Journal of Urban Health: Bulletin of the New York Academy of Medicine, Vol. 88, No. 6
doi:10.1007/s11524-011-9609-y

Social Conditions and Urban Health Inequities: Realities, Challenges and Opportunities to Transform the Urban Landscape through Research and Action

V. Nelly Salgado de Snyder, Sharon Friel, Jean Christophe Fotso, Zeinab Khadr, Sergio Meresman, Patricia Monge, and Anita Patil-Deshmukh

ABSTRACT *The process of urbanization entails social improvements with the consequential better quality-of-life for urban residents. However, in many low-income and some middle-income countries, urbanization conveys inequality and exclusion, creating cities and dwellings characterized by poverty, overcrowded conditions, poor housing, severe pollution, and absence of basic services such as water and sanitation. Slums in large cities often have an absence of schools, transportation, health centers, recreational facilities, and other such amenities. Additionally, the persistence of certain conditions, such as poverty, ethnic heterogeneity, and high population turnover, contributes to a lowered ability of individuals and communities to control crime, vandalism, and violence. The social vulnerability in health is not a "natural" or predefined condition but occurs because of the unequal social context that surrounds the daily life of the disadvantaged, and often, socially excluded groups. Social exclusion of individuals and groups is a major threat to development, whether to the community social cohesion and economic prosperity or to the individual self-realization through lack of recognition and acceptance, powerlessness, economic vulnerability, ill health, diminished life experiences, and limited life prospects. In contrast, social inclusion is seen to be vital to the material, psychosocial, and political aspects of empowerment that underpin social well-being and equitable health. Successful experiences of cooperation and networking between slum-based organizations, grassroots groups, local and international NGOs, and city government are important mechanisms that can be replicated in urban settings of different low- and middle-income countries. With increasing urbanization, it is imperative to design health programs for the urban poor that take full advantage of the social resources and resourcefulness of their own communities.*

KEYWORDS *Urban, Health inequity, Social conditions, Developing countries, Slums*

Salgado de Snyder is with the Center for Health Systems Research, National Institute of Public Health (INSP), Cuernavaca Morelos, Mexico; Friel is with the Department of Epidemiology and Public Health, University College London, London, UK; Friel is with the National Centre for Epidemiology and Population Health, Australian National University, Canberra, Australia; Fotso is with the Africa Population and Health Research Center (APHRC), Nairobi, Kenya; Khadr is with the The American University in Cairo, Cairo, Egypt; Meresman is with the Centro Latinoamericano de Economía Humana (CLAEH), Montevideo, Uruguay; Monge is with the Central American Institute for Studies on Toxic Substances (IRET), Universidad Nacional, Heredia, Costa Rica; Patil-Deshmukh is with the Partners for Urban Knowledge, Action and Research (PUKAR), Mumbai, India.

Correspondence: V. Nelly Salgado de Snyder, Center for Health Systems Research, National Institute of Public Health (INSP), Cuernavaca Morelos, Mexico. (E-mail: nsnyder@insp.mx)

INTRODUCTION

In general, the process of urbanization entails social improvements, with consequential better quality-of-life for urban residents. However, in many low- and some middle-income countries (LMICs), urbanization conveys inequality and exclusion, creating cities and dwellings characterized by poverty, overcrowded conditions, poor housing, severe pollution, and absence of basic services such as water and sanitation.[1,2] But "place" means more to humans that just the physical space they inhabit. The social environment describes the structure and characteristics of relationships among people within a community.[3] In urban centers, the social environment provides infrastructure such as health care, employment, education, social networks, and social interactions, which can be inclusionary or exclusionary, thereby affecting people's physical and mental health.[4]

In this Global Research Network on Urban Health Equity (GRNUHE) paper, we describe how in cities in LMICs social exclusion contributes to urban health inequities via inequities in social infrastructure including health care, education, employment, and social capital. We highlight policies and practices implemented in cities across the world that have sought to be socially inclusive and improved the social conditions for disadvantaged population groups. We conclude by emphasizing some of the gaps in the global evidence base and describe key areas for future action-oriented research in the field of social exclusion and urban health inequities.

SOCIAL EXCLUSION AND HEALTH INEQUITIES

Social exclusion refers to the systematic denial for certain social groups of the resources and/or recognition that could facilitate their full participation in the society. The Social Exclusion Knowledge Network (SEKN) of the World Health Organization (WHO) Commission on Social Determinants of Health advanced a comprehensive definition of social exclusion, stressing the relational and multi-dimensional perspective of the social systems: dynamic, multi-dimensional processes driven by unequal power relationships in the society.[5] These processes operate along and interact across four dimensions—cultural, economic, political, and social—and at different levels including individuals, groups, households, communities, countries, and global regions. These processes result in a continuum of inclusion/exclusion and contribute to unequal access to resources, capabilities, and rights required for human development, valued recognition, involvement and engagement, social proximity, decision making, material well-being, living within environmental limits, and resisting the hazards of environmental change. This definition proposed by the SEKN provides a wider lens to social exclusion that links it to the unequal power relationships in the society and recognition that exclusion processes operate differently and have different impacts on different groups and/or societies at different times.[6]

The proliferation of slums in LMICs highlights an additional dimension of exclusion: socio-spatial, which is defined as a process whereby different social groups residing in specific geographical areas are being excluded from access to resources and opportunities offered by the city.[7] This concept of socio-spatial exclusion postulates that geographic areas, and in particular slums, should be

investigated not as mere residences of the excluded population but as factors that contribute to further social and health risks.

The relationship between social exclusion and health inequities has not received, nor sufficient attention from researchers and policy makers in LMICs. In this context, we were able to identify examples from different parts of the world. For instance, in the east, Rashid argues that in Bangladesh, the broader political and economic conditions challenge the ability of the urban poor to improve their health and daily living context.[8] Rashid warns that living in slum settlements is associated with shame, stigma, and spatial exclusion. In Pakistan, Hunter suggests that poor health outcomes were observed among socially excluded groups.[9] In India, the caste system remains a major indicator for health outcomes, as reveled by the Indian National Health Survey–III (2005–2006) that documented lower levels of prenatal care, institutional deliveries, and vaccination coverage among scheduled castes; infant and maternal mortality were also higher among members of scheduled caste and scheduled tribes.[10]

Similar examples were identified in other regions of the world. The African Population and Health Research Center reported in 2002 that in the slums of Nairobi, child mortality rates were significantly higher than those in other areas in the city; slum mortality rates exceeded rural Kenyan mortality.[11] Additional risk included poor quality and quantity of water and sanitation, inadequate hygienic practices, poor ventilation and use of hazardous cooking fuels, transmission of infectious diseases in densely populated slums, and the elevated cost of health care, which delays, or prevents, access to health services for the poor.

In Mexico, excess mortality was evident in municipalities with very high levels of marginalization, and social exclusion contributed to "notorious" health inequalities measured in terms of mortality rates related to transmissible illnesses in childhood and produced by avoidable factors.[12]

INEQUITIES IN SOCIAL INFRASTRUCTURE AND THE RELATIONSHIP WITH URBAN HEALTH INEQUITIES

Education

Education is strongly correlated with health inequities because it provides a main route out of poverty and empowers people—financially, psychologically, and politically.[5,13–15] Higher educational attainment improves health both directly and indirectly through provision of access to better work and economic conditions, social–psychological resources, and information management that allows disadvantaged individuals to make better choices and achieve healthier lifestyles.[16]

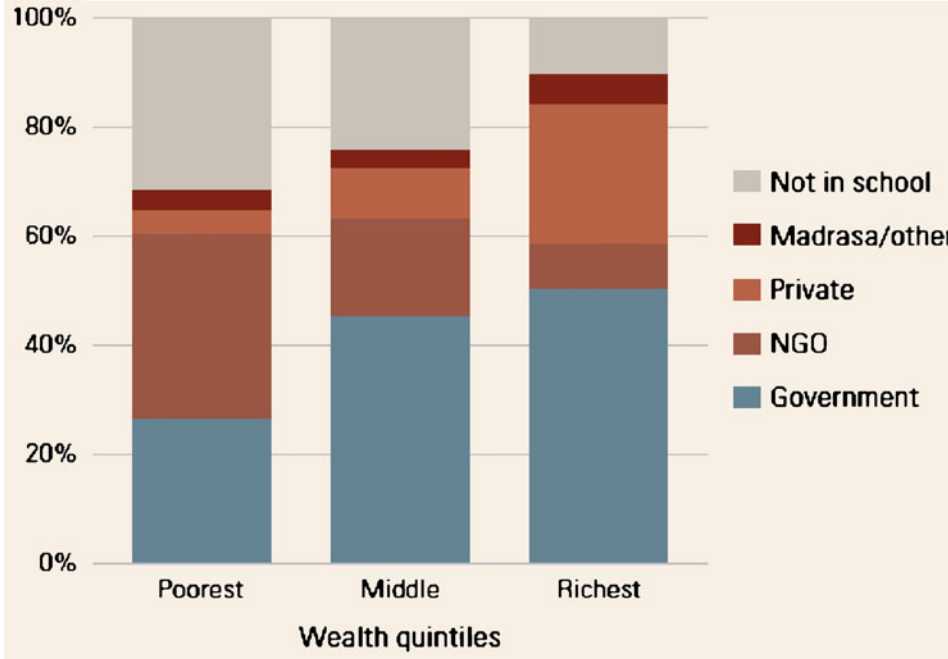
In general, socially disadvantaged, marginalized groups experience many barriers to quality education. Frequently, schools are too far from their homes or when geographically accessible, they might be unaffordable.[17,18] In the slums of Dhaka, Bangladesh, the poor dwellers generally have little, if any, choice of education provider (Box 1). In the slums of Nairobi, parents pay for poor-quality private schooling while children from outside the slums have access to free government education. Even where schools are accessible, security concerns

present an additional hurdle to access.[19] Furthermore, social exclusion through denial of education is common in slums due to the lack of official residency status. For purposes of school registration, the authorities do not recognize that these children even exist.[20] While in many countries, there has been a movement for a ban on child labor, this has not always been accompanied by an analysis of the reasons for this problem. Providing children with a quality education, life, and income-generating skills is now seen as a means of increasing the options available to working children and their families.[21]

Box 1: Slums in Dhaka—marginalization with rapid urban growth.[20]

Education figures for Dhaka's slums are among the worst in Bangladesh. One study of four slums found that just 70% of children were enrolled at the primary level, many of them in schools run by NGOs. The study found high inequality within the slums. The children of better-off families were far more likely to be in government or private schools. Children from the poorest households were less likely to be in school, and if they were, almost half relied on schooling supplied by NGOs, churches or private entrepreneurs, with little government support or regulation.

Figure A: Percentage of children aged 6 to 11 years enrolled, by type of school and wealth, selected slums of Dhaka, 2008



Only a quarter of Dhaka's slums have government schools, mostly located in well-established slum areas, while newer, less formal settlements have none. Lacking tenancy rights, slum dwellers are in a weak position to demand education and public finance. Moreover, as many city authorities periodically bulldoze informal settlements, some non-government providers are loath to invest in school buildings. Source: UNESCO, 2010.

Women in LMICs have lower educational levels than men; women in poverty are at the greatest disadvantage. Low schooling rates among women in LMICs were related to having more children, single motherhood, decreased visits to prenatal care, low birth weight, and low breast cancer screening and pap testing.[22–24] A meta-analysis has shown that more education reduces the risk of heart disease and diabetes, lowers the probability of reporting fair or poor health, reduces lost days of work to sickness, and increases positive health behaviors in relation to smoking, drinking, and drug use.[25]

Employment

Urban settings concentrate a large proportion of the labor force in many LMICs, where migration from rural to urban areas is frequent in order to find better job opportunities.[26] Employment availability, salaries, and working conditions affect health equity through the material and social empowerment that they convey.[27] In addition to the direct health consequences of tackling work-related inequities, employment has a potential role in reducing gender, ethnic, and other forms of social exclusion.

Financial security among urban dwellers is determined, or at least mediated, by the labor market. Since the economic crisis, the number of workers in vulnerable employment has increased from 2008 to 2009 by between 41.6 and 109.5 million. The largest potential negative impact is in South Asia, Southeast Asia, and Sub-Saharan Africa, where extreme working poverty may have increased by 9% or more in the worst-case scenario.[28] Urban workers living under precarious situations such as unemployment, underemployment, temporary employment, and non-voluntary part-time jobs, and their dependents, face lack of social security benefits (medical attention, sponsored pensions, workers compensation, paid maternity leave). Health outcomes related with job insecurity include high blood pressure, longstanding illnesses, psychiatric morbidity, and general illness symptoms.[29] The health risks associated with different job categories and precarious employment are not constrained to LMICs. Reports derived from the Whitehall study in England demonstrated that health risks increase significantly with decreasing occupational grade.[30]

There are many health hazards faced by urban workers, including acute and chronic problems affecting hearing, respiratory, cardiovascular, nervous, and hepatic functions. Occupational cancer is a major outcome associated with several occupational exposures.[31] Workers in the informal sector of the urban economy, especially the poorest, are additionally exposed to urban environmental risks such as air pollution, radiation due to sunlight, and non-potable water.[32]

Health Care Services

While social and health services are frequently more available in cities than in non-urban areas, marked inequities in access and utilization of services exist across a number of social categories within cities. For instance, in many parts of the world, women have been systematically excluded from the health systems.[33] This is usually associated with lack of health protection and promotion resources, and lack of, or limited access to treatment for specific diseases, particularly services for women in late stages of HIV infection and young

teenagers.[34–37] Also, children living in poor areas have been reported to have less access to health services.[38]

Traditionally, minority ethnic groups, displaced communities, and people with disabilities have been neglected by the health system. Their needs tend to be ignored, facing multiple access barriers associated with discrimination and stigma which leverage with poverty and create vicious circles.[39] Finally, vulnerable groups are often excluded from the data systems, becoming invisible for health planners and services.

Social Capital and Social Networks

Social capital and social networks are important factors that protect health in urban settings. Observation and empirical data, mainly from high-income countries, indicate improvement in health outcomes following improvements in social capital and social network.[40] In general, individuals living in high bonding, bridging, and linking social capital communities are more likely to self-report better health.[41] In Chile, a recent study of social capital and self-rated health in urban low-income neighborhoods identified five domains of social capital: perceived trust in neighbors, perceived trust in organizations, reciprocity within the neighborhood, neighborhood integration, and social participation.[42] Trust, reciprocity, and social cohesion were associated with better self-rated health. In Sweden, collective social capital, particularly trust and social participation, was positively related to better self-rated health.[43] Collective social capital was also found to buffer the impact of poverty on adolescence health (obesity) and risky behavior (smoking) in the USA. Additionally, individual social network increases the adoption of both pathogenic or salutogenic behaviors.[44]

Socially disadvantaged and excluded groups living in slums often rely on their informal, visible, and invisible social capital and social networks to counteract adverse living conditions. Migrants without social contacts in Nairobi had less access to information about housing and employment than migrants who had a more robust network of friends and relatives in the city.[45] Children attending full-time schooling, and after-school programs, in many Latin American countries found their local schools to be their vehicle to inclusive social participation and the main instrument for stimulating and enabling their future.[46]

Sensitizing the political environment and urban planning processes to the importance of social capital and social network for better urban health resonates strongly with the current debates around values in public health policy. The political constraints against equity enhancing policies are understood to be shaped by the degree of social cohesion in a country and the quality of its institutions.[47]

ACTING NOW TO IMPROVE HEALTH EQUITY THROUGH SOCIALLY INCLUSIVE CITIES

Together with the other actions to improve access to resources (e.g., education, healthcare, technology, and credit), the development of women's entrepreneur-

ship through micro, small, and medium enterprises has the potential to empower women, transform society, and hence contribute to the reduction in health inequities.[48,49] The Self-Employed Women's Association in India is recognized internationally as providing a multi-pronged support for female empowerment, beginning initially with the improvement in working opportunities and conditions (Box 2).

Box 2: Improving social conditions through female working conditions—the Self-Employed Women's Association (SEWA), India.

SEWA is one of the largest NGOs in Asia, with more than 1 million women members working in the informal sector. In the city of Ahmedabad, India, there are around 100,000 street vendors selling fruit, vegetables, fish, clothes, footwear, and other items. Vegetable sellers buy their wares from merchants in the wholesale markets, often borrowing from the merchants at high interest rates. To support the livelihoods of the vegetable sellers, SEWA together with the vegetable sellers and growers sets up its own wholesale vegetable shop in the main wholesale market-yard of Ahmedabad, linking growers directly to street vendors, thereby cutting out exploitative middlemen; now both vegetable growers and sellers obtain better prices for their produce. As the vegetable sellers were routinely harassed by local authorities and evicted from their vending sites, they, together with SEWA, campaigned for licenses, identity cards, and representation in urban boards which formulate policies and laws for vendors and urban development in general. The SEWA vendors' campaign has been strengthened by nation-wide and international alliances. SEWA Bank provides banking to poor self-employed women, including the vegetable sellers, who can now apply for micro-credit from SEWA Bank. The Bank is owned by the self-employed women as share holders, its policies are formulated by an elected Board of women workers, and the Bank is professionally run by qualified managers accountable to the Board.

SEWA also runs care centers for infants and young children; the vegetable sellers do not have to take their children with them when working on the streets. SEWA campaigns at the state and national level for child care as an entitlement for all women workers. SEWA, in partnerships with government, community organizations, and the corporate sector, is also improving living conditions through slum upgrading programs to provide basic infrastructure such as water and sanitation.

Source: SEWA website: http://www.sewa.org/services/bank.asp

Strengthening of social capital among and across groups can take place in many different ways and settings. The example from a socially disadvantaged urban area in Rio de Janeiro demonstrates how a school-based holistic health promotion model can empower at the individual level and at the same time build community resilience and capital (Box 3).

Box 3: Building social capital through the school environment in Rio de Janeiro[50]

Alexandre de Gusmao Municipal School is located in the Acari neighbourhood, a low-income area housing 40,000 people with an average life expectancy of 56-58 years. Approximately 50% of these houses are shanties and border the extremely polluted Acari River. Drug trafficking is the most attractive income-generating alternative for youngsters. This discouraging environment reinforces negative messages to the children and adolescents of Acari. As part of the Health-Promoting Schools initiative led by the Secretary of Health in Rio de Janeiro, the Acari Alexandre de Gusmao's health promotion project was established. It applies a popular education approach, where the school is the center of social action and education. The project uses reading as a way to promote communication and critical-thinking skills, two important health-related and life-related competencies. The school initiated a Home Reading Project, which developed into a small network composed of other schools and churches, and a community strategy involving teachers and voluntary parents in teaching reading. The project lends books, organizes reading gatherings, and visits museums and libraries. The project also used music to engage children in workshops and after-school classes. The Popular Opera Centre of Acari was created to introduce experiences that most children in the community had seen before only on television: to train them as singers, dancers, and in other performing-arts-related professions. The school decided to include people of all ages in the initiative, and soon approximately 500 people joined a wide spectrum of activities and workshops including classic ballet, guitar, singing, percussion, music history, and drama. Recognizing that self-esteem, self-efficacy, participation and self-determination contribute to healthy development and well-being, the design and delivery of these activities are seen as making a major contribution to health promotion and countering many of the negative social factors in the community. Source: Meresman, 2008.

GAPS IN THE EVIDENCE BASE

Despite the strong evidence of the adverse impact of social exclusion on health, the relationship between health and social exclusion has only recently been investigated in LMICs, and very little evidence exists that is specific to urban health inequities. There is a need for better understanding of the concept and the multidimensional nature of social exclusion in these countries and further need to thoroughly examine their relationship to urban health inequity. Research is needed that focuses on the interrelationship between the various dimensions of social exclusion and their impacts on urban health inequity, with the aim of identifying the particularities and communalities of exclusion/health nexus in these contexts and of putting forward intervention priorities. Studies are needed in the area of socio-spatial exclusion; in particular, the extent to which spatial exclusion reflected in slum residence can exert an adverse impact on health beyond that of the social dimension of exclusion. Research on groups such as immigrants, people with disabilities, ethnic minorities, women, and children is required to improve the allocation of resources and adjustment of services to the needs of these neglected groups.

We have highlighted the important role of social capital for the health of socially excluded groups, but again, the breadth and depth of this evidence base is in its infancy in LMICs, and little of the available research pays particular attention to the urban context. There is also the need for a critical assessment of the capacity of social capital to be translated into concrete health outcomes. The findings reported in this paper show that the link between social capital and health operates through different pathways at different societal levels but initiatives to strengthen social

capital for health need to be part of a broader, holistic, social development process that also addresses upstream structural determinants of health.

A clearer understanding of the complexity and dynamics of the social processes involved and their contribution to health equity and better health is needed. It is important to make clear recommendations for policy and programming that also identify key elements needed to build supportive social conditions. Successful experiences of cooperation and networking between slum-based organizations, grassroots groups, local and international NGOs, and city government are important mechanisms that can be replicated in urban settings of different LMICs. With the increasing urbanization, it is imperative to design health programs for the urban poor that take full advantage of the social resources and resourcefulness of their own communities.

ACKNOWLEDGEMENTS

This work was made possible through funding provided by the Rockefeller Foundation and undertaken as a contribution to the Global Research Network on Urban Health Equity. The views presented herein are those of the author(s) and do not necessarily reflect the decision, policy, or views of our institutions.

REFERENCES

1. Phelan JC, Link BG, Diez-Roux A, Kawachi I, Levin B. Fundamental cause of social inequalities in mortality: a test of the theory. *J Health Soc Behav*. 2004; 45(3): 265–285.
2. UN-HABITAT. *State of the World's Cities 2006/7: The Millennium Development Goals and Urban Sustainability*. Nairobi, Kenya: United Nations Human Settlements Programme; 2006.
3. Galea S, Ahern J. Distribution of education and population health: an ecological analysis of New York City neighborhoods. *Am J Public Health*. 2005; 95: 2198–2205.
4. Vlahov D, Freudenberg N, Proietti F, et al. Urban as a determinant of health. *J Urban Health*. 2007; 84(1): i16–i26.
5. Commission on Social Determinants of Health. *Closing the Gap in a Generation: Health Equity through Action on the Social Determinants of Health*. Geneva, Switzerland: World Health Organization; 2008. Final report of the Commission on Social Determinants of Health.
6. Popay J, Escorel S, Hernández M, Johnston H, Mathieson J, Rispel L; Social Exclusion Knowledge Network (SEKN). *Understanding and tackling social exclusion: final report to the WHO Commission on Social Determinants of Health*. http://www.who.int/social_determinants/knowledge_networks/final_reports/sekn_final%20report_042008.pdf. Social Exclusion Knowledge Network (SEKN). Published February 2008. Accessed February 8, 2011.
7. Blanco I, Subirats J. Social exclusion, area effects and metropolitan governance: a comparative analysis of five large Spanish cities. *Urban Res Pract*. 2008; 1(2): 130–148.
8. Rashid S. Strategies to reduce exclusion among populations living in urban slum settlements in Bangladesh. *J Heal Popul Nutr*. 2009; 27(4): 574–586.
9. Hunter S. *A Quantitative Assessment of Social Exclusion in Pakistan*. Oxford, UK: Oxford Policy Management; 2008.
10. International Institute for Population Sciences. *National Family Health Survey III*. Mumbai, India: India International Institute for Population Sciences; 2006.
11. African Population and Health Research Center. *Population and Health Dynamics in Nairobi's Informal Settlements: Report of the Nairobi Cross-sectional Slums Survey (NCSS) 2000*. Nairobi, Kenya: African Population and Health Research Center; 2002.

12. Gonzalez–Perez G, Vega-Lopez M, Romera-Valle S, Vega-Lopez A, Gabrera P. A sociospatial analysis of social exclusion and inequity in health in Mexico. *Rev Salud Publica*. 2008; 10: 15–28.
13. Lee A, Cheng FF, Fung Y, St Leger L. Can Health Promoting Schools contribute to the better health and wellbeing of young people? The Hong Kong experience. *J Epidemiol Community Health*. 2006; 60(6): 530–536.
14. Rojas, F. *Inequalities in Education and Health at Ninth Region of Araucanía, Chile. Bridging the Ethnic Gap among Mapuches: GIS and Spatially-referenced information to affect Institutional Disparities*. Washington DC: III World Bank Conference on Inequality, Politics and Power, 2006.
15. Grantham-McGregor S, Cheung YB, Cueto S, Glewwe P, Richter L, Strupp B. Developmental potential in the first 5 years for children in developing countries. *Lancet*. 2007; 369(9555): 60–70.
16. Ross CE, Wu CL. The links between education and health. *Am Sociol Rev*. 1995; 60(5): 719–745.
17. UNESCO. *EFA Global Monitoring Report 2009. Overcoming Inequality: why governance matters*. Paris, France: UNESCO/Oxford University Press; 2008.
18. Lincove JA. Determinants of schooling for boys and girls in Nigeria under a policy of free primary education. *Econ Educ Rev*. 2009; 28(4): 474–484.
19. Oketch M, Mutisya M, Ngware M, Ezeh A. *Why are There Proportionately More Poor Pupils Enrolled in Non-State Schools in Urban Kenya in Spite of FPE Policy?* Nairobi, Kenya: African Population and Health Research Center; 2008.
20. UNESCO. *Reaching the marginalized: EFA global monitoring report*. Oxford, UK: Oxford University Press; 2010.
21. Tufail P. *Situational Analysis of Street Children: Education for All Policy Review and Best Practices Studies. Basic NFE for Children Living and/or Working on the Streets in Pakistan*. Islamabad, Pakistan: AMAL Human Development Network/UNESCO Islamabad; 2005.
22. Minuci E, Almeida M. Birth weight intra-urban differentials in the city of São Paulo. *Rev Saúde Pública*. 2009; 43(2): 256–266.
23. Couture M, Nguyen C, Alvarado B, Velasquez L, Zunzunegui M. Inequalities in breast and cervical cancer screening among urban Mexican women. *Prev Med*. 2008; 47(5): 471–476.
24. de Charry L, Carrasquilla G, Roca S. Equity regarding early breast cancer screening according to health insurance status in Colombia. *Rev Salud Pública*. 2008; 10(4): 571–582.
25. Cutler, D. & Lleras-Muney, A. *Policy briefs, 2007 report #9: education and health*. http://www.npc.umich.edu/publications/policy_briefs/brief9/policy_brief9.pdf. Published March 2007. Accessed March 10, 2011.
26. Todaro M, Smith S. *Economic Development*. Reading, PA: Addison-Wesley Higher Education Group; 2003.
27. Employment Conditions Knowledge Network. *Employment Conditions and Health Inequalities. Final report of the Employment Conditions Knowledge Network of the Commission on Social Determinants of Health*. Geneva, Switzerland: World Health Organization; 2007.
28. International Labor Organization (ILO). *Global employment trends*. Geneva, Switzerland: International Labor Organization; 2010.
29. Clougherty JE, Souza K, Cullen M. Work and its role in shaping the social gradient in health. *Annal N Y Acad Sci*. 2010; 1186: 102–124.
30. Marmot M, Rose G, Shipley M, Hamilton P. Employment grade and coronary heart disease in British civil servants. *J Epidemiol Community Health*. 1978; 32(4): 244–249.
31. Partanen T, Chaves J, Wesseling C, et al. Workplace carcinogen and pesticide exposures in Costa Rica. *Int J Occup Environ Health*. 2003; 9: 104–111.

32. Monge P, Carmenate L, Piedra N, Aragón A, Partanen T. Condiciones de salud y trabajo en América Central-situación actual. *Archivo de Prevención de Riesgos Laborales*. 2010; 13: 84–91.
33. Nash Ojanuga D, Gilbert C. Women's access to health care in developing countries. *Soc Sci Med*. 1992; 35(4): 613–617.
34. Silver E, Bauman L, Camacho S, Hudis J. Factors associated with psychological distress in urban mothers with late-stage HIV/AIDS. *AIDS And Behavior*. 2003; 7(4): 421–431.
35. Milligan R, Wingrove B, Richards L, et al. Perceptions about prenatal care: views of urban vulnerable groups. *BMC Public Health*. 2002; 2: 25.
36. Bruce J, Hallman K. Reaching the girls left behind. *Gend Dev*. 2008; 16(2): 227–245.
37. Leon S, Konda K, Klausner J, Jones F, Cáceres C, Coates T. Infección por Chlamydia trachomatis y factores de riesgo asociados en una población marginal urbana de bajos ingresos de la costa peruana. *Rev Panam Salud Publica*. 2009; 26(1): 39–45.
38. Nayar K. Social exclusion, caste & health: a review based on the social determinants framework. *Indian J Med Res*. 2007; 126: 355–363.
39. Ariza-Montoya J, Hernández-Alvarez M. Equidad de Etnia en el Acceso a los Servicios de Salud en Bogotá, Colombia, 2007. *Rev Salud Pública*. 2008; 10: 58–71.
40. Kawachi I, Wamala S. *Globalization and Health*. New York, NY: Oxford University Press; 2007.
41. Lochner KA, Kawachi I, Brennan RT, Buka SL. Social capital and neighborhood mortality rates in Chicago. *Soc Sci Med*. 2003; 56(8): 1797–1805.
42. Sapag JC, Aracena M, Villarroel L, et al. Social capital and self-rated health in urban low income neighbourhoods in Chile. *J Epidemiol Community Health*. 2008; 62: 790–792.
43. Eriksson, M. Social capital and health - implications for health promotion. http://www.polarresearch.net/index.php/gha/article/viewArticle/5611. Published February 8, 2011. Accessed February 19, 2011.
44. Coutts A, Kawachi I. The urban social environment and its effect on health. In: Freudenberg N, Galea S, Vlahov D, eds. *Cities and the Health of the Public*. Nashville, TN: Vanderbilt University Press; 2006.
45. UN-HABITAT. *Low-income Housing: Approaches to Help the Urban Poor Find Adequate Accommodation: Housing the Urban Poor in Asian Cities, Quick Guide #2*. Nairobi, Kenya: UN-HABITAT; 2008.
46. Meresman S. Mainstreaming health promotion into educational policies, the Uruguayan experience. *Promot Educ*. 2005; 12(3): 178–179.
47. Ritzen J, Easterly W, Woolcock M. *Good Politicians and Bad Policies: Social Cohesion, Institutions, and Growth*. Washington DC: World Bank; 2000.
48. Walokar DM. *Women Entrepreneurs*. New Delhi, India: Himalaya Publishing House; 2001.
49. Tambunan TTH. *Development of SMEs in ASEAN*. New Delhi, India: Readworthy; 2008.
50. Meresman S, Pantoja A, da Silva C. Brazil: addressing the social determinants of health: the experience of a municipal school in Rio de Janeiro. In: Whitman CV, Aldinger CE, eds. *Case Studies in Global School Health Promotion: From Research to Practice*. New York, NY: Springer; 2008.