Analysis of 106 urban PHC centres from 1596 facilities of Bangladesh Health Facility Survey (BHFS) 2014, and 66 urban PHC centres from 1600 facilities of BHFS 2017 was done, using the WHO Health Systems Building Blocks.

Results:

Service delivery: An increase in availability of NCD management guidelines (20.75% to 34.85% for diabetes and 16.98% to 21.21% for hypertension) was seen at the urban PHCs between 2014 and 2017.

Health workforce: Urban PHC centres with health workforce who received training in diabetes increased from 31.31 in 2014 to 40.91% in 2017. In contrast, a decrease in workforce trained in hypertension was noticed from 25.47% in 2014 to 18.19% in 2017.

Access to drugs and equipment: Between 2014 and 2017, access to amlodipine (antihypertensive medication) decreased from 17.92% to 13.64%, while that of metformin (diabetic medication) increased from 5.66% to 21.21%. Additionally, availability of diabetic and hypertensive equipment increased from 2014 to 2017.

Health financing: Urban PHC centres financed through user fees increased from 13.21% in 2014 to 45.45% in 2017.

Health Information System: While availability of computers saw a small increase from 74% to 77%, access to internet increased from 66% to 79% between 2014 and 2017. However, person designated for health statistics showed a decrease from 74% to 42% over the same duration.

Leadership and Governance: More than 97% of urban PHCs reported external supervision between 2014 and 2017. However, quality assurance activities reduced from 92.45% in 2014 to 74.24% in 2017.

Conclusion: While most components across the health system building blocks showed some improvement, availability of guidelines, health workforce training, access to NCD drugs and health financing need an increased focus to strengthen the urban PHC system.

265 Social determinants and risk factors associated with non-communicable diseases among urban poor in Nepal: A comparative study with poor, middle and rich groups using STEP survey

Dr Sampurna Kakchapati, Mr Deepak Joshi, Mr Santosh Giri, Bikram Adhikari, Sushil Chandra Baral
HERD International, Kathmandu, Bagmati, Nepal

Abstract

Non-communicable diseases (NCDs) are a significant public health concern globally, and the burden is disproportionately high among urban populations. This study aims to compare the social determinants, NCD risk, and NCD among urban poor, middle, and rich groups and to determine the factors associated with hypertension, obesity, and diabetes among urban poor of Nepal.

This study used data on urban population from STEP survey of 2019, in which 3460 urban population and 1692 urban poor population were included for the analysis. We used bivariate analysis to compare the social determinants, NCD risk and NCD among urban poor, urban middle and urban rich and multivariate logistic regression to determine the association between social determinants, NCD risks and obesity, hypertension and diabetes among urban poor.

The study found significant differences in education, employment, smoking habits, and cholesterol levels between the three wealth quintiles. Among urban poor, low education, unemployment and smoking habits were more prevalent, while high cholesterol were more prevalent among the urban rich. Bagmati Province [AOR=2.7(95% CI:1.17-6.02)], salt intake [AOR=2.7(95% CI:1.43-5.15)], and hip circumference [AOR=1.1(95% CI:1.04-1.18)] had higher odds of being overweight compared to normal, while hip circumference [AOR=1.3(95% CI:1.16-1.41)] and cholesterol [AOR=1.1(95% CI:1.01-1.02)] had higher odds of being obese compared to normal. Age [AOR=1.02(95% CI:1.0-1.03)] and cholesterol [AOR=1.1(95% CI:1.01-1.02)] had higher odds of being pre-hypertensive, and men [AOR=3.42(95% CI:1.85-6.30), cholesterol [AOR=1.1(95% CI:1.01-1.02)] and obesity [AOR=4.31(95% CI:1.71-10.82)] had higher odds of being hypertensive. Hilly [AOR=5.48(95% CI:1.52-19.72)] and terai regions [AOR=5.52(95% CI:1.61-18.9)] and cholesterol [AOR=1.1(95% CI:1.01-1.02)] had higher odds of being pre-diabetic. Hilly [AOR=4.6(95% CI:1.25-17.56)] and terai regions [AOR=7.11(95% CI:2.56-25.13), cholesterol [AOR=1.1(95% CI:1.01-1.02)] and obesity [AOR=3.6(95% CI:1.25-10.37)] had higher odds of being diabetic.

The findings indicate significant disparities in education, employment, and lifestyle habits based on wealth quintiles. Ecological region, salt intake, age, and cholesterol were associated with an increased risk of overweight, pre-hypertension, pre-diabetes, and diabetes. Targeted interventions aimed at improving access to healthcare, education, and lifestyle modifications could help reduce these disparities and improve health outcomes among vulnerable populations.

Breakout Session 36: Informal Settlements

10:45 - 11:45 Thursday, 9th November, 2023

Location Home Park

Presentation type Oral

326 Shining a Light on People with Disabilities that Live in Slums: Findings from a Participatory Qualitative Study

Ife Albert¹, Adesewa Adesina², Mohammed Zanna³, Fatima Mohammed³, Shehu Isa³, Nurudeen Kurfi³

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Abstract

Very little is known about slum residents with disabilities, from the prevalence of disability in slums, to the characteristics and lived experiences of slum residents that have disabilities. Slums are also disabling environments; they are characterized by greatly inadequate basic amenities (e.g., water, sanitation, electricity, health and social services), high infectious disease and injury rates, and increased exposure to environmental hazards. Disabled people are more likely to experience poverty, and poor urban residents are more likely to live in slums, which suggests that disabled urban residents may disproportionately live in slums, hence, experiencing a “double disadvantage”.

In partnership with the United Disability Network (a grassroots disability rights organization in Lagos Nigeria), we conducted unstructured interviews with disabled slum residents (n = 63) to learn more about their experiences, their needs and desires, and the most salient opportunities for research and community-based interventions. We visited seven slum communities across Lagos between June and July 2022 and interviewed 6-12 people with disabilities per community. United Disability Network staff were involved in the development of research objectives, took the lead in establishing community connections for interview purposes, and contributed to data transcription, analysis and synthesis.

Interviewees described their experiences over the life course, from childhood through adulthood. They highlighted the ways in which multidimensional ableism, insecurity of tenure, and marginalization in response to other identities they possess (most of our respondents were migrants) interact to negatively impact their quality of life. The interviews also revealed a network of intricate and diverse informal and formalized social relations, and the multiple social roles slum residents with disabilities hold in their families and communities.

10 Sustainably strengthening health systems through capacity transfer using TCI's coaching model: A Case Study in Africa and Asia

Ms Kate Graham MSC, Ms Maheen Malik Dr, [Victor Igharo](#)

Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, USA

Abstract

Women and girls living in urban slums in Africa and Asia lack access to education, timely information, and referrals, leading to unintended pregnancies that perpetuate urban poverty, impede gender equity, increase maternal and child mortality, and contribute to climate change through unsustainable growth.

The Challenge Initiative (TCI) is a proven platform for effectively scaling and sustaining urban health programming. It strengthens a city's ability to implement high-impact interventions (HII) by letting them lead implementation. The core of TCI's approach is health systems' strengthening by sustainably strengthening health workers capacity, which is achieved through TCI's coaching model. TCI coaches local government health staff through a unique, systemic and flexible approach of building government's capacity through establishing and institutionalizing coaching within government system. Instead of "doing" on behalf of the government, TCI coaches local government staff to adapt, manage, and deliver a more coordinated, results-driven, well-resourced, sustainable and high-impact RMCH interventions so a trained workforce remains behind to deliver services long after TCI support ends. TCI also provides coaching to strengthen local government's leadership, management, and coordination functions and improved data for decision-making.

TCI defines coaching as a structured yet flexible process to empower coachees to make positive changes to deliver their work effectively and efficiently. Since 2016, TCI's hub partners in Africa and Asia have strengthened the capacity of local governments at the system and individual level by building capacity through coaching on both management and technical HII.

From 2020-2021, TCI conducted a series of in-depth interviews and focus group discussions with 308 participants from across 10 countries and 4 TCI hubs. TCI hub and local government staff were interviewed to better understand the coaching practices, processes and tools that were effective in transferring capacity and to make recommendations on how coaching might be adapted and sustained. Through this research, the study revealed clear linkages between results and TCI's coaching approach. Respondents mentioned that this effective coaching has strengthened their knowledge, skills and ability to complete their jobs in the face of challenges and has increased their overall leadership capabilities.

494 Physical Activity Security: Changing the Conversation for Environmental Justice with Development in Lower- and Middle-Income Country Settings

Professor Estelle Victoria Lambert MSc, PhD¹, Professor Tracy Kolbe-Alexander MPh, PhD², Dr. Gregore Iven Mielke PhD³

¹Research Centre for Health through Physical Activity, Lifestyle and Sport, University of Cape Town,, Cape Town, Western Province, South Africa. ²School of Health and Medical Sciences, Faculty of Health, Engineering and Sciences, Ipswich Campus, University of Southern Queensland, Ipswich, Queensland, Australia. ³School of Public Health Faculty of Medicine, Brisbane, Queensland, Australia

Abstract

Introduction: The relationship between physical activity (PA), health and well-being has been well-established over the past 6 decades, but the link between PA and sustainable development is a more recent phenomenon. PA has been described as "choice-based" or "necessity-driven" and environmental justice is needed for PA security "when all people, at all times, have physical and economic access to sufficient, safe and enjoyable PA to meet, not only their health needs, but to promote physical and emotional well-being and social connectedness, for an active and healthy life". We explored these relationships across high- and low-income country settings using publicly available data. **Methods:** Data from 143 countries (LMIC/UMIC, N=99, HIC, N=44) were gathered (WHO Global Health Observatory, OurWorldinData and Worldometer), including: GINI coefficient, World Bank classification, %urbanised, % living in slums, life expectancy, %food insecure, obesity, diabetes prevalences, deaths due to cardiovascular disease (CVD), road incidents, pollution, or personal violence, human rights index, national PA plans and physical inactivity (PiA). Regression and mediation analyses were conducted on factors related to environmental justice that may explain differences in PiA in HIC vs LMIC/UMIC settings. **Results:** PiA prevalence was higher in HIC (32.7%) vs LMIC/UMIC (25.4%, $P<0.001$), despite more national PA plans (89% vs 59%). Urbanisation, obesity, diabetes, CVD deaths%, and life expectancy were also higher. Slum dwelling and food insecurity were 10-20 fold higher in LMIC/UMIC vs HIC ($P<0.001$). Deaths from air pollution, violence and road incidents were also higher. In LMIC/UMIC, PiA was inversely correlated to food insecurity, %slum dwelling, %urbanisation ($P<0.001$) and positively correlated to deaths due to violence. Mediation analyses demonstrated the link between PiA and HIC was positively mediated by %urbanisation, whereas, the path between HIC vs LMIC/UMIC and PiA was inversely mediated by %slum dwelling, and personal violence ($P<0.001$). **Conclusion:** Results suggest that urban, built environment attributes impact on PiA differently in HIC vs LMIC/UMIC settings. Slum dwelling persons from vulnerable communities in LMIC/UMIC settings are more physically active, which reflects "necessity-based" vs "choice-based" PA. PA security should be considered as a rights-based issue for urban planners and policy makers to level the urban playing fields.

515 Homicide Impact Evaluation of the Vila Viva Project in Belo Horizonte, Brazil

Dr Amélia Augusta Friche PhD¹, Dr Uriel Silva PhD¹, Dr Maria Angélica Salles Dias PhD¹, Dr Aline Ferreira Sales PhD¹, Dr Veneza Berenice Oliveira PhD¹, Amanda Magalhães MPH¹, Dr Nelson Gouveia PhD², Dr Ana Ortigoza PhD³, Dr Usama Bilal PhD⁴, Dr Gina Lovasi PhD⁴, Dr Ana V. Diez-Roux PhD⁴, Dr Waleska Teixeira Caiaffa PhD¹

¹Federal University of Minas Gerais, Belo Horizonte, MG, Brazil. ²São Paulo University, São Paulo, SP, Brazil. ³Pan American Health Organization, Washington, D.C., USA. ⁴Drexel University, Philadelphia, PA, USA

Abstract

Background Intersectoral policies for urban transformation that improve living conditions have been developed in vulnerable areas, especially in Latin America. However, there is still little evidence of the impacts of these interventions on health and on mortality. Considering that homicides are sensitive indicators of social conditions and in order to explore the social and health impacts of changes in the physical and social environments arising from policies, the aim of this study is to analyze the impact of urban transformation interventions on homicide rates in Belo Horizonte, Brazil.

Methods We used a quasi-experimental design: throughout the municipality of Belo Horizonte, five informal settlements (IS) under the Vila Viva Program (VVP) were each matched with a corresponding non-intervened IS, while the rest of the municipality was defined as the “formal city”.

Mortality information came from Sistema de Informação Sobre Mortalidade from 2002 to 2020, georeferenced by place of residence. Intercensal population projections were used as denominators. Detailed information on the timing and components of each intervention was compiled. The outcome was the homicide rate (ICD-10 codes X85 to Y09, aggregated over all age ranges) defined as the ratio of the number of homicides to the projected population at risk for each year. We conducted a Difference-in-Difference (DiD) analysis using a negative binomial model including a random intercept for each year and study area. Placebo tests and negative control analyses were also conducted.

Results The average intervention effect was a reduction of 28% in the incidence of homicide (rate ratio = 0.72; 95% confidence interval = 0.59 – 0.90).

Discussion Urban transformation interventions appear to result in decreases in homicide rates over time. The results reinforce the potential of public policies not traditionally originating from the health sector to improve health and reduce homicide rates.

472 Intraurban disparities in the risk of hospitalization and death from COVID-19: a spatiotemporal analysis of the epidemic dynamics in a large urban center in Brazil.

PhD Aline Dayrell F. Sales PhD^{1,2}, MSc Solimar Carnavalli Rocha², PhD Uriel Moreira Silva², MSc Débora Moraes Coelho^{2,1}, PhD Larissa Lopes Lima², MSc Amanda Magalhães^{2,1}, PhD Maria Angélica Salles², PhD Amélia Augusta de Lima Friche^{1,2}, PhD Waleska Teixeira Caiaffa^{2,1}

¹Federal University of Minas Gerais, Belo Horizonte, Minas Gerais, Brazil. ²Observatory for Urban Health in Belo Horizonte, Belo Horizonte, Minas Gerais, Brazil

Abstract

Objective

To explore and describe the temporal trend in severe COVID-19 cases, associating them with the control measures adopted during the epidemic and to social vulnerability in the city of Belo Horizonte, Brazil.

Methods

Data on severe COVID-19 cases (i.e hospitalizations and deaths due to COVID-19) were accessed from the Epidemiological Surveillance Information System for Influenza (SIVEP-Gripe). Hospitalizations and deaths reported from March 2020 to March 2022 were geocoded according to the place of residence. The variation in the moving average was analyzed according to the control measures adopted by the municipality. Relative risks, adjusted by age, of severe cases were computed for each month and place of residence that was stratified into two areas: informal settlements and “formal city” (the rest of the municipality excluding informal settlements).

Results

There were 32,222 hospitalizations and 7,803 deaths registered due to COVID-19, with peaks in July 2020, January 2021, March 2021 (the highest), and a slight increase in January 2022. From June 2021 onwards, a reduction in severe cases was observed. The higher risk of hospitalization and death due to COVID-19 in informal settlements than in formal city becomes evident early in the epidemic (April 2020). The rates of severe COVID-19 cases were more disparate among informal settlements versus formal city during the peak periods (July 2020 - $RR=1.81$ for hospitalizations and $RR=1.81$ for deaths; and March 2021 ($RR=1.22$, for hospitalizations and $RR=1.31$ for deaths). The risks become similar regardless of the place of residence after April 2021, when vaccination seems to be starting to take effects.

Conclusion

An unequal COVID temporal distribution pattern was observed in the city across time suggesting a persistence of the intraurban social and structural inequality. Although the impact decreased overtime, the persistence of the gap between urban areas highlights the syndemic character of the epidemic, recognizing that the interactions between diseases and social conditions can seriously affect population health.

Breakout Session 37: Amplifying Partnerships to Enhance Urban and Rural Mental Health via the Utilization of Tele-psychiatry in Quito, Ecuador

10:45 - 11:45 Thursday, 9th November, 2023

Location Centennial

Presentation type Panel

491 Amplifying Partnerships to Enhance Urban and Rural Mental Health via the Utilization of Tele-psychiatry in Quito, Ecuador

Dr. Karol Tipan MD¹, Ms. Shari Jardine MPH, MA², Dr. Eric Cioè-Peña MD², Ms. Saleha Atif MPH², Dr. Iván Tomás Palacios León MD¹

¹Universidad San Francisco de Quito, Quito, Ecuador. ²Northwell Health, New Hyde Park, NY, USA

Abstract

Background: The COVID-19 pandemic has intensified the strain on global health organizations, highlighting the urgent need for enhanced social cohesion and resources to combat the exacerbated health inequities and disparities. This abstract presents a comprehensive overview of a groundbreaking initiative undertaken in Ecuador, a middle-income country with a significant population residing in metropolitan Quito. The program, established through a global health partnership between the Universidad San Francisco de Quito (USFQ), the Ecuadorian Ministry of Public Health (MSP), Northwell Health (NWH), and Zucker Hillside Hospital (ZHH), aims to address the mental health gaps in the region through the implementation of telepsychiatry services.

Methods: The scarcity of residency programs in psychiatry within Ecuador has resulted in inadequate psychiatric coverage, with a startling ratio of 1.4 psychiatrists per 100,000 individuals in the country's population of 17.8 million. To bridge this gap, the telepsychiatry program (TP) was launched in January 2021, offering free mental health care to underserved communities in districts D1708 and D1709 of the Metropolitan Districts of Quito. The program leverages the expertise of psychiatry residents from ZHH and graduate medical students from USFQ, supported by psychologists from local health centers, to provide consultations, screenings, and follow-up care. Ongoing training is facilitated by NWH and USFQ, with bilingual proficiency among all TP clinicians.

Results: Preliminary results indicate promising outcomes, with 83 patients referred to the TP experiencing a significant reduction in wait and referral times. Previously, patients endured extended waiting periods of up to three months before receiving psychiatric services, whereas now, consultations are provided within one to two weeks following referral.

Conclusion: This program not only addresses critical mental health disparities but also serves as a model for replication throughout the country. As a result of its success, the Ecuadorian Ministry of Public Health has endorsed new legislation, codifying mental health and endorsing the implementation of similar telepsychiatry programs nationwide. The initiative presents a promising blueprint for other countries with comparable geographic and economic profiles, offering insights into the establishment and replication of localized telepsychiatry programs to combat mental health barriers and promote social equity.

Breakout Session 38: Urban Health System in Bangladesh: Challenges and Way Forward

10:45 - 11:45 Thursday, 9th November, 2023

Location Kirkwood

Presentation type Panel

364 Urban Health System in Bangladesh: Challenges and Way Forward

Margub Aref Jahangir Health Officer¹, Mohammad Zahirul Islam Senior Programme Officer², Dr. Shamim Haider Talukdar Chief Executive Officer³

¹UNICEF, Dhaka, Bangladesh. ²Embassy of Sweden, Dhaka, Bangladesh. ³Eminence Associates for Social Development, Dhaka, Bangladesh

Abstract

The urban health system in Bangladesh is a complex phenomenon and faces challenges such as limited access to healthcare facilities, uneven healthcare distribution, inadequate capacity and quality of services. Urban areas face higher environmental hazards, crowded living conditions, and inadequate sanitation, leading to increased rates of communicable and non-communicable diseases, as well as maternal and child health problems. However, a comprehensive and collaborative approach can overcome these challenges and contribute to the development of a resilient urban health system capable of meeting the growing demands of rapid urbanization. Through community engagement and partnerships with relevant stakeholders such as government agencies, non-governmental organizations and the private sector, the proposed workshop seeks to create a collaborative response to urban health system challenges. The workshop will be organized by Bangladesh Urban Health Network (BUHN) and aims to address challenges and opportunities associated with urban health systems in Bangladesh. The primary objective is to disseminate the current state of urban health in Bangladesh, highlight the main challenges and identify specific areas that require improvement. The second objective is to find out the best practices with the ultimate goal of advancing and enhancing the urban health system in Bangladesh. The interactive workshop will have a chairperson, a moderator and will be featuring four presentations on identifying challenges in policy formulation, research findings, and implementation of urban health initiatives; demonstrating successful urban health initiatives; best practices implemented in Bangladesh; discussing the potential for partnership and collaboration in addressing urban health challenges in Bangladesh and outlining how the proposed workshop aligns with Bangladesh's upcoming 9th Five Year Plan and 5th Health, Population and Nutrition Sector Program (HPNSP). The aim is to develop a strategic roadmap for urban health systems in Bangladesh by addressing existing challenges, promoting preventive measures, leveraging technology, enhancing coordination among stakeholders, and integrating urban health considerations into national development plans. The workshop will be interactive and participatory in nature, with ample opportunities for discussion and feedback from participants. The urban health system in Bangladesh faces challenges of limited access, unequal distribution, and inadequate quality of healthcare.

Breakout Session 39: Beyond Prescriptions and Services: Leveraging “By” and “With” Strategies for Healthier Living

10:45 - 11:45 Thursday, 9th November, 2023

Location Sweet Auburn

Presentation type Workshop

78 Beyond Prescriptions and Services: Leveraging “By” and “With” Strategies for Healthier Living

Jane Ellery PhD^{1,2}, Peter Ellery PhD, MLA^{1,2}

¹E2Praxis, Brownstown, IN, USA. ²National Wellness Institute, Stevens Point, WI, USA

Abstract

Creating the conditions where healthier living can both occur and be sustained requires thinking beyond the traditional provision of services and prescriptions that occur in healthcare settings. Healthy Placemaking and Healthy Lifestyle Centers show promise in helping expand change opportunities. To support this enhanced thinking, we will discuss Halbert Dunn’s conceptualization of High-Level Wellness (1959) depicted through a Health Axis, an Environmental Axis, and the resulting 4-quadrants (poor health, protected poor health, emergent high-level wellness, and high-level wellness).

Using these 4 quadrants, we will reflect on current strategies and tactics for encouraging healthier living using “To...For...With...By” thinking. After this brief introduction, we will use participatory activities to unleash a vast reserve of contributions and latent innovations waiting to be discovered within our group. First, we will use the “Liberating Structure” (see <https://www.liberatingstructures.com/>) of 1-2-4-All to include everyone’s voice and encourage a generative conversation. This will be followed by small-group discussions around opportunities to shift from TO (fixing people) and FOR (serving people) strategies to WITH (walking alongside) and BY (work led by those who benefit from the change) strategies. A final full-group conversation will allow us to reflect on our new thinking and plan for transformative change.

Breakout Session 40: IResearch Club: An Indigenous approach to environmental health research experiences

10:45 - 11:45 Thursday, 9th November, 2023

Location Highlands

Presentation type Panel

521 IResearch Club: An Indigenous approach to environmental health research experiences

Regina Idoate PhD

University of Nebraska Medical Center, Omaha, Nebraska, USA

Abstract

The National Cancer Institute-funded Youth Enjoy Science (YES) Indigenous Research (IResearch) program at the University of Nebraska Medical Center in Omaha, NE, works in partnership with the Omaha Public Schools (OPS) Native Indigenous Centered (NICE) program and a community-based organizations, including Bluebird Cultural Initiative, to provide middle school students with early cancer research experience through culture-based citizen science projects. IResearch clubs bring academics, community members and Native American students together in public school classrooms across Omaha, NE. IResearch club participants are engaged in research projects that are grounded in environmental health and Indigenous research principles. Students learn to measure International Agency for Research on Cancer classified carcinogens of local relevance in water, air, and soil in and around Omaha, NE. Program curricula learning objectives are aligned with the Nebraska State Science Standards, Next Generation Science Standards, and Title VI, Part A - Indian, Native Hawaiian and Alaska Native Education Cultural Standards. This presentation aims to share the lived experiences of IResearch from multiple perspectives, Indigenous and non-Indigenous, from a panel including a YES program principal investigator, program manager and student participant. This presentation will share lessons learned about IResearch Club community outreach and engagement, curriculum and pedagogy, research experiences and Native American student interest in pursuing environmental health, health sciences and research careers.

Breakout Session 41: WASH

12:00 - 13:00 Thursday, 9th November, 2023

Location Sweet Auburn

Presentation type Oral

184 Mapping Urban Waterlogging Zones using HEC-HMS and HEC-RAS Modeling: A Case Study of Dhaka City

Ms Khadiza Tul Kobra Nahin¹, Professor Zahidul Quayyum¹, Ben Howard²

¹BRAC James P Grant School of Public Health, BRAC University, Dhaka, Bangladesh. ²Imperial College London, South Kensington, London, United Kingdom

Abstract

Urban waterlogging is a global concern, posing threats to the environment, infrastructures and public health. It is exacerbated by increasingly intense rainfall as a result of climate change, and by the proliferation of impervious surfaces in cities. Dhaka city, Bangladesh, is a center of economic and social activity, yet it is subject to annual waterlogging during monsoon season which thwarts development and causes significant health risks to its inhabitants, such as disease outbreaks. Here, we present an attempt to detect waterlogging zones of Dhaka city with the application of HEC-HMS (Hydrologic Modeling System) and HEC-RAS (Hydrologic Engineering Center's River Analysis System) modeling. The watershed map, and rainfall hydrographs were generated utilizing ALOS PALSAR DEM (Digital Elevation Model) image and rainfall data, and calibrated with the river discharge data in HEC-HMS. The rainfall hydrographs and river discharge data were used to simulate the hydraulic model in HEC-RAS and generate the flooding and waterlogging zones. Vulnerable areas were identified by overlaying population density, location of slums, poor housings and secondary transfer stations (STSs) of waste, and elevation data with the modeled waterlogging maps. The analysis revealed that the areas adjacent to the northwestern, northeastern and southeastern boundaries of the city are the most severely affected zones. The waterlogging of STSs in southwestern areas of the city introduces the potential for open waste contamination, posing a particular threat to the health of inhabitants. Furthermore, the high population density and prevalence of slum areas in the southwestern and southeastern waterlogging zones represent hotspots of vulnerability in the city. Low elevation in the northwestern waterlogged zone leaves it vulnerable to extended periods of waterlogging, introducing significant risks for the slum households located in this area. This study provides a vital spatial characterization of waterlogging and vulnerability in Dhaka city, which can be used to improve the drainage system in the highly waterlogged zones and reduce the health risks experienced by city dwellers.

222 Intersecting Systems of Power Shaping Health and Wellbeing of Urban Waste Workers in the Context of COVID-19 in Vijayawada and Guntur, Andhra Pradesh, India

Ms. Inayat Singh Kakar¹, Ms Apeksha Mallia², Dr. Lana Whittaker², Dr. Rachel Tolhurst², Dr. Surekha Garimella¹

¹The George Institute for Global Health India, New Delhi, Delhi, India. ²Liverpool School of Tropical Medicine, Liverpool, United Kingdom

Abstract

Background: Waste work in India is an undervalued role relegated to historically marginalised communities. The informal nature of their work coupled with lack of state regulation keeps waste workers trapped in poverty. This study aims to

understand how intersecting systems and relations of power impact the agency of waste workers to shape their health and wellbeing.

Methods: We used in-depth interviews, key informant interviews, and focus group discussions to collect primary data from urban waste worker communities in Vijayawada and Guntur in India. Thematic analysis was used to analyse data using conceptual frameworks relating to wellbeing and power.

Results: Inter-generational poverty and lack of access to social determinants of health keeps waste workers trapped in a cycle of debt and poverty. They experience negative wellbeing owing to material and relational deprivations that are sustained by a nexus of power relations, explained using the themes of “power over”, “power to”, “power with”, and “power-within”.

Conclusions: The ability of communities to exercise agency is constrained by the power exercised on their lives by the state and society. NGOs play a supportive role for the realisation of rights, but the ability of waste workers to organize and effect change is limited to coping strategies.

322 Revival of Traditional Stone Spouts (Hiti) in Kathmandu Valley, Nepal: A Sustainable Solution for Urban Health through Indigenous Knowledge in Water Resource

Ms. Prasamsa Pokharel

Avni Center for Sustainability, Kathmandu, Bagmati Province, Nepal

Abstract

The traditional stone spouts (Hiti) which date back to 550 AD play a role in fulfilling water demands in the Kathmandu Valley, Nepal. These intricately carved stones are supported by traditional groundwater supply components such as traditional canals, ponds, and wells which are considered elaborate and intricate in design and technology. Spout water is traditionally regarded as a clean drinking water source; however, it is mostly used by low-income homes in the present day. These functional spouts fulfilled their main supply of drinking water and had a total discharge of 2.4 MLD. Kathmandu Water Supply Development Board (KVVWSDB) identified 573 spouts in the valley, out of which only 224 were functional at the time of the survey and 94 were completely lost. Traditionally, these stone spout systems located in a plaza were also a source of community engagement and a place for performing religious rituals bonding a healthy society.

This case study documents the successful revival of the Alko hiti, a traditional stone spout in one of the Newar communities of Kathmandu Valley. In the year 2000, a bone mill factory's waste infiltrated a conduit in Alko hiti. The locals who drank this water experienced diarrhea and vomiting, which sparked a significant conservation movement. In 2003, active community participation played a vital role in the revival of the Alko hiti complex. Thereafter, the activism not only developed the systematic use of hiti water but also revived the surrounding complex that contained the tangible and intangible heritage of the community like temples, statues, chaityas, paati (traditional resting place), pond, rajkulo (traditional canal). This hiti now serves fresh water for more than 300 households. The exploratory research approach was done to understand the sub-surface structure of the indigenous stone spout system, tangible heritage, and its cultural practices were identified to analyze its contribution towards creating a healthy neighborhood. This case study can be a lesson for indigenous knowledge of a sustainable water supply system and its ripple effect towards preserving intangible heritage through their cultural practices for urban health.

43 UrbanCare Dialogues, an Incubator to create Investment-ready Municipality Projects fostering Health.

Alvaro Valera Sosa

Building Health Lab, Berlin, Germany. Technische Universität Berlin, Berlin, Germany

Abstract

Background

Often municipal urban proposals fail to meet the requirements of development banks and agencies. Some poorly align sustainable development goals cost-effectively, only tackling one set of issues. Others are not part of a larger vision at the national or regional levels. In most cases, proposals do not support vulnerable groups such as older adults and children.

UrbanCare Dialogues is an incubator to create investment-ready projects for health and well-being as the spearhead for sustainable development. During three days, local government representatives meet with urban health specialists, climate advisors, and development agencies to prepare robust draft proposals for financial approval.

Day 1 discusses the benefits of urban planning for equity. Day 2 explores supportive green urban infrastructure. Day 3 reviews drafts to make these plans bankable. The first invited to participate are Municipalities from Brazil in the Summer of 2023.

Methods

Each Dialogue Day has morning and afternoon sessions. During the Morning sessions, Local Government representatives work on templates to explain their cases by pressing urban problems, current solutions, and administration obstacles. In the Afternoon sessions, three advisors present evidence-based guidelines, instruments, and strategies addressing the problems. Then, Government representatives break into groups. Mentored by an advisor, each Gov group works on the templates proposing an integrated plan addressing several sustainability goals within single interventions.

Expected results

Government participants renew knowledge for project development by taking practical advice from evidence-based planning and design approaches that ensure the return on public and public/private investments. Advisors attain greater insight into technical and financial obstacles that local governments undergo in the development and implementation phases. A final report gives guidance and steps to apply before development agencies and to facilitate a project follow-up.

Conclusions

The investment gap in infrastructure is not the shortage of capital. It is the shortcomings in planning and design processes to produce evidence that projects effectively attend to the needs of people, improve urban ecosystems, and be bankable. The UrbanCare Dialogues create a consensus across planning specialists and advisors on how to customize programs and resources for helping municipalities set up evidence-based projects to access financing.

430 Child Health Conditions among Urban Slums of India: Role of Housing and Environmental Factors

Dr. Laxmi Kant Dwivedi PhD

International Institute for Population Sciences, Mumbai, Maharashtra, India

Abstract

The poor situation of slums of Indian cities is exaggerated by the fact that some of the cities of India like Mumbai houses a considerable percentage of slum dwellers. More than half of its inhabitants live in slum areas. The living conditions in slums are

far from being healthful. They lack basic minimum standards of livelihood, such as sanitary facilities, hygienic conditions, and medical care. The human development index of slums of these cities are at low level. Evidence all over India testifies that living in slums is a predisposing factor for high infant mortality and poor nutritional status. The data for the present paper has been taken from the recent round of National Family Health Survey-2019-21 for eight cities of India namely; Chennai, Delhi, Hyderabad, Indore, Kolkata, Meerut, Mumbai and Nagpur. Child under-5 nutritional status measured by stunting and wasting along with suffering from Diarrhoea and ARI (acute respiratory infection) were considered as outcome variables. Slum defining characteristics i) Access to drinking water (improved and unimproved using DHS guidelines) ii) Access to sanitation (improved and unimproved using DHS guidelines) iii) Housing (deprived included kaccha and semi-pucca, pucca in nondeprived category) iv) Overcrowding (overcrowded if number of persons per room used for sleeping > 3) were considered as independent variables along with household and mother characteristics. The basic household amenities like source of drinking water, sanitation, adequate housing and adequate space plays an important role in examining the child nutritional status and prevalence of diarrhea and ARI. Results suggests that there is need to differentiate between defining a slum based on household approach and community approach and test its validity. In case of stunting, community level factors are playing more important role for determining stunting among children than household level. However, in case of wasting and underweight household factors play a major role. As the stunting can be interpreted as an indication of poor environmental conditions or long-term restriction of a child's growth potential and wasting as the acute measure of acute undernutrition, usually as a consequence of insufficient food intake or a high incidence of infectious diseases, especially diarrhea.

Breakout Session 42: Transforming Evidence-Based Housing and Health Guidance into Policy and Practice for Impact

12:00 - 13:00 Thursday, 9th November, 2023

Location Centennial

Presentation type Workshop

368 Transforming Evidence-Based Housing and Health Guidance into Policy and Practice for Impact

Ms Sarah Ruel-Bergeron¹, Dr Emily Nix²

¹International Society for Urban Health, New York, USA. ²University of Liverpool, Liverpool, United Kingdom

Abstract

The World Health Organization's Housing and Health Guidelines (WHO HHGLs) provide evidence-based recommendations for healthy housing conditions and interventions. We are now at the 5 year anniversary of its publication and some progress has been made in Latin America through efforts by the Pan American Health Organization (PAHO), however for maximum impact the guidelines need to inform the state of adequate housing for communities everywhere. Dr. Nathalie Roebbel from the WHO, who spearheaded the development of the WHO HHGLs will provide a backdrop from which the audience can discuss barriers and challenges to the implementation efforts. Through an interactive discussion we will elicit insights to overcome these challenges from experiences in specific contexts or in other sectors. The audience will walk away with actionable ideas and, as researchers and practitioners, armed to lead a movement for the implementation of WHO HHGLs everywhere. The workshop is co-hosted with Dr. Emily Nix and Sarah Ruel-Bergeron, RA from the Health through Housing Coalition, and the SALURBAL project.

Breakout Session 43: An Introduction to Virtual Audits and Artificial Intelligence for Collecting Built Environment Data for Urban Health

12:00 - 13:00 Thursday, 9th November, 2023

Location Kirkwood

Presentation type Workshop

389 An Introduction to Virtual Audits and Artificial Intelligence for Collecting Built Environment Data for Urban Health

Dr. Alex Quistberg PhD, MPH^{1,2}, Dr. Dustin Fry PhD, MPH³

¹Drexel University, Philadelphia, PA, USA. ²Universidad de los Andes, Bogota, Cundinamarca, Colombia. ³US Forest Service, US Department of Agriculture, Philadelphia, PA, USA

Abstract

Workshop Goal: To provide attendees with an introduction to virtual and AI tools for collecting built environment data for research, implementation, or other urban health work.

Learning Objectives: Participants will be able to 1) define and prioritize built environment items to collect from virtual audits or with AI; 2) identify the best tools and costs for their built environment assessment needs; 3) describe how to conduct quality assessments of their collected data; 4) prepare their data for analysis or training AI models, 5) how to find and collaborate with AI expert colleagues.

Workshop Description: Accurate and up-to-date built environment (BE) data is crucial to studying and addressing urban health issues, yet there are many challenges to finding and collecting these data either from existing geographic information systems (GIS) sources or in-person street audits, particularly in low resource settings, such as informal settlements. Publicly available imagery data assessed by human auditors or by computer vision relying on artificial intelligence methods can help overcome data availability and quality in these settings, but may present some technical challenges for researchers and practitioners. In this workshop, participants will learn about the different virtual or AI tools and methods for collecting BE data, how to choose and prioritize BE items or objects that can be collected using virtual audits or AI, how to collect virtual audit data, and how to prepare collected data for analyses or for training AI models. Participants will have a chance to use the CANVAS virtual audit system and an alternative annotation platform and see implementation examples in US and Latin American cities. We will also provide an overview of how AI models work, how they can be trained and evaluated, and recommendations for finding and collaborating with AI experts with an example of a project in Bogota, Colombia. Please note that setting up or programming the training of AI models or their application due to time constraints of workshops.

Target Audience: Anyone interested in learning more about virtual audit and AI tools is welcome to attend, no technical knowledge or prerequisites are needed to attend.

Breakout Session 44: Break the Cycle of Children's Environmental Health Disparities: A Research and Training Model

12:00 - 13:00 Thursday, 9th November, 2023

Location Highlands

Presentation type Panel

520 Break the Cycle of Children's Environmental Health Disparities: A Research and Training Model

Leslie Rubin MD

Emory University, Atlanta, GA, USA

Abstract

Break the Cycle is an annual, collaborative interdisciplinary research and training program involving university students in academic tracks that focus on the impact of adverse social, economic, and environmental factors on children's health, development, and education. Each participating university student develops a project that focuses on preventing or reducing environment-related disorders for children who live in communities where environmental hazards and emotional stresses are related to circumstances of social and economic disadvantage. At the conclusion of the project period, the students present the results of their projects at a national conference and write manuscripts on their projects for publication in a peer-reviewed journal supplement dedicated to the collection of projects from each annual program. The annual program begins with a call for proposals from a wide range of university students. Fundamental to Break the Cycle is the expectation that the projects make a positive difference by improving the health and well-being of children, their families, and their communities. It is also envisioned that the students would be inspired to pursue careers that focus on reducing health disparities and in becoming leaders for the future. To date there have been over 180 students from over 50 different academic departments in over 20 states in the USA, from 6 countries in Latin America and 2 Countries in Africa, with more than 150 papers published in international journals and 14 books in a Public Health Series. The program received The Children's Environmental Health Excellence Award from the US EPA in 2016.

Moderator:

Leslie Rubin MD Associate Professor, Department of Pediatrics, Morehouse School of Medicine Director, Break the Cycle Program, Southeast Pediatric Environmental Health Specialty Unit, Emory University President Founder, Break the Cycle of Health Disparities, Inc.

Presenters:

Developing Thick Skin: How FDA Labeling Loopholes Exacerbate Negative Impacts of Pediatric Eczema in Vulnerable Communities

Abayomi Jones Georgia State University, College of Law J.D. Program, 2nd year Mentor: Stacie Kershner JD

Examining the Impact of Adverse Childhood Experiences on Educational Outcomes of Students with and Emotional Behavior Disorders

Nicole Houston Georgia State University, Learning Sciences Ph.D. in Education Psychology, 1st year Mentor: Miles Irving PhD

Evaluating the Effectiveness of Pandemic-Era Anti-Eviction Policies on Children's Health

Anna McPeak Georgia State University College of Law J.D. Candidate, 2nd year Mentor: John Marshall JD

Breakout Session 45: Tools for Facilitating Collaborative Action on Complex Health Challenges

12:00 - 13:00 Thursday, 9th November, 2023

Location Old 4th Ward

Presentation type Workshop

431 Tools for Facilitating Collaborative Action on Complex Health Challenges

James Dills MUP MPH, Michelle Marcus MPH, Taylor Williams MPH, Leigh Alderman JD MPH
Georgia Health Policy Center, Atlanta, GA, USA

Abstract

Vital conditions for health and well-being reframe social determinants of health to be more accessible for audiences outside traditional public health practice (e.g. community members, professionals from other sectors, etc.). This interactive workshop exposes participants to two facilitation tools for collaborative exploration of the relationships necessary to invest in these vital conditions. These tools are 'The Iceberg Metaphor for How We Engage with Complex Systems' and 'A Fullstream Perspective of Health Promotion.' Workshop facilitators successfully use these tools to design and implement efforts that align research, policy, and practice to address urban health issues such as maternal health, care access, asthma, social isolation, chronic disease, and equity.

The Iceberg is a way to initiate systems thinking in the context of complex challenges. This tool is particularly effective in helping people with different perspectives come together to identify impactful action opportunities. In Health in All Policies work, it creates space for collaborators from diverse professional sectors to examine the underlying system behaviors, structures, and mindsets that produce outcomes of concern. Employing this activity helps narrow collective focus onto specific policies that can be leveraged to promote health and well-being.

The Fullstream Perspective builds on efforts to move public health work upstream toward more systemic prevention and away from over-reliance on downstream clinical treatment. However, when working with people holding broad perspectives on community well-being, it becomes clear that one person's upstream is another's downstream. The Fullstream approach acknowledges this tension and provides a means for identifying interconnections between downstream and upstream efforts. These interconnections often reveal opportunities for new collaborations.

Facilitators will demonstrate applicability of both tools through examples of their work in Georgia on affordable housing as a platform for population health. The workshop design includes opportunities for individual reflection, small group exercises, and full-room discussion. Following a level-setting presentation on core concepts of systems thinking and Health in All Policies, real-world applications of both tools will be shared. Participants will then have the opportunity to apply their own perspectives and end with a full group discussion of how these tools could be useful for their own work.

Poster Session 2

14:30 - 15:00 Thursday, 9th November, 2023

Location Midtown Combined

Presentation type Poster

288 Sequential environmental exposure patterns and anxiety symptoms

Miss Yuliang Lan, Dr. Marco Helbich
Utrecht university, Utrecht, Netherlands

Abstract

Background: Daily short-term environmental exposures, such as green space, air pollution, and noise, have been implicated in impacting health. However, the existing body of evidence predominantly relies on aggregated exposure estimates, such as 24-h averages, which fails to capture the daily spatiotemporal exposure sequences.

Objective: This study aimed to (1) identify individuals' sequential exposure patterns experienced during their daily mobility and (2) investigate the potential association between these exposure patterns and anxiety symptoms.

Methods: In this cross-sectional study, 141 participants aged 18-65 were tracked using GPS-enabled smartphones for up to seven days in the Netherlands. Anxiety symptoms were assessed using the Generalized Anxiety Disorders-7 (GAD-7) questionnaire. Location-specific exposures to green space, PM2.5, and noise along participants' mobility trajectories were estimated at ten-minute intervals. The resulting exposure sequences were clustered using multivariate time series clustering with dynamic time warping as the similarity measure. Linear regressions were employed to examine the relationship between time-resolved sequential exposure patterns and GAD-7 scores.

Results: Four distinct daily sequential exposure patterns were identified among the participants. Regression analyses revealed that individuals in the "moderately health-threatening," "moderately health-supportive," and "strongly health-supportive" clusters tended to exhibit lower GAD-7 scores compared to those in the "strongly health-threatening" cluster. Particularly, participants with a "moderately health-threatening" exposure pattern reported significantly fewer anxiety symptoms than those with a "strongly health-threatening" exposure pattern.

Conclusion: This study provides evidence that both the sequence and short-term magnitudes of environmental exposures may influence mental health. It emphasizes the importance of incorporating time-resolved mobility-based assessments in future investigations of environmental health effects in daily life.

165 Urbanism and Socio-Spatial Segregation, a Social Construction of Environmental and Health Risks/crisis: A case study of the city of Douala, Cameroon

Dr Babette Linda Safougne Djomekui
University of Capetown, Capetown, South Africa

Abstract

The housing policy initiated since the colonial era in the city of Douala, followed by the city's rapid growth, has generated repercussions on the social strata and the main consequence has been the socio-spatial fragmentation of the city. This "segregationist policy" maintained by the city administration has progressively pushed a category of inhabitants towards non-aedificandi zones, thus contributing to a progressive territorialisation of risks and environmental and health crises. On one hand there are "well planned" residential areas where the cost of housing and access to land is too high even for the middle-class citizen. On the other hand, there are informal settlements where most of the citizens live. These informal settlements are characterised by overcrowding; the near absence of solid and liquid waste sanitation facilities; the anarchic occupation of risky areas, notably the marshy bottomlands, by precarious dwellings; the difficult access to basic facilities and services (drinking water, sanitation, hospitals, etc.). These illegal land conquests, carried out under the "complicit" gaze of the government, have contributed to the creation of a highly vulnerable "informal city". The repercussions of this form of urbanisation on the living environment, quality of life and health are very alarming. This research aims to show that environmental and health risks/crisis are essentially socially constructed. This is catalysed by the segregationist dynamics of urbanisation especially in a context where the mechanisms of densification predispose city dwellers to high health vulnerability.

164 Self-perceived neighborhood characteristics by adolescents from small and medium-sized Brazilian cities.

MsC Daiane Castro Professor and researcher, PhD Rosana Aquino, PhD Leila Amorim
Federal University of Bahia State, Salvador, Bahia, Brazil

Abstract

Objectives:To describe self-perceived neighborhood characteristics by adolescents from small and medium-sized Brazilian cities. **Methods:**Cross-sectional school survey conducted in 2013, with a sample of 2,212 adolescents between 14 and 18 years of age, from ten cities in Brazil. All municipalities are classified as small and medium-sized (population between 20,000 and 65,000 inhabitants), located in the state of Bahia, northeastern Brazil, a region marked by deep social inequalities. The perceived characteristics of the neighborhood were analyzed using an instrument with 14 questions about the physical and social environment. The analyzes considered corrections to the study design with complex sampling, and the software used was Stata Version 13.0. **Results:**Most adolescents were female (67.1%) and black (black and brown - 70.3%). Almost half of those responsible for the interviewee's family had low education (≤ 8 years - 45.9%) and received assistance from the federal government (84.6%). As for the characteristics of the physical environment, only 28.8% stated that the neighborhood had places to practice physical activity (PA) such as squares, parks and bike paths; 77.8% reported that walking was easy; 66.2% that the streets were well lit, and only 18.3% agreed that there was heavy or intense traffic. As for the availability of services, 36.1% said they had points of sale for healthy foods, such as fruits and vegetables; 62.7% many bars; 61.9% points of sale of cigarettes and 17.9% snack bars. When considering the attributes of the social environment, 82.9% reported that the neighborhood was supportive; 68.6% sociable; 80.4% never suffered an episode of violence; 85.5% felt safe during the day and 39.5% felt safe at night. **Conclusion:**The results suggest that the neighborhoods are safe, with high sociability and easy walking. However, they have few resources for PA, little public lighting, low vehicle traffic and moderate availability of points of sale for alcohol and tobacco, in addition to the lack of establishments that sell healthy foods, which may favor the adoption of risky habits for health. These are typical characteristics of cities outside large urban centers, indicating the need for further investigations in contexts similar to these and interventions aimed at implementing healthy cities.

160 Effects of Political Advocacy for Health on Improving Social Determinants of Health among Vulnerable Groups, Aseer Prince Model

Assistance Prof Metrek ALMETREK^{1,2}, Dr Mohammed Khashoggi³, Dr Manal Shams³, Ms Sarah Alkhorayef³, Mr Majed Algahtani³
¹Ministry of Health, Abha, Aseer, Saudi Arabia. ²King Khalid University, Abha, Asser, Saudi Arabia. ³Ministry of Health, Riyadh, Riyadh, Saudi Arabia

Abstract

Background: Addressing social determinants of health is essential for improving health and reducing health disparities as one of the achieving action plans for Saudi Arabia's SDGs Vision 2030. We have aimed to assess the improvements and changes of the five determinants (Economic stability, education, Social and community context, healthcare services, and neighborhood and built environment for vulnerable groups led by His Royal Highness Prince Turki bin Talal, which had implemented the Improvement SDoH initiatives.

Method: We have implemented a cross-sectional design assessing the SDoH objectives outcomes over five years in seven WHO-registered healthy cities in Asser (Abha, Bisah, Balgarn, Muhayel, Alharajah, Tareeb, and Alamwah). We have used the PMO checklist to successfully completed interventional projects indoor and outdoor specific and public spaces. We included the projects that related to SDoH and emerged from ASDA and healthy cities programs strategy for vulnerability by 2018 and after.

Results: The total number of completed projects among the seven cities is 307 compared to 119 before 2018 over the 10 years, most of them in the social and community context 97. The total of vulnerable beneficiaries is 208010 most of them got the benefits from Neighborhood and built environment and healthcare services 80832. Amongst the seven cities, most projects were implemented in Abha 85. Of 307 projects, 145 have been implemented by the government, 67 by privet, and 95 by non-profit organizations. A total of 175983 volunteers have participated in the projects compared to 98120 before 2018 over the 5 years, most of them were involved in healthcare services 78260 volunteers and social and community contexts 52190 volunteers.

Conclusion & Recommendations: This paper offers an early evaluation of some of the outputs related to ASDA & Healthy Cities strategy KPIs of the regional initiatives and national projects in the region. However, the health and quality of life outcomes of these projects' OKRs are currently being investigated by means of an ongoing prospective study, which is expected to be completed in 2026. We have defined the gaps between population increase and surveillance expansion as limitations of some determinants data.

144 Efficacy and health benefits of different water distribution systems in informal settlements: a cross-sectional study in Nairobi, Kenya

MSc Vitor Pessoa Colombo¹, Dr Jérôme Chenal¹, MSc Fred Orina², Dr Hellen Meme², Prof. Dr Jürg Utzinger^{3,4}

¹École Polytechnique Fédérale de Lausanne, Lausanne, Switzerland. ²Kenya Medical Research Institute, Nairobi, Kenya. ³Swiss Tropical and Public Health Institute, Allschwil, Switzerland. ⁴University of Basel, Basel, Switzerland

Abstract

Background

Access to safe water sources, whenever needed, is a human right. However, attending to this fundamental right remains challenging in informal settlements. Consequently, these settlements are more exposed to risk factors of several diseases related to the lack of safe water, notably diarrheal diseases. Transitional water distribution systems are needed as “conventional” distribution systems fail to expand as fast as human settlements. In Nairobi, Kenya, alternative systems have emerged, both in the formal and informal sectors. These systems deserve further investigation to assess, in practice, their benefits.

Methods

We conducted a cross-sectional study based on 1,147 household surveys to assess the “efficacy” and “health benefits” of different water distribution systems in two informal settlements in Nairobi. These systems were the exposure of interest; they were categorized into three types: piped to premises, public tap/dispenser, and street vendor. The first outcome of interest, “efficacy,” was measured through the availability of drinking water in the month preceding the survey. The second, “health

benefits,” was measured through the occurrence of diarrhea. We calculated adjusted odds ratios (AORs) stratified by age groups to assess correlations between exposures and outcomes while accounting for relevant diarrhea covariates.

Results

Regarding efficacy, only public taps/dispensers showed a significant association with water availability (AOR = 1.43; 95% CI: 1.04–1.96). Street vendors showed a positive association but did not meet conventional significance thresholds (AOR = 2.05; 95% CI: 0.975–4.31). As for health benefits, public taps/dispensers were significantly associated with lower odds of diarrhea in children under five (AOR = 0.56; 95% CI: 0.32–0.99), while water from street vendors was significantly associated with higher odds in the general population (AOR = 2.03; 95% CI: 1.03– 4.01).

Discussion and conclusions

The higher odds of water availability from public taps/dispensers and street vendors are certainly due to the flexibility and capillarity of such systems, which are decentralized and more resilient. Water safety, however, was not observed among street vendors. There is a delicate balance to be found in transitional water distribution systems between water safety and availability, and public water dispensers seemingly offer such balance.

130 Cooler streets for a cyclable city: Assessing the alignment of active transport and urban greening strategies in Melbourne to achieve common public health goals

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Abstract

Transport is a social determinant of health and impacts the wellbeing of individuals and communities. Active transport, namely walking and cycling, has been correlated with a reduction in non-communicable diseases such as cardiovascular disease, respiratory disease and diabetes (Stevenson et al., 2016). Transport policy and strategies can therefore influence societal health by providing infrastructure that encourages active transport. However, rising surface temperatures pose a barrier to active transport goals, by discouraging outdoor physical activity and increasing exposure to heat-related illness. To tackle urban heat, many cities are implementing urban forest strategies to increase street tree planting, which has a demonstrable cooling effect (Sun et al., 2019; Lungman et al., 2023).

Evidently, urban planning has the potential to tackle emerging public health threats, through strategies that promote active transport and urban forestry. Intersecting health outcomes of active transport and urban forest strategies include increased physical activity, improved air quality and reduced urban heat. The complex and interconnected nature of non-communicable diseases and urban heat require integrated solutions, yet disciplinary silos restrict coordination across local government departments to respond holistically.

This research therefore answers the question, **how are the City of Melbourne’s *Transport Strategy 2030* and *Urban Forest Strategy* aligned to achieve common public health goals?**

The City of Melbourne is an ideal case study because while it identifies non-communicable diseases and urban heat as two pressing urban health issues, they are addressed through separate strategies that are implemented by different council departments.

This poster presents the context and findings of the research, which combines policy content analysis and spatial analysis. The policy content analysis examines and codes each strategy to identify whether, and to what extent, they set clear goals to address physical inactivity and urban heat. Mapping of current and planned cycling infrastructure and tree canopy using Geographic Information Systems software enables a spatial comparison of how the two strategies translate to built form outcomes. The results are visually presented using a colour-coded table and maps.

81 Examining the Ontological Perspectives of Urban Health Policy Ideas in Planning the Western Parkland City, Sydney, Australia

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Abstract

This case study explores the ontological backgrounds of the multiple urban health policy ideas that are held by policy actors involved in the planning of the Western Parkland City in Sydney, Australia. Understanding the ontological similarities and differences of urban health policy ideas highlights the complexity of fostering health in real-world urban planning policymaking and the need for a transdisciplinary approach.

Through an analysis of interviews with key policy actors and policy documents, we first identified seven key urban health policy ideas embedded in the planning of the Western Parkland City. These are: 1) Creating economic and education opportunities; 2) Improving access to amenities and services; 3) Investing in health infrastructure; 4) Creating and designing healthy spaces; 5) Conserving the natural environment; 6) Building resilience to climate hazards; and 7) Promoting healthy food environments.

Subsequently, these urban health policy ideas were interpreted against ontological frameworks on urban health paradigms and urban health research traditions. The findings indicate that urban health policy ideas are not solely based on sectoral or thematic differences such as transportation, housing, public health, and urban planning, but rather reflect a blend of different understandings of conceptual, theoretical, methodological, and instrumental approaches to foster health through urban planning. The mix of ontological perspectives highlights the complexity and diversity of ontological perspectives that underpin urban health policy ideas in real-world urban planning policymaking. This observation has significant implications for policymaking, especially in the context of transdisciplinary collaborations across diverse ontological perspectives.

69 Environmental education in urban Pakistan: Looking back at three decades of a participatory action learning program

Mr. Syed Ayub Qutub MA (CANTAB), Ms. Fauzia Butt

PIEDAR, Islamabad, Pakistan

Abstract

Theme 7: Health ATL: Environmental Education and Sustainability

Environmental Education in Urban Pakistan: Looking Back at Three Decades of a Participatory Action Learning Program

Syed Ayub Qutub and Fauzia Butt

Abstract

This is the story of a mother who started a neighborhood cleanup campaign with her own children and their schoolfellows, and went on to become an internationally recognized mover and shaker of environmental education. This paper appraises the successes and limitations of the environmental education program that she led for three decades. It reached out to over 200 schools in the low-income wards of cities and towns in Pakistan with actionable messages on key environmental issues, and encouraged several generations of principals, teachers, students and their parents to engage in proactive environmental management and extension at the local scale. The highlights include the translation and contextualization of international best practices, a focus on schoolchildren as the agents of change, and a cascade training approach with leading schools reaching out to others in their locality. A co-curricular spiral learning approach was adopted with environmental knowledge infused into the main subject disciplines through a set of dedicated manuals. “Green picnics” that combined conservation, waste management, and healthy eating as fun activities became a well-known brand emblem. The partner schools in each region got together on Earth Day to celebrate their year-long achievements while a quarterly newsletter kept the wider network together. COVID-19 hit hard at programs that reach out to population segments that live below the digital divide, and the program is still struggling to recover from the disruption. Several attempts have been made to integrate the program with national environmental education initiatives. The proponents have also participated in coalitions to integrate the latter into the national education curricula and provincial syllabi. However, these policy advice and advocacy efforts are still at the aspirational stage in Pakistan. Lessons are drawn from these positive and negative experiences before arriving at a succinct conclusion.

48 Access to Greenspaces and physical activity in UK adolescents

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Abstract

The health benefits of regular physical activity in adolescence are well-documented. Currently, young people in the UK are not achieving recommended levels of physical activity. Greenspaces may be an environmental factor that encourages physical activity by offering a safe and attractive place for exercising. Previous research examining green spaces in the Millennium Cohort Study have focussed on crude measures of greenspace such as percentage land cover without considering accessibility. Greenspace is a complex determinant of health that can influence health via different pathways depending on the outcome. For physical activity outcomes, the accessibility and type of green space are key considerations, especially in adolescence.

This study aims to assess the impact of accessibility of greenspaces on physical activity at age 14. Participants come from the Millennium Cohort Study; a nationally representative UK longitudinal birth cohort. Participant postcode data were linked to the closest greenspace access point and network distance (metres) and walking time (minutes) was derived using geographical information systems (GIS). When considering access to greenspace availability, instead of using fixed distances (e.g. 300/800m), a continuous measure of distance was chosen to avoid preconceived change. The use of network distance rather than “as the crow flies” captured more accurate data on how a person might walk to their nearest greenspace, using publicly accessible roads and footpaths. Only greenspace categories relevant to adolescents were included.

At age 14, participants self-reported physical activity and a subsample wore wrist-worn activity monitors for one weekday and one weekend day.

Associations between greenspace access and self-reported physical activity will be quantified using linear regression models. Zero Inflated Poisson (ZIP) models will be used to examine associations with accelerometer-measured physical activity due to the distribution of this outcome. Results will be presented stratified by sex.

9 How local governments in Africa and Asia use TCI’s RAISE Tool to systematically self-assess effectiveness and sustainability of their local urban health programs

Ms. Maheen Malik Dr., Ms Kate Graham, Victor Igbaro

Abstract

The United Nations projects that by 2050, nearly 70% of the world's population will live in cities, with 90% of that urbanization occurring in Africa and Asia urban slums. To solve this problem, the Challenge Initiative (TCI), funded by the Bill & Melinda Gates Foundation and Bayer AG, facilitates the greater self-reliance of local governments to scale up family planning (FP) global high-impact practices (HIPs), leading to sustained improvements in urban health systems and increased use of modern contraception, especially among the urban poor. When women can plan the number and spacing of their pregnancies, they can plan for a brighter future, whether that includes a career, education, or a family.

TCI's demand-driven model is premised on a shared mindset and commitment to having local players lead, using data to inform problem-solving and decision-making, and achieving high impact at scale. TCI does not implement but rather through TCI's technical and management coaching, local governments at the city, state, or county level implement the program. Over the course of 3 years, TCI supports the government to undertake landscaping, identify gaps, develop program designs with the goal of 20% of the interventions generating 80% percent of the impact. Sustaining impactful health programs, strengthening community-wide capacity and optimizing available resources is core to TCI's "business unusual" platform.

To help measure capacity and institutionalization of a program, TCI created and implemented the Reflection and Action to Improve Self-Reliance and Effectiveness (RAISE) Tool to systematically self-evaluate their progress and the effectiveness of their FP/AYSRR programs and a city's readiness to "graduate" from TCI coaching and financial support. TCI encourages local government to engage a diverse group of participants to participate in the RAISE assessment process. It is necessary to coordinate all of these stakeholders to ensure sustainable and improved health outcomes.

Through this poster presentation, TCI will take participants on a cities journey through self-reliance, showcase results from over 100 local governments RAISE assessments, share how RAISE helped governments make timely course corrections and address identified gaps.

435 Offices to homes: health and wellbeing impacts of housing deregulation in London

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Abstract

Housing quality is an important determinant of health and wellbeing and a major factor in societal health inequities. In the context of long-term housing shortages and post-Covid empty offices, many countries have deregulated planning and construction standards to increase residential supply. We explore the wellbeing effects such deregulation could cause using an exploratory study of non-residential conversions in London. In 2013, the UK government changed Permitted Development Rights (PDR) so that developers can convert commercial and light industrial buildings into housing without planning permission in England. Prior research identified that 'PDR housing' has numerous quality issues (e.g. small internal spaces), which are exacerbated in deprived neighbourhoods and that residents may have higher vulnerability than the general population (e.g. due to its use as temporary accommodation by local government).

Our exploratory study adopted a transdisciplinary approach in four London boroughs: Hillingdon, Hounslow, Lambeth and Southwark. Working with housing charity Groundswell, we developed an online survey and interview guide for occupants of PDR housing. We used the Warwick-Edinburgh Mental Wellbeing Scales (WEMWBS) wellbeing outcome measure. Between April and June 2022, we had 218 survey responses and 41 in-person interviews.

We found that having sufficient space for socialising, eating together as a household and studying was strongly associated with higher mental wellbeing. When compared to respondents who had at least one of: external shutters, fans, fixed shading or awnings or canopies over windows or doors, those with no cooling options were associated with a WEMWBS score that was 21 (95%CI 11, 32; $p < 0.001$) points lower and a significantly higher risk of having a WEMWBS score that may be indicative of probable clinical depression (OR 24.1, 95%CI 1.29, 845; $p = 0.042$), after controlling for household income.

Deregulated non-residential conversions to housing pose potential health and wellbeing risks in the areas of space, overheating, amenities and perceived safety. Residents also highlighted problems with windows and outdoor space. Individual agency and co-occurrence of housing-related challenges (e.g. insecure tenure) may play a role in modifying potential wellbeing impacts of PDR housing. We offer recommendations to strengthen regulations in England, alongside implications for policy-makers considering increasing office-to-residential conversions elsewhere.

219 Examining Stressors for Young Women in Urban Uganda through Photovoice: Reflections from the TOPOWA Study in Kampala

Dean and Professor Monica Swahn Ph.D., MPH¹, Associate Professor Shannon McMorro Ph.D., MPH², Research Scholar Jane Palmier JD, Ph.D., MPH¹, Deputy Director Anna Nabulya B.A. Social Sciences³, Programme Officer Jacqueline Nassaka MA in Ethics and Public Management³

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Abstract

Context: Uganda has both a rapidly urbanizing population and one of the world's youngest populations. Within this context, young women living in urban slums experience a multitude of stressors and unmet health needs spanning most social determinants of mental health. However, their perspectives are rarely included in health research or decision making. As such, we engaged young women in a Photovoice study, using this community-based participatory and visual research method to delineate salient urban stressors and their context for young women living in urban slums.

Methods: In 2022, we conducted a qualitative Photovoice study with 15 young women aged 18-24 across three urban sites of Banda, Bwaise, and Makindye to assess participant perceptions of stressors, wellbeing, and mental health in their environments. Participants attended three Photovoice sessions conducted in Luganda, a local language, learned about the Photovoice process, took photos in their respective communities, and then chose photos they wanted to share and discuss. We modified the SHOWEd approach by asking how their communities reflected "topowa", meaning "don't give up" in Luganda. Participants contributed to theme validation and researchers conducted inductive thematic analysis of discussions and photos.

Results: Participants documented sources of community strength and perceptions of empowerment and resilience, including economic empowerment, entrepreneurship, religious and spiritual support, and schools and medical facilities. Participants also highlighted multiple stressors in their urban environments that negatively impact their wellbeing including poor sanitation and waste disposal, fear of violence, unsafe food handling at vendors and homes, and particularly in Makindye, the negative impact of bars and alcohol access in the community. Additionally, the final discussion, theme validation, and the captioning of photos underscored the participant's feeling of stress and concerns for their safety based on the environmental threats in the community.

Conclusion and Discussion: Findings offer important perspectives and images directly generated by participants. The images and accompanying discussions offer deeper insight and visual documentation of the context of urban stressors within three urban slums across Kampala. Additionally, these data are shaping a new cohort study of mental health trajectories and specific urban stressors for young women in Kampala, Uganda.

323 Universal Health Coverage Status in Urban Bangladesh

Umme Farihin Sultana Sr. Research & Knowledge Management Officer¹, Shuhail Hussain Research Assistant¹, Margub Jahangir², Dr. Shamim Hayder Talukder Chief Executive Officer¹

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Abstract

Background

Bangladesh has made progress in achieving universal health coverage (UHC), but the focus has been on rural areas, neglecting urban populations. Despite better healthcare access in urban regions, inequalities persist within and among communities due to income inequalities, limited infrastructure, overcrowding, and inadequate facilities. High out-of-pocket expenditure poses a major barrier to UHC in urban Bangladesh, particularly for the economically disadvantaged.

Methodology

To investigate the status of UHC in urban Bangladesh, a systematic literature search was conducted that aimed to gather comprehensive information on the topic. PubMed and Google Scholar, were utilized for the literature search. The search was limited to scholarly articles published between 2010 and 2021, ensuring the inclusion of recent research findings. Keywords such as ‘universal health coverage’, ‘urban health, and ‘Bangladesh’ were used to refine the search and capture relevant studies.

Result

The results of this study on the status of UHC in urban Bangladesh indicate that significant challenges remain in achieving equitable access to health care services. An analysis of existing literature and reports suggests that while urban areas have better healthcare infrastructure than rural areas, inequalities within and between urban communities remain prominent. High out-of-pocket costs and affordability issues hinder access to health care for the urban poor. Geographical and social inequalities in access to health care also persist, particularly in urban slums and marginalized communities. The study highlights the need for targeted interventions, including improved primary health care, increased health insurance coverage, and increased collaboration between the public and private sectors, to address this challenge and improve UHC in urban Bangladesh.

Conclusion

The achievement of UHC in urban Bangladesh relies on the collaborative efforts of the government and private sector. By prioritizing quality, affordability, and equity in healthcare delivery will lead to improved accessibility, affordability, and quality of healthcare services for urban residents. Effective policy initiatives should address the specific needs and challenges faced by urban populations. By adopting a comprehensive and context-specific approach, urban areas in Bangladesh have the potential to make remarkable progress towards achieving UHC and fostering the overall health and well-being of their population.

493 Neighborhoods and Mental Health: Urban Health Index as a Tool to Measure Disparities in Mental Health Metrics in the Central Savannah River Area

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Abstract

Mental health is an essential aspect of the overall well-being of individuals. Moreover, mental health conditions increase the risk of diabetes, hypertension, and cardiovascular diseases. Stress, family environment, resilience, and hostility are essential factors contributing to mental health and physical health. In recent years there has been growing interest in determining the

effects of neighborhood characteristics on psychological and biological risk factors for poor mental health and health outcomes. The Urban Health Index (UHI) was developed by the World Health Organization to measure disparities in health determinants that affect health on a neighborhood or small area level. As such, studying the relationship between indicators of mental health and the UHI of neighborhoods can help explain the pathways through which neighborhood environment can affect community and individual health.

This study aims to study the relationship between indicators of mental health and UHI of neighborhoods in the Central Savannah River Area.

Based on 2000 data, we observed statistically significant relationships where a higher UHI was associated with a PSS that is 6.818 lower ($p=0.029$), a 7.176 higher FES index ($p=0.001$), a 9.621 lower CMHS total score ($p=0.018$), and a total CDRS score that is 12.426 higher ($p=0.032$). A similar trend is seen in the analysis of 2010 data; higher UHI is associated with a PSS that is 8.010 lower ($p=0.017$), an 8.103 higher FES index ($p=0.001$), an 11.075 lower CMHS total score ($p=0.009$), and a total CDRS score that is 9.711 higher, though not statistically significant ($p=0.098$.)

Our result indicates that a higher UHI is associated with lower perceived stress, a better family environment, lower hostility, and higher resiliency. Our data suggests that neighborhood characteristics may play a role in its residents' mental health. This finding may help to understand how disparities in health outcomes occur between neighborhoods. Our study is one of the first to investigate the relationship between the UHI with mental health indicators such as PSS, FES, CMHS, and CDRS. Our data suggest neighborhood traits may influence residents' mental health, providing insights into health outcome disparities and assisting policymakers with targeted public health interventions.

480 Where do slum out-migrants go? Implications for sustainable urban development

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Abstract

As of 2020, about 51% of African urban residents (over 238 million people) live in slums, the highest proportion globally. Despite high levels of in- and out-migration as dominant slum features, most slum migration literature focus on in-migrants; slum out-migration literature is relatively sparse, largely due to data collection challenges after outmigration (which are exacerbated by the fact that slum migrants live more informal/ undocumented lives than most people).

Urban slums, non-slum urban areas, and rural areas are vastly different in nature, and have their own distinct health producing qualities. For example, slum residents have been shown to have worse health, socioeconomic and environmental outcomes (e.g., education, employment, water and sanitation, exposure to violence) compared to non-slum urban residents and rural residents. They also have different resident profiles, as well as drivers and facilitators of residence and in-migration. Voluntary outmigration is traditionally thought of as highly selective, as moving requires resources and opportunities, and outmigrants are typically moving for better socioeconomic prospects. But given the unique characteristics of slums and their residents, this may or may not be true, and likely varies by the destination of out-migration.

In this study, we compare the sociodemographic characteristics of slum outmigrants (such as age, gender, marital status, education and socioeconomic status) based on destination type (i.e., another slum, a non-slum urban area, or a rural area). We also look at trends in destination type over time, as well as differences in reason for outmigration by destination type. We use longitudinal data from the Nairobi Urban Health and Demographic Surveillance System, which has collected data from residents of two slum communities in Nairobi Kenya beginning with an initial census in 2002, and up until now. In addition to being a needed update to the existing literature, this research can help inform strategies for effectively incorporating the implications of migration into sustainable urban development policies and programs.

316 Work-Family Conflict and Perceived Work Ability among Doctors in Tertiary Hospital

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Abstract

According to the World Health Organization, Bangladesh has the second-lowest number of doctors per 10,000 people among the South Asian nations, at 5.26 per 10,000 people. A high workability index score is significantly associated with a decreased family work conflict, so the present study aimed to assess the relationship between work-family conflict and workability among doctors in tertiary hospital. This cross-sectional study was carried out in Dhaka Medical College and Hospital (DMCH) in 2022. A total of 422 doctors were taken as study participants by convenient sampling method. Data was collected through face-to-face interview using a semi-structured questionnaire, work and family conflict scale (WAFCS) and work ability index (WAI). Majority (44.9%) of the doctors were 30 years of age and below and (50.1%) were female. About (68.2%) were married. Maximum and minimum scores for work to family conflict among doctors are 35 and 15 and for family to work conflict are 30 and 10. Out of 437 participants 69.3% had good work ability, 21.3% had moderate work ability, 8.7% had excellent and 0.7% had poor work ability. Significant association was observed between work to family conflict and work ability, family to work conflict and work ability as well as work to family conflict and family to work conflict using Pearson correlation test. To provide quality healthcare services to the citizens of Bangladesh, work-family conflict among doctors should be minimized and work ability of the physicians should be given the highest priority.

313 Food is the Foundation: How Jones Valley Teaching Farm is using school gardens to educate, empower and create economic mobility and food agency for students & young adults.

Ms. T. Marie King

Jones Valley Teaching Farm, Birmingham, AL, USA

Abstract

We believe in the power of food and value centering the voices of students and young adults. We know that when students and young adults are connected to their food source powerful things can happen. In the heart of Birmingham Alabama, we have established seven teaching farms, with five being strategically placed in one neighborhood. Through our Good School Food program our instructors work with teachers to use farming, food, and culinary as tools to support classroom instruction. Are your students struggling with fractions in the fourth grade? What if we take the afternoon to make fraction chili and use cooking to teach students the principals of fractions and they get to eat what they cooked. Who new fractions could taste good. Students are also able to sign up for our after-school farm and culinary clubs as well as participate in our Spring Break and Summer Camps.

On the high school level, students receive in class instruction, but they have an opportunity to apply for a paid internship where they learn from our farmers in an immersive hands-on program. Students who have graduated high school but are interested in furthering their knowledge in urban and organic farming can apply for our yearlong paid apprenticeship that includes health benefits. Over the year apprentices deepen their knowledge of farming, meet industry professional, and are exposed to career pathways under the agriculture/culinary and food service industry that they may not have been aware of.

In addition to centering students and young adults, we are challenging larger systems that have historically oppressed and marginalized communities of color. We're changing how we utilize language the language, we don't identify communities as being food deserts. However, we teach and advocate for food resiliency while leveraging our resources so that our students and

young adults have a seat at decision making tables. Lastly one of our goals is for our staff to be 100% past program participants and 30% of our small staff are past program participants.

We know we're changing lives because behind every student we touch there's family behind them.

303 Power of light: How art and light can support the health and wellbeing of people in urban informal settlements

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Abstract

The environment of many people living in informal settlements in Freetown can be dark and dangerous in the evenings and at nights. Poorly lit public space and roads, often with open sewers and potholes put children and vulnerable groups at risk of injuries and are prone to several forms of violence including sexual assault against women. Access to basic services become challenging in the dark. Likewise, theft can occur in darkness, depleting already meagre resources and contributing to loss of livelihoods or poverty. This negatively impacts the health and wellbeing dwellers.

The ARISE (Accountability and responsiveness in informal settlements for equity) consortium of the Liverpool School of Tropical medicine (LSTM) uses implementation and community-based participatory health research approaches to better understand health and wellbeing in informal urban settlements. In April 2023, ARISE partnered with international artist Luke Jerram as part of a project to highlight the work of the LSTM for its 125th anniversary.

Luke worked with local artists from the Dwarzark community in Freetown, Sierra Leone to use art and light to highlight community challenges and potential solutions. Sketches demonstrated difficulties in accessing water, healthcare, safety concerns for women and other vulnerable groups at night and studying in dim light. Artists were supported to design light sculptures of potential solutions to community challenges, including a tap with running water, light bulb, book, the sun as a source of power and several lanterns. Sculptures were used in a health and wellbeing walk with community members. Simultaneously, solar-powered streetlights were installed as capital investment at water sources frequently used by women and children, communal spaces, dark roads, and alleyways. Following installations, women and children felt safe to collect water at night from sources with streetlights; children used streetlights for study during power outages.

The inclusion of art, objects of beauty and light within informal settlements in Freetown has been a powerful way to increase wellbeing, build community pride and social satisfaction, and to enable community members to express their rights.

233 The Protecting Our Energy Project: A Project Created to Mobilize Black and Brown Women to Stand Up for Energy Justice in Atlanta

Drew Wood-Palmer MPH, Diamond Spratling MPH
Girl Plus Environment, Atlanta, GA, USA

Abstract

Household utilities have long placed an outsized burden on low-income households and marginalized communities. Recent research shows that residents of Black and Brown neighborhoods who make less than 50% of area median income (AMI) are 27% more energy-cost burdened than residents from the same wage bracket who live in White neighborhoods. To help address this disparity, Girl Plus Environment created the Protecting Our Energy Project; a six month effort designed to increase awareness and engagement of Black and Brown women and non-binary individuals in energy justice.

The Protecting Our Energy Project was a combination of digital advocacy, community training, and local policy action. We implemented a 12-week social media campaign to educate our community about energy justice. We also launched a cohort of 25 Black and Brown women and non-binary individuals in Atlanta, GA, where we facilitated trainings on how to get engaged in the Georgia Power Rate Case. Cohort participants submitted public comments and participated in public hearings at the Public Service Commission.

At the conclusion of our cohort, 89% of participants indicated feeling confident to talk about energy justice with their community, as opposed to the 6% prior to the cohort. Through our digital energy justice campaign, we reached over 10,000 individuals, and distributed over \$5,000 in utility bill stipends for severely energy burdened households.

Knowing that 89% of our cohort feels confident to speak on energy justice, we plan to facilitate another training program where they learn best practices for communicating and mobilizing their communities to stand up for energy justice.

40 Southern Urban Research for Growth and Equity (SURGE)-Engaging Local Communities in University Health Research

Christine Stauber, Jalanyne Arias, Dawn Aycock, Jacque-Corey Cormier, Kathy Dolan, Jidong Huang, Fei Li, Nicole Lynch, Ashli Owen-Smith, Lucy Popova, Terry Pechacek, Laura Salazar, Claire Spears, Scott Weaver
Georgia State University, Atlanta, GA, USA

Abstract

Situated in the heart of downtown Atlanta, Georgia State University (GSU) is the largest university in the state with >52,000 students housed on six campuses. In spring 2022, Georgia State University launched the Research Innovation and Scholarly Excellence challenge which provided competitive opportunities for research and collaboration among faculty and staff. The Southern Urban Research for Growth and Equity (SURGE) project was one of eight funded projects. The SURGE project aims to identify the most pressing health and equity issues for diverse Atlanta communities and to explore engaging communities in research to study these issues. The team consists of 14 faculty members from across the GSU schools and campuses and has involved 10 graduate and undergraduate students. Since the project began, we established a 12-member community advisory board (CAB) with representatives from nonprofit, religious, and governmental organizations based in DeKalb and Fulton Counties. In consultation with the CAB, we aim to identify: 1) health issues that are the most salient for their communities, 2) how communities are motivated to participate in research, and 3) how to build authentic and mutually beneficial community-university partnerships to begin addressing health equity issues. We conducted eight focus groups with 91 participants from three populations including African American, Senior, and Refugee/Migrant/Immigrant community members in the Atlanta Area. During focus groups, we identified important themes regarding health and engagement in research. These included mistrust for the medical field, the importance of social determinants of health such as food, housing and health insurance, and a desire to participate in research on issues that are meaningful to the community members. A key message we gathered from all focus groups was the desire to hear back about the results of our focus groups (or research projects in general) which is important to be successfully engaged in community-based research activities. The work of the SURGE project has demonstrated the importance of building and supporting community partnerships as an essential step in development and implementation of research programs and interventions to reduce health disparities within the diverse populations of Atlanta.

522 Machine learning to predict risk for community-onset Staphylococcus aureus infections in children living in southeastern United States

Lilly Immergluck

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Abstract

One particular germ, Staphylococcus aureus (S. aureus), is known to cause human infections and since the late 1990s, community-onset antibiotic resistant infections (methicillin resistant S. aureus (MRSA)) have caused epidemic proportions of infections. This antibiotic resistant pathogen continues to cause significant infections in the United States and globally. Antimicrobial resistance has been increasing within communities. Skin and soft tissue infections (SSTIs) still account for the majority of these in the outpatient setting. Geographic information system tools coupled with spatial statistical modeling have been used to better understand place-based factors which contribute to the transmission and spread of human infections. Machine learning can predict the location-based risks for community-level S. aureus infections. To combat antibiotic resistance from continuing at its current trajectory, improved prevention and surveillance strategies are needed.

Multi-year (2002-2016) electronic health records of children <19 years old with S. aureus infections were queried for patient level data for demographic, clinical, and laboratory information. Residential addresses of patients in the analyses were georeferenced. A machine learning ecological niche model, maximum entropy (MaxEnt), was applied to assess model performance of specific place-based factors (determined a priori) associated with S. aureus infections; analyses were structured to compare methicillin resistant (MRSA) against methicillin sensitive S. aureus (MSSA) infections. Differences in rates of MRSA and MSSA infections were determined by comparing those which occurred in the early phase (2002-2005) and those in the later phase (2006-2016). Multi-level modeling was applied to identify risks factors for S. aureus infections.

Among 16,124 unique patients with community-onset MRSA and MSSA, majority occurred in most densely populated neighborhoods of Atlanta's metropolitan area. MaxEnt model performance showed training AUC ranged from 0.771 to 0.824, while the testing AUC ranged from 0.769 to 0.839. Population density was the area variable which contributed the most in predicting S. aureus disease (stratified by CO-MRSA and CO-MSSA) across early and late periods. Race contributed more to CO-MRSA prediction models during the early and late periods than for CO-MSSA.

Machine learning accurately predicts which densely populated areas are at highest and lowest risk for community-onset S. aureus infections over a 14-year time span.

186 Home-based vaccination record availability and urban and rural difference among children aged 12-23 months in Pakistan: results from a national cross-section survey

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Abstract

Background: Routine vaccination cards are considered a quality measure in vaccination services and one of the reliable sources of information about vaccination history. Increasing card retention is one of the key measures to evaluate robust coverage. This study examined the availability of routine vaccination cards among children aged 12-23 months across urban and rural areas of Pakistan.

Method: The analysis was based on data from a cross-sectional national household survey; the Pakistan Demographic and Health Survey (PDHS) 2017-2018. The PDHS -18 used the sampling frame that was created for the Pakistan Population and

Housing Census 2017. The survey followed a stratified two-stage sample design that involved the selection of enumeration blocks (EBs) using the probability proportional size method followed by systematic sampling of households.

Results: A total of 1,975 children aged 12-23 months were covered by the survey. At the national level, 85% of children were reported to have a vaccination card, however, only 63% of the children, had vaccination cards at the time of the interview. A higher proportion of children (91%) in urban areas reported having had a vaccination compared to those in rural areas (82%). Similarly, a greater percentage of children in urban areas (66%) had their vaccination cards at the time survey interview compared to children in rural areas (62%).

Conclusion: Routine vaccination cards are important for assessing vaccination coverage. Results indicate that there are disparities in vaccination coverage and card availability between urban and rural areas. These findings suggest the need for targeted interventions to improve vaccination coverage and card retention, particularly in rural areas.

Keywords: vaccination cards, home-based record, retention, vaccination, Pakistan

139 Contraceptive status of urban slum women in Bangladesh: a comparison of pre-COVID, COVID and post COVID era

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Abstract

COVID-19 has a huge impact on every aspects of medical and social wellbeing. It can affect the human fertility aka contraceptive behaviour directly or indirectly. Studies suggested that health services such as disruption supply of contraceptive methods occurred during high pick of COVID-19. Besides, the COVID-19 related non-pharmaceutical provisions can also create temporary changes in contraceptive methods behaviour. Therefore, people of Dhaka city, specifically slum population may have faced it most. Based on this concept, we hypothesized that there is a substantial change in utilization of contraceptive methods prevalence among the urban slum women in Bangladesh.

This presentation is based on the data extracted from Urban Health and Demographic Surveillance System (UHDSS) runs by International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b). UHDSS collects and monitor nearly 160,000 population from approximately 40,000 households at 5 different slums in Dhaka south, north and Gazipur city corporations. We gathered the data for three consecutive time period 2019-2021 from the married women (aged 13-49 years) of UHDSS sites. Main outcome variables are prevalence of contraceptive use and types of contraceptive use which were grouped by socio-economic variables- such as age and education of women, working status, and wealth quintile^[1] of the households. The other variables were sources of contraceptive methods.

Overall, the contraceptive prevalence was remaining almost same and local pharmacies found to be dominant over the other healthcare facilities throughout the years. However, a noticeable declination was found in IUD/injectables/implants (35.1% in 2019, 30.2% in 2020, and 29.5% in 2021). While the use of oral pill was increasing from 41.7% in 2019 to 43.2% in 2020 and 47.6% in 2021. We found those changes were mostly occurs between the women with different socio-demographic clusters.

The study can suggest that proper regulation of the contraceptive distribution and utilization is required while the relevant stakeholders and agencies make the contraceptive available to urban slum population during COVID period.

[1] Wealth quintile has been calculated using 17 household asset items aggregated using principal component analyses and grouped into five categories based on quintiles- poorer, poor, middle, rich and richer.

423 Intraurban Perspectives on Homicides in Belo Horizonte, 2002-2020: An Age-Period-Cohort Analysis

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Abstract

Background

Homicides are a major social and public health problem. They affect everyone in a city, especially those living in vulnerable areas. In this study we aim to evaluate how homicide rates in the city of Belo Horizonte are distributed according to age, period and birth cohorts, across vulnerable and non-vulnerable urban areas.

Methods

We obtained yearly homicide counts (CID-10 codes X85.0 to Y09.9) from the Sistema de Informação de Mortalidade and intercensal population projections based on IBGE 2010's census for the 2002-2020 period, by 5-year age categories. Analyses were stratified into two areas: informal settlements and “formal city” (the rest of the municipality excluding informal settlements). We decomposed homicide rates (per 100,000) in age, period and cohort (APC) effects using a Poisson model with homicide rates as the outcome and fixed effects for each APC category. In order to identify the APC effects, we used the APC Intrinsic Estimator (APC-IE), which estimates all age, period and cohort effects as deviations from their corresponding means.

Results

In the formal city, children and young teenagers (0-4, 5-9 and 10-14 years of age) as well as certain elderly groups (60-64, ..., 75-79 years) had a smaller than average risk for homicides, while youth and young adults (15-20, ..., 45-59 years) had a higher-than-average risk for homicides (rate ratios – RR – ranged from 0.11 to 8.45). The same overall pattern was observed in the informal settlements, but the effects were smaller in magnitude (RRs ranged from 0.06 to 6.18). There was an overall decrease in homicide rates across periods in both formal city (2002-2007 period RR = 1.34, 2017-2020 period = 0.59) and informal settlements (2002-2007 period = 1.42, 2017-2020 period RR = 0.63). Out of 24 birth cohorts, only 1 in the formal city and 6 in the informal settlements had a higher or lower risk for homicides than average.

Discussion

Our research reveals intraurban discrepancies in the distribution of homicides across age groups, years and cohorts in Belo Horizonte. Understanding the determinants of these discrepancies might provide vital insights for developing strategical policies that account for social heterogeneity and inequities.

468 Infant Mortality trends in a Brazilian Metropolis: An Intraurban Analysis

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Abstract

Background Infant mortality rate (IMR) is an important indicator of the health status in a community. Although there is an overall decreasing trend in IMR over the years both in developed and developing countries, there are few studies evaluating intra-urban differences in IMR within large cities. The objective of this study is to explore the temporal evolution of infant mortality in a Brazilian metropolis (Belo Horizonte – Minas Gerais) according to social vulnerability and place of residence.

Methods We obtained yearly infant deaths from the Sistema de Informação de Mortalidade and live births from the Sistema de Informações sobre Nascidos Vivos between 2002 and 2020. All records were georeferenced by place of residence. Each area was classified in terms of legal status (informal settlements and "formal city", i.e. the rest of the municipality excluding the informal settlements) and social vulnerability (satisfactory and critical, according to the IVS - Índice de Vulnerabilidade Social). We investigated the temporal trends in IMR and its association with place of residence and social vulnerability using a Negative Binomial (NB) regression. IMR (per 1,000 live births) was the outcome, and the exposures were a linear time component, place of residence (reference = formal city) and social vulnerability (reference = satisfactory).

Results There was an average decrease of 3% in IMR for each year (rate ratio: RR = 0,97; 95% confidence interval: CI = 0,96 – 0,98). IMR was found to be higher in informal settlements than in the formal city (RR = 1.30; 95% CI = 1.22 – 1.39), and higher in areas with critical IVS (RR = 1.31; 95% CI = 1.24 – 1.39). Therefore, informal settlements that were also socially vulnerable had, on average, 71% higher infant mortality rates than areas in the formal city with satisfactory IVS.

Discussion Although decreasing over time, the intraurban discrepancies we found in infant mortality are still striking, suggesting that more needs to be done in terms of understanding and promoting child and youth health, particularly in the most vulnerable informal areas.

465 Health-supporting Public Spaces in Urban South Africa: Exploring Potential of Outdoor Gyms to Enhance Physical Activity and Placemaking

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Abstract

Background: In South Africa, nearly half of adult women and 43% of adult men are physically inactive. Attributes of public open spaces (POS) and recreational facilities may limit or promote PA, such as outdoor gym installations (OG). In Cape Town, the city municipality has installed over 250 OGs in public spaces across the city. This study aimed to 1) describe OG visitors, 2) the nature of their visits, including observed physical activity (PA), and 3) observed and reported attributes of OGs in 20 city OGs. **Methods:** 19 OGs were purposively-selected based on City of Cape Town priorities. Each gym was observed using an adaptation of the System for Observing Play and Recreation in Communities (SOPARC). We documented gender, age group of visitors and PA intensity. Brief intercept interviews (N=85) were conducted with visitors. An audit of gym equipment and POS attributes was conducted. Chi-square and logistic regression were used to analyse the results. **Preliminary Results:** Of the gyms sampled thus far (n=9), only one was located in a very-low income area. The number of stations per gym varied from 4-15. Most gym equipment was considered partially functional, with 28% of stations fully functional. More men than women (P<0.001) used OGs, but did not differ by time of day, day of week, or by age group. PA intensity in OGs was mostly light, while in the other target areas, PA was mostly sedentary, suggesting that these were used as places to rest or socialise. Male gender (P<0.04), proximity (P<0.04), preferred equipment (P<0.06), that OG use makes users feel healthier (P<0.04) and is affordable (P<0.01) contributed significantly to OG use. Together these explained 30-48% of the variance in gym use. Recommendations included: regular maintenance, installation of toilets and more equipment. Non-users also preferred to make use of private gym facilities. Data collection in an additional 10 OGs are underway. **Conclusion:** Results suggest that proximity, upkeep and a wider variety of well-maintained equipment are important factors to encourage use of OGs for PA by the wider public. Moreover, benefits of OGs may extend beyond PA for health and contribute to urban placemaking.

181 Examining the perceived advantages and disadvantages of linking the formal health system with informal healthcare providers in Nigeria for improving health delivery in urban slums

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Abstract

Background: Urban slums, predominantly inhabited by the urban poor are common in emerging countries in sub-Saharan Africa, such as Nigeria. The paucity of formal healthcare providers in urban slums has given rise to the proliferation of informal providers as major sources of health care with the attendant problems in urban slums. It will be necessary as short to medium term intervention to link the informal providers with the formal health system for proper governance and quality assurance of their services.

Aim: To examine the views of different stakeholders on pros and cons of linking the formal health system with informal healthcare providers in urban slums in southeast Nigeria.

Method: We interviewed 32 different stakeholders (12 policy makers/program managers, 16 formal providers, 32 informal providers and 16 community leaders) across eight (8) urban slums in two states in southeast Nigeria. We elicited their responses on the opportunities and challenges that are likely if we attempt to link formal providers to the informal providers. Interviews were transcribed and analyzed using descriptive thematic analysis.

Results: The presence of informal healthcare providers within the urban slums were recognized by all the stakeholders. Although many formal & informal providers showed interest in committing to linkages, they expressed reservations especially with the perception that linkages will ultimately lead to low patronage of informal settlements who consider that their means of income will be threatened by linkages. Some services are also considered to have traditional appeals and affordable, which make some service users cleave to the services offered by informal providers. Community members were also worried with infrastructural deficiencies of public health facilities in their settlements, but were also willing to contribute to its growth. In all, all actors saw benefits in establishing linkages if a 'win all' situation is guaranteed.

Conclusion: Establishing linkages holds potentials to improve health services, but there is need to mobilize and co-create effective interventions with concerned stakeholders. Sustainable linkage mechanisms must ensure that the earning of informal providers are guaranteed while strengthening the public health provider facilities to ensure they are adequate and appealing to use.

166 Who provides health services in urban slums in Nigeria, what are their challenges and how can the services be improved?

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Abstract

Introduction: Urban slums in Nigeria are highly deprived of formal social services, especially healthcare services, with dire effects on health outcomes for the slum dwellers. Hence, identifying and addressing key factors that constrain healthcare

provision in urban slums would help improve the quality of healthcare services for slum dwellers. This paper examines the key challenges facing healthcare providers in urban slums in South-East Nigeria and the proffered solutions to these challenges.

Method: A quantitative provider survey was undertaken in eight slums in two states in South-East Nigeria. The 260 randomly sampled respondents were heads of formal and informal health facilities and individual providers in the selected urban slums. The sample showed that 92.7% of the respondents were informal health providers and 7.3% were formal providers. Data was collected using a pre-tested interviewer-administered questionnaire. Data was analyzed using descriptive statistics. **Results:** It was found that 78.5% of the providers were trained for the services they provide. Majority of the providers (56.2%) were patent medicine providers, 15.8% were herbalists, 6.9% were bonesetters. Other informal providers were nursing/maternity homes and traditional bone setters. The formal providers were primary health centers (4.2%), private clinics (2.3%) and medical laboratory facilities (1.5%). The most common challenges faced were: informal (clients who cannot pay for services, Lack of good access road, Low availability of quality drugs etc.); formal (clients who cannot pay for services, insecurity of health facilities, lack of good access roads etc.). Most of the challenges were experienced by providers at the center and outskirts of the slums. Furthermore, we found that the providers believe that the best way to improve service provision is by ensuring the availability of drugs in public health facilities, establishing more equipped public health facilities in the neighborhoods, Improving the treatment capacity of drug sellers and other informal providers.

Conclusions: Informal health providers dominate urban slums. However, there are many challenges with provision of both informal and formal healthcare services that should be addressed so that urban dwellers will have effective access to appropriate healthcare services.

158 Existence and Motivations for Referral and Data Reporting Practices among Informal Healthcare Providers in Urban Slums in Southeast Nigeria: Implications for Sustainable Development Goal 3.

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Abstract

Background:

Ensuring availability of effective referral and data reporting systems in underserved urban slums are essential for timely interventions to save lives and ensure continuum of care in such places. Achieving this will require the collaboration and partnership of the informal healthcare providers that abound in urban slums and the formal health systems, especially as the WHO has emphasized that the public health sector alone cannot achieve the health related SDG3 targets. This study aims to explore the motivations of informal healthcare providers in providing referrals and data reporting to the formal health system.

Methodology

The qualitative study was conducted in 8 urban slums in Anambra and Enugu states in southeast Nigeria. In data collection, there were 33 in depth interviews (IDIs) with bonesetters, patent medicine vendors (PMVs), traditional birth attendants (TBAs), traditional herbal medicine dealers and traditional healers. The IDIs were recorded, transcribed and themes were identified related to motivations for referral and data reporting using NVIVO v10. Results were summarized in narratives.

Results

Existence and motivations for referral and data reporting by the informal healthcare providers were identified. All informal healthcare providers acknowledged some involvement in referral of patients to the formal health sector. However, their

reasons for referral varied. A major common motivator was to save lives. However, not all informal healthcare providers were involved in reporting their data to the public health system, but expressed willingness to be trained in data reporting.

Conclusion

Strengthening the motivation for referral and data reporting amongst informal healthcare providers in urban slums has the potential to improve health service delivery in urban slums. One strategy could be by institutionalizing linkages between the formal and informal health care systems to ensure quality service delivery for the achievement of SDG3.

Keywords: Informal healthcare providers, formal health systems, urban slums, health service delivery

324 Nutrition Status in Urban Bangladesh

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Abstract

Introduction: Bangladesh's socioeconomic environment is being profoundly impacted by urbanisation, which has serious implications for the population's nutritional state. Unique dietary, lifestyle, and healthcare access patterns in the urban setting may have an impact on nutritional outputs. The development of effective interventions to enhance public health in urban Bangladesh depends on an understanding of the nutritional status of urban communities.

Methodology: The study was conducted based on secondary data. Data were collected from Pubmed, Google scholar, notable health journals and international organizations' reports. No primary data was collected for this research. Only publications published between 2010 and 2022 with the keywords "nutrition," "urban nutritional status Bangladesh," "nutrition in Bangladesh's cities," and "child health and nutrition in Bangladesh" were included in the search. The sources included studies on the present situation of nutrition in Bangladesh's metropolitan areas, factor analysis techniques, and cross-sectional surveys.

Results: The results showed that urban Bangladesh has a complicated nutritional landscape. Stunting among children has reduced significantly in both slum and non-slum areas [2]. However, stunting and wasting are still big problems in urban slums [3]. Most of the average health and nutrition outcomes are poorer for slum residents than for non-slum residents [1]. However, the dangerously increasing prevalence of overweight and obesity among adults and adolescents points to a move towards non-communicable diseases connected to nutrition [4]. The score for dietary diversification was underwhelming, indicating insufficient intake of crucial nutrients [5]. Additionally, based on socioeconomic factors, there are frequently discrepancies in nutrition status in urban areas. Due to pricing and availability concerns, lower-income households may have a harder time getting access to nutrient-dense meals, which can lead to greater rates of undernutrition [6].

Conclusion: By highlighting the need for comprehensive initiatives to promote healthy nutrition behaviours and lessen the impact of both undernutrition and a lack of dietary diversity, this study offers insightful information about the nutrition landscape of urban areas. Bangladesh can work to realise its sustainable development objectives for nutrition and public health by giving urban nutrition interventions priority

Breakout Session 46: Mental Health & Perceptions

15:00 - 16:15 Thursday, 9th November, 2023

Location Sweet Auburn

Presentation type Oral

359 Variability in self-harm mortality in six Latin American cities: an ecological study.

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Abstract

Background: Self-harm mortality rates in Latin America (LA) have remained steady since 1990 with some variations by country. While national rates and trends have been examined previously, there are few studies examining subnational or city differences. Studies at these levels are important for reducing and preventing self-harm, particularly in regions with high socioeconomic heterogeneity, as in the case of Latin America. We aimed to estimate the variability of self-harm mortality in six LA cities by education level.

Methods: Vital registry data from 2009-2019 on self-harm deaths from the Salud Urbana en América Latina (SALURBAL) project for six LA cities were included in the analysis: Buenos Aires, Argentina; Belo Horizonte, Brazil; Santiago, Chile; San José, Costa Rica; Mexico City, Mexico; and Panama City, Panama. Our main analysis units were subcities (n=299) defined as smaller administrative areas (i.e., municipalities, comunas, cantones, delegaciones, and corregimientos) that compose cities. An empty multilevel linear model with a random intercept estimated variability in age-standardized self-harm mortality rates (ASMR) between and within cities. Association between education level (proportion of people ≥25 years that completed secondary education or more) and self-harm mortality for each subcity was assessed in city specific negative binomial models adjusted for age groups. All analyses were stratified by sex.

Results: Santiago had the highest ASMR overall, whereas Panama City had the lowest. The ICC was 39.8% and 34.8% in males and females, respectively, suggesting ASMR variability was mostly within rather than between cities. Higher education level was associated with lower self-harm mortality rates for both sexes in Buenos Aires and Santiago, while only for males in San Jose and Panama. The opposite was observed in Belo Horizonte, where higher education level was associated with higher self-harm mortality rates for both sexes. No association with education level was observed in Mexico City overall, or in San José and Panama City among females.

Conclusion: Variability within self-harm mortality in LA cities, as well as its association with education level highlights the need for area-specific policies that prevent and reduce the burden of self-harm mortality in LA. The policies should also consider social and economic contextual factors.

128 Identifying and Mapping Urban Stressors: A Participatory Approach for Understanding Place and Mental Health in 3 Slums in Kampala, Uganda

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Abstract

Introduction: There is a growing interest in better understanding the link between place and mental health. However, research strategies remain underdeveloped for low resource settings and dense urban environments. As part of a larger study, we identified, operationalized and mapped urban stressors based on input from young women in 3 slums of Kampala.

Methods: Several strategies were used in the fall of 2022 to identify and operationalize urban stressors linked to adversity and mental health. We conducted a PhotoVoice project, focus groups and engaged with our TOPOWA project Youth Advisory, who ranked the selected stressors and provided critical context. The list of stressors, as perceived by young women, included Public Latrines, Drainage channels, Alcohol Outlets, Hospital, Boda Boda stage, Brothels, Government schools, Police posts, Places of worship, Water source, Video Halls, Bridges, Washing bays, Sports betting.

Results: The community mapping was implemented across 26 parishes, using a 2,000-meter circle radius of 3 Uganda Youth Development Centers in Banda, Bwaise, and Makindye. Using GPS coordinates for each center, buffer zones were created using google earth to define the enumeration area. The data collection team (N=15) used GPS enabled Samsung Mobile phones with a customized ODK mobile data collection platform for capturing the community data of both regulated and unregulated alcohol sales outlets. Mapping was done using ESRI software. As an example, 381 alcohol selling points were identified and mapped. Of these, 213 or 56% of the alcohol selling points were either retail shops or small bars (seating 1<5). Large bars (seating >20) (n=66; 17%) and medium size bars (n=84; 22%) (seating 5-20) were also identified.

Conclusion: Community mapping can be resource intense and complex. However, we share our strategy and lessons learned for how to identify and map community indicators with the goal of informing and facilitating methodological advances and new projects. In order to better understand place and mental health and other urban health priorities, pragmatic strategies are needed to disentangle the impact of stressors in the built and social urban environment, particularly in settings where there is a scarcity of research.

107 Exploring the Impact of Urban Stressors on Mental Health in Uganda: Perspectives from Young Women in Kampala's Urban Slums

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Abstract

Background: Uganda is a low-income country with very high levels of unmet mental health needs. As many young people migrate to urban centers, the importance of understanding urban stressors and how they are linked to poor mental health remain an important and understudied research area with important implications for a fast-growing population within urban slums. The purpose of this study was to understand how young women in Kampala perceive urban stressors, mental health, and resilience. More specifically we wanted to understand how these stressors can be mitigated with economic empowerment initiatives offered in the local community.

Methods: We conducted six focus group discussions in 2022 with 75 women aged 18-24 from three Kampala slums (Banda, Bwaise, Makindye) that had previously participated in vocational skill training by the Uganda Youth Development Link. A key goal of the focus groups aimed to determine the perceived social and environmental stressors linked to poor mental health among young women and assess the potential of vocational training and economic empowerment initiatives in mitigating these urban stressors.

Results: Three primary themes emerged from the focus group discussions on how to frame and conceptualize the stressors linked to mental health: 1) Social Determinants of Stress (social stigma, sexual harassment, violation of moral fabric); 2) Environmental Determinants of Stress (hazardous conditions, inadequate infrastructure, poor health facilities); and 3) Economic

Determinants of Stress (unemployment, low income). The participants effectively delineated various advantages of vocational training, including income generation, skill acquisition, enhanced self-esteem, and improved quality of life.

Conclusions and Discussions: The focus group discussions provided valuable insights into mitigating the social, environmental, and economic determinants of stress and poor mental health within Ugandan slums. The findings highlighted the benefits of vocational training as an effective economic empowerment strategy, leveraging the opportunity as a driver of equity and social justice. These findings will be further investigated in a new study to assess the mental health trajectories of young women in Kampala's urban slums. The study aims to determine if addressing the economic determinants of health can help mitigate the impact of social and environmental stressors on mental health outcomes.

296 Sleep Quality, Food Scarcity, and Mental Health among a Pilot Study of Young Women living in the Slums of Kampala, Uganda

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Abstract

Background: Poor sleep quality and food scarcity are linked to adverse mental health outcomes, including stress. However, little is known about the associations between poor sleep quality and stress among youth living in low-resource settings, who are often faced with high levels of food scarcity.

Methods: A pilot study of young women living in the slums of Kampala, Uganda attending Uganda Youth Development Link (UYDEL) centers were recruited to participate in a 5-day pilot study on the social drivers of mental health. The primary goal was to examine the feasibility and acceptability of wearable wrist devices for a larger cohort study. The secondary goal of this pilot study was to assess associations between food scarcity, stress, sleep quality, and mental health. Sleep quality was measured daily using the Patient-Reported Outcomes Measurement Information System (PROMIS). Stress was measured using the Perceived Stress Scale (PSS) at the end of the 5-day period. Bivariate associations were computed using the Fisher's Exact Tests for categorical variables. All analyses were conducted in R 4.2.1.

Results: Among the participants, the mean age was 20.13 years. About a third of the women (36.7%) reported at least one member of their household going to sleep hungry in the past 4 weeks, and 40.0% reported a lack of food at some point in the past month. The majority of participants reported moderate stress levels (66.7%) or high stress levels (30.0%). Overall, PROMIS sleep disturbances were classified as "none to slight" (89.3%) or "mild" (10.7%) for all reported nights. All participants who reported an average level of mild sleep disturbances across the 5-day study period (n=3) also reported high perceived stress levels. However, among those who reported no sleep disturbances (n=19), only 24% of participants reported high perceived stress levels (p=0.03).

Conclusion: Food scarcity and high stress levels are prominent among young women in Kampala. Additionally, high stress levels were associated with mild sleep disturbances in our pilot study. A future cohort study is planned to explore these associations longitudinally, among a larger sample, and in the context of other social drivers of mental health in this population.

402 Community and stakeholders' perceptions about poor ambient lighting in Dhaka City

Syeda Tahmina Ahmed¹, Anisur Rahman Bayazid¹, Rumpa Akter¹, Riaz Hossain Khan¹, Zahidul Quayyum¹, Judith Irene Rodriguez², Gary Adamkiewicz²

Abstract

Exposure to poor lighting in housing and neighborhoods affects our physiological, visual, and emotional health. Poor ambient lighting in the housing and neighborhoods of Dhaka city is an emerging environmental and health concern. Significant research has yet to be carried out to address this. In our recent research, we modelled lighting environment (daylight modelling), using a climate-based daylight simulation approach and integrated into the three-dimensional environment, and we could identify areas of high exposure to low lighting. We have used the results for this qualitative study to examine how people of different ages, sex, socio-economic status, and occupations suffer at the household and community level due to poor lighting exposure. Also, what could be the potential strategies to overcome those challenges? A total of 7 Focus Group Discussions, and 17 Key Informants' Interviews, were conducted from. The data was divided into five major themes, with multiple sub-themes, viz. causes of poor ambient lighting, challenges from poor lighting exposures, identification of vulnerable population groups, existing coping mechanisms, and respondents' recommendations in addressing the problem. Housing and neighborhood features, planning and policy failures, and affordability for good quality housing were the key factors influencing poor ambient lighting. The homeowners introducing less or zero setback areas and unregulated urban planning and monitoring, aggravated the poor lighting condition. Women, young children, and elderly persons were found to be the most vulnerable group in terms of poor lighting exposure. The health complications reported by the respondents were vitamin D deficiency & its consequences, common illness, and visual problems. Other challenges reported were their loss of productivity around household business and regular activities, extra expenses for artificial lighting, cost of illness, and security issues. In their efforts of short-term coping mechanisms to reduce poor lighting problems in the households, use of candles and charge lights are common. Use of glass in building construction is common for the corporate and other institutions constructing glass buildings. For positive changes, the local communities can be included in co-producing interventions and policies by participatory methods and activities.

Breakout Session 47: Toward a Dynamic Ecosystem of Capacities Strengthening Initiatives for Urban Health

15:00 - 16:15 Thursday, 9th November, 2023

Location Centennial

Presentation type Panel

527 Toward a Dynamic Ecosystem of Capacities Strengthening Initiatives for Urban Health

Francisco Obando¹, Nathalie Roebbel¹, Dr. Fernanda Lanzagorta²

¹WHO, Geneva, Switzerland. ²PAHO

Abstract

Committed to strengthening capacities for urban health, the World Health Organization (WHO) will showcase effective training initiatives globally. The session will discuss existing strengths and gaps in skills, knowledge, and competencies of practitioners and civil society groups to address pressing urban health challenges. It will reflect on the adequacy of access and quality of existing available training.

The panelists will share their capacity strengthening approaches, including successes and difficulties faced. The session will focus on capacities required to work within and across sectors, in response to the complexity and diversity of urban health action taking place at the local, national, and international levels.

The WHO has developed a “capacities for urban health assessment tool”. The session will serve as a way to identify opportunities for connecting the users of the tool to available training. It will examine the merit of establishing a community of practice among institutions engaged in capacity strengthening for urban health.

Moderator

- Nathalie Roebbel, *Cross-cutting lead (Urban Health), WHO*

Speakers

- Giselle Sebag, *Executive Director, International Society for Urban Health (ISUH)*

- Amanda O'Rourke, *Executive Director, 8 80 Cities*

- Clint Grant, *Director, Healthy Community Design, Association of State and Territorial Health Officials (ASTHO)*

- Fernanda Lanzagorta, *International Consultant on Urban Governance, Pan American Health Organization (PAHO)*

- Francisco Obando, *Consultant – Urban Health, WHO*

Session objectives

1. To showcase effective urban health training initiatives
2. To uncover salient gaps in skills and knowledge among urban health practitioners, prioritizing areas for action to address them

3. To identify ways of connecting interested individuals and institutions to existing urban health training globally
4. To discuss the merit of establishing a community of practice among institutions engaged in capacity strengthening for urban health

Breakout Session 48: Greenery and Healthy Behaviors

15:00 - 16:15 Thursday, 9th November, 2023

Location Kirkwood

Presentation type Oral

345 Green spaces as urban assets for health promotion and health equity

MSc MPH Evelise Pereira Barboza^{1,2}, MSc Marta Cirach¹, MPH Diana Vidal Yañez¹, PhD Federica Montana¹, PhD Natalie Mueller¹, MSc MPH Tamara lungman¹, MSc Sasha Khomenko¹, MSc Carolyn Daher¹, MSc Jose Barrera-Gómez¹, PhD John Gallagher³, PhD Meelan Thondoo⁴, PhD Hans Keune⁵, PhD Tadhg Macintyre⁶, PhD David Rojas-Rueda⁷, PhD Michelle Kondo⁸, PhD Mark Nieuwenhuijsen¹

¹ISGlobal Barcelona Institute for Global Health, Barcelona, Spain. ²Pompeu Fabra University, Barcelona, Spain. ³Trinity College Dublin, Dublin, Ireland. ⁴University of Cambridge, Cambridge, United Kingdom. ⁵University of Antwerpen, Antwerpen, Belgium. ⁶Maynooth University, Maynooth, Ireland. ⁷Colorado State University, Fort Collins, USA. ⁸United States Department of Agriculture Forest Service, Philadelphia, USA

Abstract

BACKGROUND

Green spaces play an important role in preserving population health and well-being in cities. We bring together evidence from three studies recently developed. Firstly, we estimated the number of natural-cause deaths among adult residents that could be prevented in around 1,000 cities in 31 European countries, if the WHO recommendation for universal access to green space was achieved. Secondly, we estimated the distribution of green space and its attributable mortality among the population by socioeconomic status in six medium-sized European cities (Burgas, Lahti, Limerick, Tallinn, Umea, and Versailles). Finally, we estimated the potential mental health benefits of a local greening plan in Barcelona, Spain.

METHODS

We performed different health impact assessments. We focused on adult residents (aged ≥ 20 years). We used two green space proxies: normalised difference vegetation index (NDVI), and percentage of green area (%GA). Exposure and preventable health burden were estimated at a fine grid-cell level (250 m \times 250 m) for 2015. The first study considered 978 cities and 49 greater cities, in 31 European countries. The second included six medium-sized cities. The third was focused on Barcelona, and we compared the baseline green space with the Eixos Verds Plan implementation for extensive street greening.

RESULTS

For 2015, we found that meeting the WHO recommendation of access to green space could prevent 42,968 (95% CI: 32,296–64,177) deaths annually using the NDVI proxy in European cities, representing 2.3% of total natural-cause mortality. For the %GA proxy 17,947 (95%CI: 0–35,747) deaths could be prevented annually. The NDVI and %GA distribution varied between cities and within cities. In the six cities, around 60% of the population lacked green space. Exposure and attributable mortality were significantly correlated with the average annual income and we found two different patterns in terms of this relationship, mainly depending on where the deprived populations live. For the Barcelona Eixos Verds Plan full implementation, we estimated 14% of self-perceived poor mental health cases, 13% of mental health specialists visits, 13% of antidepressant use cases, and 8% of tranquilliser/ sedative use cases could be prevented annually, corresponding to over 45 M € annual savings.

348 Research Through Design For Salutogenic Green Spaces

Dr. ir Agnès Patuano Assistant Professor Landscape Architecture
Wageningen University and Research, Wageningen, Netherlands

Abstract

There is now a large body of research exploring the salutogenic benefits provided by green spaces. However, the evidence still needs to be translated into design knowledge which can be of use to landscape practitioners. Recently, a useful approach to bridge the gap between theory and practice has emerged under the name of Research by/through design(ing).

Research through design has already been successfully used to develop climate adaptive landscape interventions. However, its application to designing for health and wellbeing is a particularly challenging task. Health studies are deeply rooted in positivism and post-positivism where quantitative approaches are preferred. Additionally, the salutogenic effects of green spaces are wide-ranging, complex and interrelated, which makes their translation into usable guidelines and criteria difficult. However, this endeavor is critical, particularly as we are dealing with a global health crisis which highlights the importance of outdoor spaces.

This research critically discusses some potential avenues, from different epistemological approaches to theories with the most potential to create scientifically valid design knowledge. Together, this knowledge can guide the design process of landscape architects willing to increase the health benefits offered by the spaces they conceive.

482 Urban planning strategies for healthy space

Simone Trevisan, Ana Maria Sperandio
Unicamp, Campinas, SP, Brazil

Abstract

The well-being and health of individuals and communities strongly depend on the quality of urban spaces. Unfortunately, modern cities are full of problems such as unemployment, pollution, and inadequate housing, which give rise to infectious and chronic diseases. While steps have been taken to address these problems in the past, they have been neglected in the 20th century. Today, urban planning must prioritize the needs of residents and consider how decisions affect their well-being and health, promoting health and quality of life. It is essential to provide spaces that foster creativity, autonomy, and empowerment - a park, a vegetable garden, or a simple bench in a public square - as long as they are optimized for use and friendliness. These spaces should promote physical activity and social interaction to foster healthy communities, as exemplified by cities like Conchal, which incentivizes physical exercise, Santa Barbara, with its vegetable gardens and community medicinal containers, and Holambra, which has an economy based on flower plantations. This work focuses on assessing the adequacy of urban areas to the population's current needs, promoting quality of life, and implementing intersectoral policies for healthy aging to analyze urban health improvement. The city of Frisco, Texas, is an excellent case study in the United States. It consistently ranked high in quality of life rankings and was named the best place to live in North America by Money Magazine in 2018. The survey uses a theoretical framework corpus of information about healthy cities, which provides a historical perspective on how cities met the health needs of their societies. The study then deepens in defining indicators, indices, and principles of a healthy city to verify if the city in question meets the requirements described in 2022 Sperandio's mandala. Ultimately, the objective is to demonstrate the importance of implementing these indexes in all urban areas to improve the quality of life in the community as a prescription for achieving happiness.

58 Perceived neighborhood characteristics and practice of physical activity among adolescents and young adults: a model with distal outcomes

MSc Daiane Castro Professor and researcher, PhD Rosana Aquino, PhD Leila Amorim

Abstract

The relationship between neighborhoods and the practice of physical activity is widely studied. One of the challenges is to consider that the characteristics of the physical and social environment of the neighborhood affect each other through complex and interrelated processes and the use of robust methods that combine different aspects. This study aimed to identify neighborhood profiles perceived by adolescents and young adults and estimate their association with global and leisure-time physical activity. Data from 1,637 individuals aged 15 to 24 years were taken from a cross-sectional study with cluster sampling, conducted in a city in the State of Bahia, Brazil, in 2011. Physical activity was measured using the International Physical Activity Questionnaire (IPAQ), short version, in addition to a question about leisure activities. The perception of characteristics of the physical and social environment of the neighborhood was based on a scale with 14 questions. Neighborhood profiles were defined through latent class analysis (LCA), and the estimation of their effects on physical activity used a model with distal outcomes. The criteria evaluated to determine the number of latent classes were: Akaike Information Criteria, Bayesian Information Criteria (BIC) and adjusted BIC, Vuong-Lo-Mendell Rubin (VLMR) Likelihood Ratio test, Bootstrap and interpretability. The latent profile analysis resulted in three neighborhood patterns, described as “urban, sociable, and favorable to physical activity – class 1” (39.6%); “sociable and safe – class 2” (24.4%), “insecure, low sociability – class 3” (36%). Individuals belonging to “class 1” showed the highest probability to exercise (56.4%), while for classes 2 and 3 these percentages corresponded to 46.3% and 42.8%, respectively. A statistically significant association was identified only in the “urban, sociable and favorable to physical activity” class, whose chance of performing leisure activities was 72% (OR=1.72; 95%CI:1.29-2.29). Neighborhoods with attributes that favor the practice of physical activity and the existence of urbanization elements increase the chance of active leisure behavior among adolescents and young adults. The use of the LCA and the model with distal outcomes are promising and innovative in neighborhood approaches, it proved to be adequate and plausible, mainly for the composition of typologies that group characteristics of different dimensions.

25 Neighborhood social and built environments and neighborhood walking among Black older adults

Dr. Lilah Besser PhD, MSPH¹, Dr. Stephanie Chrisphonte MD¹, Dr. Diana Mitsova PhD²

¹University of Miami, Boca Raton, FL, USA. ²Florida Atlantic University, Boca Raton, FL, USA

Abstract

Introduction: Neighborhood environments become increasingly important to older adults, who may stay closer to home due to driving cessation, physical or cognitive limitations, or shrinking social networks. While many studies have examined how neighborhood environments influence health behaviors, fewer have focused on neighborhood predictors of health behaviors conducted in the neighborhood by minoritized groups. This study investigated associations between neighborhood characteristics and neighborhood-based walking among Black older adults.

Methods: Our study includes 2017 US National Household Travel Survey respondents who self-identified as Black, were ≥65 years old, and lived in urban areas. Neighborhood variables (i.e., Census tract) included the National Walkability Index (captured mixed land use and walking infrastructure), Area Deprivation Index, and predominant racial group (Black, White, or Mixed). Neighborhood walking/day (yes versus no) was based on minutes reported walking to and from home during an assigned travel diary day. Multivariable mixed effects logistic regression, accounting for clustering by Census tract, tested associations between neighborhood characteristics and neighborhood walking.

Results: Participants (n=3,185) were on average 73 years old and 63% were women. Approximately 10% reported any neighborhood walking. Thirty-two percent lived in predominantly (>50%) Black neighborhoods, 26% lived in predominantly White neighborhoods, and 42% lived in neighborhoods with no predominant racial group. Older age, owning a vehicle, and living in the Northeast or Midwest regions of the US (versus South) were associated with being less likely to participate in neighborhood walking. Conversely, males and renters (versus homeowners) were more likely to participate in neighborhood

walking. Individuals in neighborhoods with higher National Walkability Index scores had higher odds of neighborhood walking (OR=1.05; 95% CI=1.00-1.10; p=0.04). No other neighborhood characteristics were associated with neighborhood walking.

Discussion: Independent of individual- and neighborhood-level socioeconomic status and neighborhood racial/ethnic composition, Black older adults were more likely to walk in neighborhoods that had greater mixture of land uses and walking infrastructure (i.e., greater walkability).

212 An analysis of the Dhaka WASA LIC Unit's recourse of effective Customer Relationship Management (CRM) to uphold WaSH rights and advance equity in health care

Senior Deputy Director, PHD Fatema Showkat Jahan MSS, MDS, Additional Managing Director, PHD Sakawat Hossain MSS, MBA
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Abstract

An analysis of Dhaka WASA LIC Unit's recourse of effective Customer Relationship Management (CRM) to uphold WaSH rights and advance equity in health care

Background: Ensure WaSH right for the low-income community (LIC) of urban slums is a huge challenge for Dhaka Water Supply and Sewerage Authority (DWASA) covering a total of 21.00 million estimated population where 35% of them are slum dwellers; mostly undefined. A new Low Income Community (LIC) unit was thus functioned from 2010. The unit adopted CRM to serve LICs in ways to uphold service delivery through consumer-based approach and service co-creation. This analysis opted to appraise the CRM's expediency in improving LIC services for contributing towards improved health and wellbeing of slum people.

Methodology: Qualitative tools were used that covered FGDs, problem ranking and prioritization, Key Informant Interview (KII), Semi Structured Interview (SII). These tools applied to project covered and uncovered slum areas as well as phased out areas to have a comparative analysis. Data collected from 400 targeted participants were analyzed through multiple variable analysis and regression techniques to obtain results.

Type of participants: Slum dwellers, House Owners, LIC staff, DWASA Revenue Collector, CBO, WSUP and Unicef representatives.

Results: This study explored the effects and the relative importance of the apparent service quality dimensions of Dhaka WASA towards LICs on corporate image, customer satisfaction, and customer trustworthiness. Findings revealed that the LIC unit of Dhaka WASA has contributed significantly to the health and well-being of LICs in Dhaka by providing affordable of target audience in accessing safe drinking water (37%), sanitation facilities (48%), promoting hygiene promotion (33%) and reduction of healthcare costs (39%). In this effort, employment of CRM in the process has contributed to improved health and wellbeing among LICs in many ways such as access to services (26%), community awareness (42%), client satisfaction (52%).

Conclusion: Serving a huge undefined community with minimum resources itself a challenge for DWASA. Thus, functional LIC unit with donor support can create a sustainable impact for slum dwellers. Efficient application of CRM can ensure client centered service approach that would create sustainable health benefit at scale.

Breakout Session 49: Community

15:00 - 16:15 Thursday, 9th November, 2023

Location Buckhead

Presentation type Oral

525 Integrating Social Determinants of Health (SDoH) and Health Equity Education into Residency Training; One Program's Approach

Dr. Lynn Gardner MD

Morehouse School of Medicine, Atlanta, GA, USA

Abstract

Because physicians are directly engaged with patients regarding health, wellness, and illness, they play a crucial role in identifying and responding to their social determinants of health. To be effective, physicians must have a healthy understanding of the SDoH concepts. However, they are not comprehensively covered in most medical school curricula. Residency training provides an ideal setting to teach SDoH concepts and how to assess and respond to patient needs appropriately. Integrating this into the graduate medical education curriculum can be challenging but effectively done with forethought and careful planning. Morehouse School of Medicine Pediatric Residency Program offers one model.

Methods

The SDoH curriculum goals were taken from the CDC's definition, and the training goals were assessed. Rotational areas of the training program were identified for curriculum integration, and a longitudinal plan for continued implementation was established. The curriculum was assessed for effectiveness using pre-and post-rotational surveys and resident performance related to psychosocial issues on their certifying examinations.

Results

First year: a self-study rotation was established to allow the residents to read about SDoH with emphasis on concepts such as poverty, food insecurity, implicit bias, and adverse childhood experiences. A community comparison activity was also included. Second year: residents have an advocacy rotation directed by an advocacy attorney where they learn to advocate for children on the state and national levels. In the third year, residents choose to serve a special population to apply concepts learned. Options are homeless children, rural children, global health community, or children cared for at a Federally Qualified Health Center. Longitudinally, the SDOH are assessed with all patient encounters. The residents learn to utilize assessment instruments and provide appropriate community resources for assessed needs. Residents are more confident with their knowledge of SDoH after their first-year rotation when compared to before. Three resident classes scored at or well above the national average on the psychosocial issues section of their certifying examinations between 2018 and 2022.

Implications

Integrating SDoH education into graduate medical education curricula increases physicians' competence to assess and respond to patient needs which has favorable impact on the health outcomes of patients

267 The Living Roots Project: Building a community asset and research consortium in Ealing, West London to address health equity

Dr Megan Schmidt-Sane, Ms Jo Carpenter, Mr Tom Barker, Mr Joe Taylor
Institute of Development Studies, Brighton, United Kingdom

Abstract

Living Roots is a participatory, action oriented, asset-based project that puts collaboration and inclusion at the heart of its work, and the voice of the excluded at its center. This approach aims to ensure that project collaborators have equal voice in project strategic vision and activities to build shared understandings and a framework to understand the key 'problems' related to health inequity, engage with the local Integrated Care System (ICS) and identify leverage points in the system. This is done using a 'creative health' approach linked to Ealing's community arts scene that not only diagnoses the problem but links this diagnosis to action and continually acting on learning.

The project is working to explore intersecting inequalities, using a whole systems approach to health and wellbeing to feed insights and learning into the North West London ICS through the Integrated Care Communications and Engagement Steering Committee (SC) from which research team members are drawn.

Over 9 months, our collaboration is exploring how community organisations and stakeholders understand and experience health inequity and what are their priorities for action; what local assets, organisations, and partnerships have been established prior to, and during the pandemic; ideas and lessons for how the NHS and local government can build trust and work in partnership with voluntary and community organisations to improve health for local populations; how could a community asset and research partnership to improve health equity in Ealing be developed and sustained. Our approach includes the mapping of community assets and actors; community consultation and insight sessions to understand barriers to accessing and to discuss ways to improve health services; training and supporting community peer champions; and a reverse mentoring programme to expose local government and NHS professionals to community experiences and perspectives.

An accompanied learning approach will facilitate the development of a Theory of Change to both reflect on progress towards project objectives, including to develop a shared understanding of health equity, and to guide the effective implementation of the council's new health and wellbeing strategy that centres the community.

200 The Critical Need for Community-Based Committees (CBC) for Improving Health and Well-being in Urban Informal Settlements: Evidence from Bangladesh

Mr Muhammad Riaz Hossain Public health researcher, Miss Bachera Aktar Deputy Director, Professor Sabina Faiz Rashid Dean and Professor
BRAC James P Grant School of Public Health, BRAC University, Dhaka, Bangladesh

Abstract

Background: Urban informal settlements, also known as "slums," are a rapidly developing phenomenon in low- and middle-income countries with over one billion residents. This rapidly growing population is underrepresented in cities' health and development planning. The formation of community-based committees (CBC) in urban slums comprising marginalized populations, community leaders, and major public, private, and community-level stakeholders can improve voice, collective action, and agency.

Objective: This abstract presents data from a large community-based participatory action research project. This abstract focuses on the contributions of local CBCs to improving the health and well-being of informal urban settlement residents and the ability of those committees to increase the accountability and responsiveness of service providers within the settlements.

Methods: Data were extracted from 30 community-based participatory group sessions—five social mappings, fifteen service mapping and stakeholder analysis sessions, and ten validation sessions—with 180 participants in five informal urban settlements in Dhaka, Khulna, and Satkhira. The group sessions addressed health, water, sanitation, and social services for informal settlement residents. Conventional thematic analysis was done.

Result: We found different local CBCs comprised of elected representatives of local government, local leaders and elites, religious leaders, representatives of marginalized populations, and NGO workers. Local NGO-formed committees are involved in infrastructure development (communal toilets and bathing spaces, water supply, construction of roads and drains), waste management, health and social awareness, and external aid distribution. In addition, the communities formed mosque and panchayat committees for the safety and security of the settlements. Compared to the other five sites, the two oldest settlements, one in Dhaka city and one in Khulna city, have strong committees due to a long history of NGOs and strong local leadership. A local committee in Dhaka controlled the legal water supply with NGO help. The local government's elected representative, who leads a local committee in Khulna, strives to coordinate service-providing entities.

Conclusion: Local CBCs play critical roles in facilitating service availability and building community awareness of health and social issues. Empowering local community-based committees and developing local leadership could contribute to improving access to essential services and community development, thus reducing inequality.

531 Intervention Skill Training in Addressing Urban Health Challenges

WR Sexson, Tracey R Bell, [Joan Wilson](#), Stacey Schmidt, Farhan Hoodbhoy, Charles Moore
Emory University, Atlanta, GA, USA

Abstract

Social Determinants of Health (SDOH) is defined as the economic, educational, physical, and environmental conditions in which people live and work. SDOH training has been a part of college and health education curricula for several decades. Skill-based training to actively intervene in addressing SDOH is less commonly available to students or post-graduate professionals. Indeed, the complex collaborative networks and policy-making skills required to address SDOH demands multi-faceted interventions and problem-solving. To that end, Emory's Urban Health Initiative (UHI) collaborated with the Laney Graduate School, the Nursing School, the Law School, and the Emory Center for Ethics to offer a cross-discipline intensive course designed to train students and professionals in the variety of skills necessary to effectively address SDOH.

Over the past six years the UHI has offered multiple 1.5 to 3 credit hour courses dealing with cross-professional intensive skills training. These courses included skill development in: legislative advocacy; policy development and policy brief presentations; the ethics of social justice; the elevator pitch; writing effective OP-EDs; trauma informed interventions in Adverse Childhood Experiences (ACEs); stigma, bias and discrimination training- including attention to issues of diversity, equity and inclusion (DEI); recognition and response to "micro-aggressions"; "But-Why" analysis for honing doable projects from otherwise insoluble "wicked questions"; poverty simulation and intervention; developing feasibility studies; and program sustainability.

Course duration ranges from 28 hours to 75 hours over a four month semester. Collaborative and cross-professional instructors come from four of Emory's nine schools with students coming from six of the nine schools. Each student must complete a final "capstone" project that demonstrates facility with a variety of the skills noted above. Several of these capstone projects resulted in accepted OP-EDs and in policy development that subsequently became law in Georgia's legislature. Students receive graduate level credit for successful course completion. Many of the skills taught were incorporated in a separate multi-disciplinary certificate program offered by the School of Medicine.

Didactic skill-based training results in trained and engaged professionals with the skill set and knowledge to successfully accomplish meaningful intervention in the urban health arena.

532 The Emory Urban Health Initiative Program in Training Young "Ag-Entrepreneurs"

[Joan Wilson](#), WR Sexson, Brandon Young, Charles Moore

Abstract

Neighborhood urban agricultural sites are frequently found as a safe-haven for residents of all ages. Emory's Urban Health Initiative (UHI) uses such gardens to engage community members in teaching inner city teenagers' life-skills and entrepreneurial approaches to develop self-sufficiency, and confidence.

The UHI trains high-school aged boys in how to purchase the needed material to make and grow small basket-sized herb gardens. When the herb gardens are reasonably mature, they can be sold for a significant profit at local farmer's markets. While the project seemed straight forward initially, there was a long learning curve. We found that these students also needed other skills and resources to assure success. We taught the youth how to introduce themselves, how to shake hands with strangers and how to give (with confidence) a 30 second pitch on the various herbs and how the basket gardens should be cared for. Additionally, if they actually sold their baskets, the students did not have any place to safely keep money. We worked with a local bank to provide no-cost accounts for the youth. In order to do this, we had to help them get a state-issued identification card. With the successful participation, we taught these teens how to develop their own resume' in order to present themselves well to prospective employers. Finally, to demonstrate their success, there is a graduation ceremony with a formal certificate to reinforce the value of the training and its written inclusion in their resume'.

The teaching for the program came from the UHI, from Emory students as well as from community members. Despite the fact that community gardens often have less crime than other sites, in order to assure the safety of the participants, we developed a safety manual for use with all participants.

In summary, this program in agricultural entrepreneurship successfully taught inner city youth the personal and business skills to make money. We used this training to additionally teach life skills such as resume' development, money management and dealing with state agencies to get official identification cards.

Breakout Session 50: Launching the City Know-how platform, a knowledge hub translating evidence into action from Cities & Health

15:00 - 16:15 Thursday, 9th November, 2023

Location Highlands

Presentation type Panel

424 Launching the City Know-how platform, a knowledge hub translating evidence into action from Cities & Health

Mr. Marcus Grant MLA¹, Ms. Sarah Ruel-Bergeron RA², Mr. Alvaro Valera Sosa MScPH³

¹Cities & Health Journal, Bristol, United Kingdom. ²ISUH, Brooklyn, NY, USA. ³Building Health Lab, Berlin, Germany

Abstract

Introduction and background - 15 mins

The conference theme, translating evidence to action, is at the core of the 'City Know-how' platform; a collaboration between Cities & Health journal, ISUH and Building Health Lab. The City Know-how platform will be a step change in providing better access for the disparate communities of interest in urban health. In the launch, we expect the presence of many future users and past Cities and Health authors who have provided City Know-Hows to garner excitement about the resource for authors, practitioners, and students alike.

We know about the perennial gap between knowledge and action. But what can we do? Marcus Grant, Cities & Health Editor-in-Chief, explains the link between the journal mission and the evolution of City Know-hows. Sarah Ruel-Bergeron will speak of the longstanding partnership between ISUH and the journal and how this collaboration has always sought to help translate evidence into action for urban health. Routledge, our key publishing partner, will say a few words about knowledge translation in the current era and the need for researchers and their audiences to find new ways to communicate.

Welcome remarks by Marcus Grant & Sarah Ruel-Bergeron

Platform walk-through - 10 mins

Alvaro Valera Sosa from Building Health Lab explains the platform's communicational power and development objectives as he walks the audience through its applications and offerings. The walk-through highlights the features, user experience, and options for navigating the different Know-hows.

Moderator for discussion – Sarah Ruel-Bergeron

Panel Discussion – 30 mins

Authors who have published in Cities & Health with associated City Know-how material discuss the new platform. How can this help to connect research with practical 'knowledge into action'? Panelists will elaborate on the platform's potential and challenges in addressing research, planning, and design stages in project development.

- Olga Lucia Sarmiento Dueñas, tbc
- Helen Pineo, tbc
- José Siri, tbc

Q&A - 30 mins

An interactive session will gather comments, questions, and feedback about the platform's functionality and applications from participants. These comments will be used by the creators to refine and improve the platform following ICUH 2023. Details of an opportunity to join a feedback trial and subsequent workshop will be given.

Breakout Session 51: Healthy Havoc: Infrastructure is Crumbling our Minds and Bodies

15:00 - 16:15 Thursday, 9th November, 2023

Location Old 4th Ward

Written & Directed by Andy Boenau

We're all at risk of losing our minds and bodies to the sedentary lifestyle that's been forced on us. But our society doesn't have to keep suffering this way. This is a film about the quest to fill a prescription for healthy living. It wasn't that long ago in our history that people got mysteriously sick because they didn't understand germs. Nobody washed their hands, ever. The subject of this film is on that level of importance. There are policies & practices that need to be washed away because of the constant sickness they're introducing.

Americans are in a public health crisis that feels beyond our control. Anxiety, depression, loneliness, cognitive decline, heart disease, obesity, diabetes, cancer, chronic pains – these are all made worse by infrastructure that's planned around the automobile. Trained experts of the built environment are not trained at all in how humans interact in the built environment.

This documentary sounds the alarm about unhealthy infrastructure, provokes critical thought, and inspires people to band together to make their neighborhoods healthy and delightful places to live.