SPECIAL REPORT

Rapid Urbanization and the Growing Threat of Violence and Conflict: A 21st Century Crisis

Ronak B. Patel, MD, MPH;[1] Frederick M. Burkle Jr., MD, MPH, DTM[2]

1. Program on Urbanization and Humanitarian Emergencies, Harvard Humanitarian Initiative, Cambridge, Massachusetts, USA and Harvard Medical School, Boston, Massachusetts USA and Department of Emergency Medicine, Brigham and Women's Hospital, Boston, Massachusetts USA
2. Harvard Humanitarian Initiative, Cambridge, Massachusetts USA

Correspondence:
Ronak B. Patel, MD, MPH
Harvard Humanitarian Initiative
14 Story Street, 2nd Floor
Cambridge, Massachusetts 02138 USA
E-mail: rbpatel@gmail.com

Keywords: conflict; security; urban violence; urbanization; war

Abbreviations:
HIV: human immunodeficiency virus
IDP: internally displaced populations

Received: June 1, 2011
Accepted: February 15, 2012

Online publication: May 17, 2012

doi:10.1017/S1049023X12000568

Abstract

As the global population is concentrated into complex environments, rapid urbanization increases the threat of conflict and insecurity. Many fast-growing cities create conditions of significant disparities in standards of living, which set up a natural environment for conflict over resources. As urban slums become a haven for criminal elements, youth gangs, and the arms trade, they also create insecurity for much of the population. Specific populations, such as women, migrants, and refugees, bear the brunt of this lack of security, with significant impacts on their livelihoods, health, and access to basic services. This lack of security and violence also has great costs to the general population, both economic and social. Cities have increasingly become the battlefield of recent conflicts as they serve as the seats of power and gateways to resources. International agencies, non-governmental organizations, and policy-makers must act to stem this tide of growing urban insecurity. Protecting urban populations and preventing future conflict will require better urban planning, investment in livelihood programs for youth, cooperation with local communities, enhanced policing, and strengthening the capacity of judicial systems.

Patel RB, Burkle FM Jr. Rapid urbanization and the growing threat of violence and conflict: a 21st century crisis. *Prehosp Disaster Med.* **2012;27(2):194-197.**

Introduction

Urbanization by itself is not a problem, as cities normally provide the engines for economic growth of nation-states, and are often the safest place during disasters due to the availability and access to resources. However, the current process of rapid urbanization in developing countries threatens to undermine the protections offered by urban environments, and creates new vulnerabilities. As urban areas grow, essential public health infrastructure (water, sanitation, health services, food, and shelter) and services required to maintain those services cannot keep pace. Current rates of urbanization are unsustainable. Capacities to address this growing threat are weak, and the sustainable resource base is in free fall. At the present time, the Infant Mortality and Under Age 5 Mortality Rates in many urban slums exceed those of the pre-Alma Ata 1950s.

Urban growth often occurs in an unplanned and disorganized pattern, and is often limited to disaster-prone areas devoid of sanitation and clean water. Large populations become concentrated into urban slums that lack any semblance of basic services and human security. The growth of the urban poor population is disproportionately larger than that of the urban population as a whole, with over 60% of urban populations now living in slums.[1] Additionally, over 60% of rapid growth occurs within the existing urban population. Inevitably, these conditions can lead to a greater risk for, and exposure to, conflict and violence.

In 2008, the world transitioned from a mostly rural population to a dominantly urban one, a process that previously was predicted to happen almost a decade later.[1] This rapid transition was fuelled by an accelerated rate of urbanization in Asia, Africa, and Latin America brought about by a number of different factors. Internally, displaced populations migrate because of climate change, conflict and post-conflict levels of violence, and from rural economic failures and lack of human security. It is predicted that in the coming decades, cities will account for almost all population growth in these regions.[2] With over a billion people now living in urban slums, this global conversion process creates new vulnerabilities and insecurities, increasing risks that future conflicts and violence will originate from urban settings. It is crucial that there be a better understanding of the insecurities that lead to violence and conflict, and which populations are most vulnerable.

Patterns of urbanization vary depending on a number of factors. Mega-cities occur with populations above 10 million, and the growing mega-city phenomenon occurs where both urban and suburban populations blend into populations of over 20 million. By 2015, Mexico City, Sao Paulo, and Mumbai will join Tokyo with populations above 20 million. Currently, there is no universal definition of what constitutes "urban," but most share variables in both population numbers and density. In general, cities are recorded based on a minimum density of 2,000 people per km^2. Average population densities in Mumbai, India, number >30,000 people per km^2, with several slum areas reporting >1 million people per km^2, with a further influx of >350 new families per day.[1] Along with absolute population numbers, some parts of the fastest growing cities have unprecedented levels of high density, which is clearly a factor in the transmission of disease and affects other quality of life indices. Unfortunately, the "extreme poverty rate" exceeds that of the total urbanization growth rate in the most vulnerable of urban conclaves. Neither absolute population size nor excess density necessarily correlates well with violence, but the "rate" of growth does correlate more closely with violence and higher homicide rates.[3] Studies confirming this correlation arise from Asunción, Kathmandu, Nairobi, and Quito.[3] As cities vary in their size, structure, topography, and ethnic make-up, areas within cities create new, multiple micro-environments. Rapidly growing, incredibly dense and dramatically heterogeneous cities have become a characteristic of new urban environments that risk catalyzing future violence and conflict.

Synergies of Violence: Economic, Human and Political

Evidence from Latin America has shown that inequalities are the main and multiplicative causative factor of the growth of violence, rather than the absolute level of poverty.[3] Many disparities become even more pronounced as food, land, livelihoods, water and sanitation become scarce, and larger gaps develop between the have and have-not populations. The Republic of South Africa reports that estimates of the Gini coefficient of income inequality have worsened in the last decade from 0.64 to 0.68.[3] While urbanization in South Africa drives wealth generation, the richest 10% of the population has a 45% share of the income, while the poorest 10% have a 1.4% share, resulting in about 34% of the population living on less than $2 (US) per day.[3] The overall unemployment rate in South Africa has remained about the same from 2000 to 2005; this belies the fact that the absolute numbers of the unemployed have risen sharply. Youth unemployment rates range up to 30% for those 15-24 years of age and 41% for those aged 25-34. Forty-two percent of survey respondents in Johannesburg identified unemployment as the main cause of violence in their city.[3] Material disparities have only grown as 100% of upper and middle class residents of Nairobi have access to sanitation, while 56% of the urban poor have the same access. Normally used Sphere standards for humanitarian crises are not applicable to these urban slums, where one latrine exists per 4,000 residents in one part of Kibera,[4] and only 24% of slum households have access to piped water as compared to 92% for the rest of Nairobi.[4] Health consequences are even starker as the Under Age 5 Mortality Rate in Nairobi ranges from <15 deaths per 1,000 live births in some parts, and up to 151 in others.[5] The average Under Age 5 Mortality Rate in some Indian slums remains over twice as high as the national average.[6] Rapid urbanization, whether it arises in Africa or Asia, is concentrating vast numbers of the people into cities marked both by extreme poverty and inequities, effectively setting up an environment ripe for conflict in competing for basic essential resources.

Competition over resources also occurs among various social groups and between groups and the state. Often, this competition becomes violent as armed gangs are organized in the interest of a specific ethnic, religious, or age group. Land, a prime resource in urban environments, is a common source of disputes. Armed gangs in the cities of Nigeria are a prime example of ethnically-based groups becoming more numerous and increasingly militant. These groups go by different names: the *Igbo* Peoples' Congress (IPC), the *Arewa* Peoples' Congress (APC), the *Ijaw* National Congress (INC), the *Egbesu* Boys of Africa (EBA), and the Movement for the Actualization of the Sovereign State of *Biafra* (MASSOB).[7] The main goal of these groups is to fight for the interests of their particular social movement and the needs they require to survive. It has been reported that such "activities have at most times posed threats to the continued existence of the Nigerian state."[7]

While over-burdening the infrastructure for basic needs, rapid growth also outstrips the capacity of municipalities to protect their populations, provide policing, and bring criminals to justice. The entire system from crime prevention to prosecution has fallen behind in many cities. Complicating the problem for local authorities is that urban slums prove very difficult, if not impossible, to police. They are often completely unmapped areas, unfamiliar to non-residents and difficult to traverse, with narrow alleys and footpaths, and no formal roads, signs or lighting. These factors prevent outsiders, including police, from locating a specific "point of conflict" to work from. It is impossible to feel safe not knowing all the complex ingresses and egresses, creating "no-go" zones for everyone except the criminal element. As such, many unmanageable environments for local governments are simply ignored. In November of 2007, the German Intelligence Agency, in their document on "Ungovernable Megacities" asserted "Mumbai, Mexico City, and Jakarta are only partially able to carry out their original core responsibilities of protecting their population from violence and destabilization."[8] Furthermore, the report identifies these rapidly urbanizing and partially ungovernable cities as extremely vulnerable to worsening conflict and violence. This pattern of insecurity has resulted in the proliferation of a variety of private security services, some of which are nothing more than self-organized armed vigilante groups. Many security elements function as "professionals for hire," but range from minimally trained civilian security guards to well-armed ex-military groups that do not adhere to legal norms of responsibility or international humanitarian law, and use excessive force to accomplish their objectives.

As in many conflict zones, the preponderance of youth (the so-called youth bulge), and easy accessibility of weapons is facilitating and fueling violence in urban areas.[9] Africa's rapid urbanization differs from that of Asia and other regions, in the estimated 30 million small arms and light weapons left over from previous conflicts and wars that over 80% of the time end up in civilian hands (mostly <18 years of age).[10] Youth represent the fastest growing demographic group, and is projected to represent over 60% of the urban population by 2030.[11] They are, more often than not, illiterate, unemployed, and disaffected. The availability of weapons is increased in urban areas that, as the sites for trade and commerce, also have seen the arms trade rapidly proliferating. Urban conclaves facilitate the weapons trade by

their centralizing location, transportation hubs, and role as migration areas. Additionally, the ability of local governments to regulate and enforce laws governing the trade and use of weapons is already weak, overburdened and does not penetrate into urban slums. These environments serve as perfect sites to exploit the urban advantages for trade without the burdens of regulation or enforcement, leading to further proliferation of armed poor youth. In many urban areas, the situation has become so dire that armed youths often have more sophisticated weapons (machine guns and rocket launchers) than the police, and citizens do not believe or trust in the ability of the police to protect them.

Conflict by Nature

As cities grow in size and importance, they risk becoming centers for conflict. Power is dependent on territorial control and although relatively small in area size, cities represent the most valuable territory in modern states. Large cities not only contain the majority of human population, they also contain the instruments to exercise power, with their commercial hubs, ports with vital supply links, and industries. In the 2011 conflict in Libya, almost all of the conflict was centered on fighting around a few coastal cities where the organization of resistance and vital territorial value were located.[12] In Colombia, the town of Caucasia plays a vital role in commerce and drug trade to the north. "Whoever controls Caucasia controls access to the coca harvest and drug smuggling routes north to the Caribbean and west to the Pacific Ocean," making it one of the most valuable and thus most violent places in Colombia.[13] Cities may become the central battleground as both seats of power and conflict over power. The recent post-election violence in Cote d'Ivoire over the Presidency between the incumbent Laurent Gbagbo and the internationally recognized President Ouattara exemplifies how capitals have increasingly become the epicenters for conflict.[14] The concentrations of humanity that define mega-cities make them natural battlegrounds for future conflict.

Hyper-Vulnerable Subgroups

While the concentration of poverty, rising inequities, lack of local policing capacity, and proliferation of weapons increases the risk of violence for everyone, urbanization may also place specific populations at greater risk for violence. Men are usually the casualties of violence only because they are also the main perpetrators. In 2007 in Colombia, 12 men were killed for every one woman.[3] While men are the main perpetrators of violence, studies from South Africa show that women are more likely to suffer non-fatal violence.[3] As newly arrived women lose social protections, they bear the brunt of lack of security. They arrive to unfamiliar surroundings, exchanging long-standing neighbors and kinship relations with others from the same ethnic or cultural background for a highly diverse community living in close proximity. Additionally, urban populations are more fluid in introducing strangers with frequent in-and-out and "circular" (about a fourth from urban to rural) migration. As protections are lost, women find difficulties accessing basic services and social support. Although services are physically more proximal in urban settings, insecurity limits the women's mobility and opportunities to take on desired employment, access certain markets and basic goods such as latrines and health care services. Finally, women remain vulnerable for gender-based violence and are targets for systematic rapes which escalate during times of conflict.[15]

The number and variety of urban refugees and internally displaced populations (IDPs) is growing. Internal displacement drives the majority of people into urban areas, with camps or organized settlements becoming a secondary destination point. In 2010, 120,000 people were internally displaced into Kabul and other cities of Afghanistan due to the worsening conflict, representing a 50% increase in the total IDP population.[16] The most insecure provinces of Ghanzi and Pakita showed significant urbanization on satellite imagery. Although internally displaced persons are of the same nationalities, there are often strong ethnic differences that result in the indigenous host population seeing them as foreigners. Regional conflicts, on the other hand, draw in refugees from neighboring states creating an especially vulnerable group. Greater Nairobi is now home to large populations of refugees from eight different regional nation-states. They face constant harassment by the local authorities due to their tenuous legal status, statelessness, language differences, and unfamiliarity with local laws.[17]

Urban displacement, either with IDPs or foreign refugees, often places traditional rivals in closer proximity raising the host population's anti-immigration tendencies. Xenophobia is fueled by misperceptions and false accusations, and immigrants are blamed for an array of long-standing social ills including crime, illness, and poverty. In one South African survey, two-thirds of respondents believed that migrants were the cause of crime in their communities, while 50% believed they brought in human immunodeficiency virus (HIV).[18] The ills associated with refugee poverty concentrated in the urban slums become linked to the persons living there, and justify further attacks. They are seen as a drain on limited city services, infrastructure, and other resources. In Kenya, the *Mungiki*, a gang with political and religious inclinations agitating for traditional Kikuyu values, often attack urban refugees as a reactionary step and political statement, and intimidate and criminally extort money from them to ensure "protection."[17] Attacks in South Africa against Zimbabwean refugees have ranged from destroying property to systematic beatings, rape, and murder. When these refugee communities thrive, however, they can draw the ire of the surrounding local population. The Somali refugees in Nairobi, for instance, have transformed the community of Eastleigh into a thriving commercial center but this has fuelled even more resentment from local businessmen. Additionally, services targeted toward urban refugees may also inflame local populations who resent the benefits given to the refugees when they themselves are left out. As refugees increasingly move to urban slums rather than organized camps, these dimensions of violence and conflict will certainly rise.

Costs and Consequences

This violence and conflict environment has significant monetary and social costs that have yet to be adequately measured. In the most basic ways, violence and conflict inflict costs by material destruction of property, essential infrastructure, and existing industries. The direct cost of violence in the capital city of Guatemala in 2005 was estimated at $2.4 billion (US) or 7.3% of gross domestic product (GDP).[19] This represents more than double the cost of Hurricane Stan that year, and more than double the combined budgets of Guatemala's Agricultural, Health, and Education Ministries. Lack of security creates inefficiencies in economies. For example, many companies in Jamaica lose up to two percent of their revenue to private security

costs. They lose of three to four hours of operating time after dark due to security risks, and moneys paid to extortionists and for "protection fees."[19] Conflict also deters investment by preventing future economic growth. In 2007, Mexico estimated that it lost $9.6 billion (US) to urban violence alone in the form of lost jobs, sales and investment.[19]

While these monetary costs are hard to estimate accurately, harder still to estimate, and thus poorly recognized, are the overwhelming social costs. Violence affects lives in a myriad of ways including living in what has been referred to as "architectures of fear," as cities grow into segregated communities with gates, barred windows, and fortified walls.[19] The psychosocial consequences of limited social cohesion and support have marked ramifications on future development. For children, insecurity has detrimental effects on development and education, engendering a culture of violence for the future. Adults face further adversity when injured or disabled, or they may become mentally traumatized and stigmatized by being victims of gender-based violence.

Conclusion and Future Directions

Rapid urbanization is unsustainable, and without radical changes, major conflict and violence is inevitable. Minimal Sphere standards originally developed for war-related refugee camps or large-scale natural disasters were based on basic human rights, and used to prevent indirect mortalities and morbidities that would result from over-crowding, poor sanitation, and other environmental factors. These standards are already unmet in urban conclaves, yet Sphere-like standards are a necessary development strategy to bring evidence to the plight of urban populations, if for no other reason than to shame those in political power to act upon injustices without delay. In these circumstances, cities do not have the capacity to protect urban public health and mitigate indirect or preventable mortality and morbidity. As the risk and reality of urban violence grows with rapid urbanization, local communities, governments, international agencies, and non-governmental organizations will have to act. Unfortunately, the international humanitarian community is rarely represented in developing urban environments, either out of denial or awareness that the issues exceed their capacities. The approach to solutions must be multifaceted and address the determinants of public health, the infrastructure-based environment, urban planning, social relations, community empowerment, and policing and criminal justice capacity. Urban violence must be addressed within the context of urban planning that is strategic and long-term. Structurally, cities will have to ensure safe environments with adequate lighting, formal roads, and ample planned public spaces to break up private land with parks, markets and recreational areas. Root inequalities must also be addressed with macro- and micro-level interventions for livelihoods and basic services, especially for youth. Furthermore, youth should not only benefit from increased access to living-wage jobs, but they must be targeted while young with shelters and education as well as training programs to prevent their recruitment into armed gangs. Substance and alcohol abuse must be addressed along with the burgeoning drug trade itself. Community organizations that work to increase social cohesion must be supported with funding to increase dialogue among various social groups such as urban refugees and host communities, as well as different ethnic and religious groups. The prevalence of vigilante groups cannot be ignored, and must be stopped with training and integration of communities with local police to provide surveillance and information. Citizens should be empowered to provide government with valuable inside perspectives on environments that are foreign to police. Further programs that link the community with local police and policymakers will ensure appropriate resource distribution and buy-in from citizens. The local police and justice systems need stronger oversight and reform to root out corruption, as well as funding for better equipment, human capital, and training to effectively arrest and prosecute perpetrators of violence. Investments to improve and integrate rural areas with the larger economic goals of the state must be made in national planning, during times of conflict and after crises, to slow the flood of rural to urban migration. Finally, the various forms of violence, from organized crime to gender-based violence must be perceived in the context of the political goals they accomplish and the agents that support them. All of these strategies must be coordinated from the local to national level and supported by international agencies and donors. With both unsustainable urbanization and risks toward the eruption of urban violence on a steep incline, the time to act is now.

References

1. United Nations. *Global Report on Human Settlements 2007: Enhancing Urban Safety and Security*. London: Sterling; 2007.
2. United Nations. State of World Population 2007. http://www.unfpa.org/swp/2007/presskit/pdf/sowp2007_eng.pdf2007. Accessed May 8, 2011.
3. Bank TW. *Violence in the City*. The World Bank; 2011:1-347.
4. Rashid S. Urban poverty and social exclusion: the health challenges for the poor living in slum settlements. Presentation at: Forum 11, October 29-November 2, 2007, Beijing, People's Republic of China.
5. African Population and Health Research Center (APHRC). Population and health dynamics in Nairobi's informal settlements. Nairobi, Kenya; April 2002.
6. Awasthi S, Agrawal S. Determinants of childhood mortality and morbidity in urban slums in India. *Indian Pediatrics*. 2003;40:1145-1161.
7. Oruwari Y. *Youth in Urban Violence in Nigeria: A Case Study of Urban Gangs in Port Harcourt-Economies of Violence*. Working Paper 14. Berkeley, California. Institute of International Studies, University of California, Berkeley; 2006.
8. "Chirol." Ungoverned Megacities. ComingAnarchy.com. http://cominganarchy.com/2007/11/03/ungoverned-megacities Updated November 3, 2007. Accessed May 8, 2011.
9. Urdal H. A clash of generations? Youth bulges and political violence. *International Studies Quarterly*. 2006:607-629.
10. Muggah R, Alvazzi del Frate A. *More Slums Equals More Violence: Reviewing Armed Violence and Urbanization in Africa*. Geneva, Switzerland: United Nations Development Program; 2007.
11. Woodrow Wilson International Center for Scholars. *Youth Explosions in Developing World Cities: Approaches to Reducing Poverty and Conflict in an Urban Age*. Washington, DC: Woodrow Wilson International Center for Scholars; 2003.
12. Lewis A. Misrata: city under siege — analysis: lethal stand-off. BBC News. http://www.bbc.co.uk/news/world-africa-13118724. Updated May 10, 2011. Accessed May 10, 2011.
13. McDermott J. Colombia's criminal bands pose new security challenge. BBC News. http://www.bbc.co.uk/news/world-latin-america-12804418. Updated April 25, 2011. Accessed May 8, 2011.
14. BBC News. Ivory Coast: battle for Abidjan intensifies. BBC News. http://www.bbc.co.uk/news/world-africa-12946018. Updated April 3, 2011. Accessed May 8, 2011.
15. Gettleman J. Rape epidemic raises trauma of Congo war. The New York Times. http://www.nytimes.com/2007/10/07/world/africa/07congo.htm. Updated October 7, 2007. Accessed May 8, 2011.
16. Yoshikawa L. *Afghanistan: In a Time of Conflict*. Washington, DC: Refugees International; December 2010.
17. Pavanello S, Elhawary S, Pantuliano S. *Hidden and Exposed: Urban Refugees in Nairobi, Kenya*. London: Overseas Development Institute; 2011.
18. Parsley J. "We are not treated like people:" the roll back xenophobia campaign in South Africa. *Humanitarian Exchange Magazine*. 2002;17.
19. Skaperdas S, Soares R, William A, Miller S. *The Costs of Violence*. Washington, DC: The World Bank; 2009.