



# Center for Medical Missions

*A ministry of Christian Medical & Dental Associations*

**April 2012**

We'll be continuing our focus at "the city" this month as we look at missions, healthcare and the city. Join us as we continue looking at the future needs of medical missions.

[Daniel Tolan](#)

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**Your Call to the City!?**

by Daniel Tolan, MD

This is not a paper I would ever submit to a professor! I have only collected a few thoughts and challenges to missionary healthcare in considering the urban areas of the developing world with a focus on the slums.

Jesus went into the "cities and towns" healing the sick and preaching the good news ...

The greatest growth in cities in the next 20 years will not be in the mega-cities, but in those cities with around 500,000 people. The next fastest growing category will be in those around 200,000. That is a relief for me because I am not a fan of living in a big city. But I could see myself in a smaller city finishing out my missions career ministering in the slums. On the other hand, one of my closest friends who is a missionary surgeon loves the mega-city. What about you? Okay, I have to admit when I visited New York City recently I purposefully chose a small flat to stay in the middle of Harlem and loved it! I could see myself in a large city and building community with others. Actually, if God leads I know the best place to be! Did you know that the percent of people living in

slums will be the fastest growing segment of city growth in the next three to four decades? There is no science on “healthcare in the slums.” How do you best spend very limited resources? For example, should you treat hypertension in the slums of the developing world or will people die of other causes first? Missionary medicine must develop something new for the cities of the developing world.

Midwives needed! – A higher percentage of unattended births occur in the urban areas versus rural areas, especially when one considers the slums. In rural areas, an “experienced” older woman usually functions as the village traditional birth attendant. In the slums, you toss your dead baby on the trash heap hoping nobody notices. If they do, so what? Another one will just appear tomorrow.

Community Health and Development needed! – People in rural areas learn why they need to boil water and then find the means to do so. In the urban areas, how do the poor boil water? Do they tear down their neighbor’s shelter in the slum to burn it? Where do you put your human feces without adequate facilities in the city? In Narok, it just flows down the alley toward the source of drinking water. Try hydrating your child with that when she is vomiting! What about worms, nutrition, STDs, TB, malaria prevention, etc.? They are all much more difficult to tackle in poor areas of the city. Are you up for a challenge?

Primary care needed! Attention Nurse Practitioner, Physician Assistant, Family Practice, Pediatrics and Internal Medicine! Access to your specialty for the poor in a city in the developing world is often next to impossible. In this country, we position ourselves so people have access to us. Why shouldn’t we do that there as well? Your practice would be much more challenging! I used to visit a small clinic in the slums of Nairobi, and I faced tough decisions for every patient. What do you treat and what do you not? What medicine will cover the most? Eight rooms, all crowded, windows without glass, doors too short to enter without bending, etc. When the first room was built, I had to stoop to see patients. The next rooms had higher ceilings, but higher walls cost more. Who built this clinic? No outsiders; the people themselves built it and they are proud of it. No need for guards – touch the place and you will be killed. I met a guy from a well-to-do area of Nairobi working there who graduated with a master’s degree in finance from Nairobi University. He was there working as the “administrator.” Sadly, he was killed in a robbery in the more affluent part of the city. He gave the best three years of his life to the slums. Jesus ministered for three years...

I met a guy who lives in the slums of Mombasa and wants more training but does not want to leave his practice in the slums. He is scared he would not come back...a real possibility since most practitioners end up practicing in similar settings to their last place of training.

Slum dwellers are hardworking people that moved to the cities in search of a better life. They did not move to cities because of better services. Their children – as all children in Bangladesh – have the right to be treated as full-fledged citizens and more effort needs to be made in providing education, water, sanitation and health services to all urban slum dwellers. UNICEF MICS Bangladesh 2009

General Surgeons and Orthopedists needed! Where does a kid go for a perforated bowel from typhoid? Where does the baby go with the club foot? Where does the child go with a compound fracture from jumping off the stack of tires and rocks into the flowing stream of water and feces? Kids of the slums invent creative ways to play. In Muthare Valley in Nairobi, I can take you to the spot where the kids compete against each other in “gymnastics in the slums.” Their landing area? Dried feces! At least it is softer than rock, but what happens when an open fracture occurs?

Why not look at establishing hospitals and clinics right in the middle of the slums? You want patients, pathology, needs, grateful people, challenges, rewarding practice, plenty of bright people to teach, research opportunities and grateful governments? You got it! All in plenty! All in the name of Jesus!

Specialists, hospital administrators, entrepreneurs needed!

### **What is specific about urban poverty and what does it mean for health?**

- Data from the 2009 Multiple Indicator Cluster Survey (MICS) in Bangladesh makes it clear that conditions in slum areas are much worse than those in most rural areas, even in regard to service delivery-type indicators such as secondary education attendance rates and skilled attendance at birth.
- Commodity driven with reliance on a cash economy – usually a lack of cash (Rules for the poor - You ain't got cash? Get out of here!): poorer nutritional status due to lack of food from subsistence farming, reduced care of infants and children due to distant work places.
- Overcrowded living conditions (slums): infectious diseases, accidents.
- Environmental hazard (density, haphazard and hazardous location of settlements, exposure to multiple pollutants): respiratory diseases, diarrhea, injury.
- Social fragmentation (lack of community and inter-household mechanisms for social security, relative to those in rural areas): mental illness, STDs, stress related illness, abuse.
- Crime and violence: homicide, injuries, mental illness, abuse.
- Traffic accidents: injuries and death.
- Natural disasters: injuries and death.

**Excerpts from a USAID Policy Brief**

Over the next 30 years, most of the world's population growth will occur in cities and towns of poor countries. Even while population growth rates in Asia, for instance, are falling dramatically, the region will see an absolute increase of nearly a billion people over the next three decades –growth concentrated mostly in urban areas. In Africa, the urbanization process also is occurring apace. For example, in the United Republic of Tanzania, the population of Dar es Salaam is doubling every 12 years.

Rapid, unplanned and unsustainable patterns of urban development are making developing cities focal points for many emerging environment and health hazards. As urban populations grow, the quality of the urban environment will play an increasingly important role in public health with respect to issues ranging from solid waste disposal, provision of safe water and sanitation and injury prevention, to the interface between urban poverty, environment and health. Unsustainable patterns of transport and urban land use are a driver, or root cause, of a number of significant and interrelated environment and health hazards faced by urban dwellers in developing countries. These health and environment linkages cut across a range of policy sectors and thus are often overlooked in policymaking.

### **Environment and health linkages**

- Respiratory illnesses and urban air pollution – is estimated to kill some 1.2 million people annually. Today, many developing world cities face very severe levels of urban air pollution, higher than developed world counterparts.
- [Link to new study on burden of disease from urban air pollution](#)
- Road traffic accidents – low and middle-income countries bear 90 percent of the death and injury toll. Degradation of the environment, particularly for pedestrians and cyclists, has been cited as a key risk factor.
- Current patterns of urbanization and motorization also are associated with more sedentary lifestyles, diminished space and opportunities for physical activity, and a consequent surge in related non-communicable diseases.

### **Community assessments and health in the slum...**

Aga Kahn University is doing research focusing in the slum and poor areas on the Urgent Health Issues of Developing Countries. Look at the smile on the face of this slum dweller? Could you envision yourself working in similar environments? Missions needs you to do this!

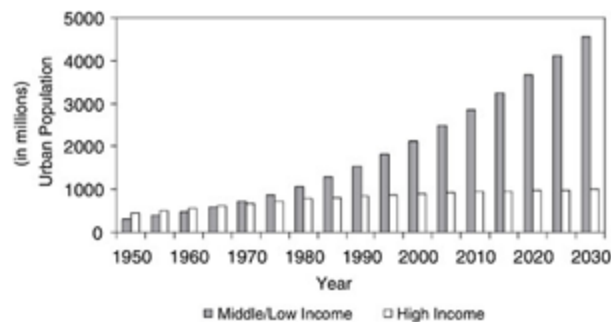
The major determinants of health may be well known, but the relative importance of each – and the amount of resources dedicated to them – is often determined at the local level. Not surprisingly, the health concerns of the developed world – where much of

cutting-edge research is conducted – are not always the same as the developing world. To address this problem, the [Aga Khan University](#) (AKU) was set up as a “problem-solving university” with a mandate to conduct research that was relevant to the problems of the developing world. AKU’s research has grappled with some of the more urgent health issues in developing countries, including maternal and child health, nutrition, HIV/AIDs and tuberculosis.

As part of an approach that combines research with healthcare programs that address research findings, AKU has engaged ultra-poor inner-city neighborhoods in participatory forms of preventative care. These efforts, which reach out to a quarter of a million people within the city and more than six million across the country, have reduced diarrheal diseases and infant deaths substantially. These programs now serve as models throughout [Pakistan](#) and other developing countries.

### Slums - The New Faces of the Developing World Cities

- In today’s world, slums and their existence is a reality which cannot be ignored
- Hundreds of millions of people are living in very poor living environments without access to basic living requirements
- Today, massive urbanization and “slumification” of urban centers is one of the biggest challenges of public health
- The graph below emphasizes the growth of the low and middle income population of the world.



### Illegal Housing is a problem in the

#### developing world – mostly in the slums

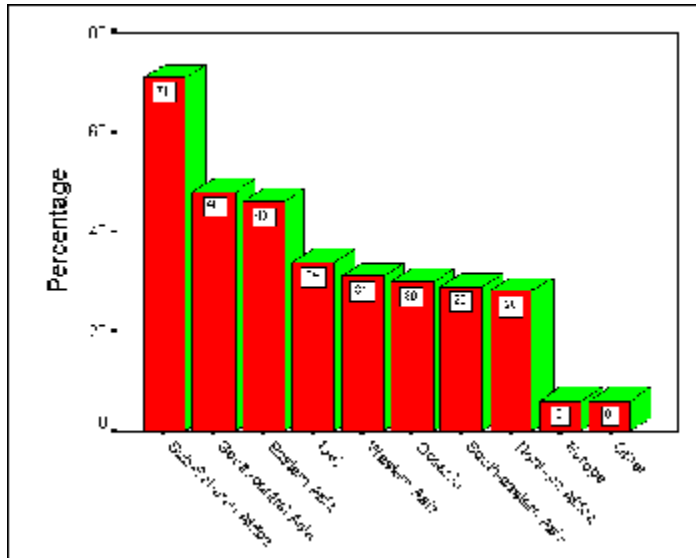
- Addis Ababa – 85 percent
- Jakarta – 62 percent
- Manila – 40 percent
- Karachi – 50 percent

### Global stats on slums

- 970 million people lived in slums in 2005
- More than 70 percent of the urban population in Africa live in slums

- 270 million urban residents in south and central Asia live in slums
- It is projected that if urban poverty rises at the same pace, nearly 2 billion people would be in slums by 2030

**Percent of slum dwellers – (Can you tell we need missionary healthcare in the slums?)**



Health problems are increased in the slums

Contaminated water - cholera, typhoid, dehydration

No disposal of human waste - gastroenteritis

Wastewater and garbage – parasites, mosquitoes

Insects, pests (e.g. rats) and parasites in homes – anaemia, worms, malaria

Insufficient living spaces, poor ventilation and overcrowding – communicable diseases such as TB, measles, whooping cough

Children are at risk from traffic, unsafe or contaminated sites – injuries, trafficking in persons, skin diseases

Air pollution, both outdoor and indoor – respiratory illness, asthma, pneumonia

Natural disasters such as earthquake, landslides or floods – ex: Haiti – especially in city areas

Nutritional deficiencies – no access to self-farmings

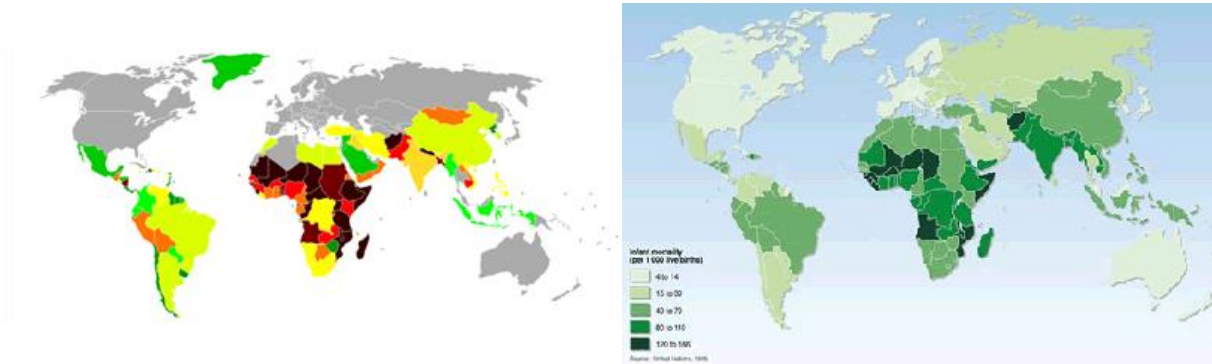
Inadequate healthcare, no access, poor public health programmes

Lack of access to emergency services

High rates of mental illness and suicide

AIDS

Compare the two maps of the world below. The darker colors on the left side map represent a higher percent living in slums. The darker colors on the right side map represent higher infant mortality rates. Are you surprised?



### Summary:

- There is urgent need for “healthy slums programs” by the church.
- No major agency is driving this process at a global level.
- Among urban poor, those living in “slums” often face risks well in excess of rural risks.
- Access to health services is more difficult for urban poor than commonly realized.
- Similar knowledge gaps of rural and slum dwellers of prevention and treatment.
- Faith-based programs must be high quality health interventions meeting all government standards and more.
- Participation of the slum community in program design and various other stages is as possible as it is in rural areas and maybe even more important.
- Healthy slums programs will require an even greater emphasis on a multi-sectorial partnership approach at local and national levels.
- Strengthening the capacity of slum dwellers, local governments and other stakeholders will be key.

We the church ... (go ahead and put yourself in this sentence) ... in order to reach out in the name of Jesus to those living in the slums and to the city ... (write something you have in mind – dream a bit!)

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[Orientation to Medical Missions](#) – July 20-22, 2012 in Bristol, Tennessee.

Three days of exposure to what life will hold for you in medical missions: how to survive, thrive and stay alive while being what God has called you to be in medicine in a cross-cultural setting.

[Global Missions Health Conference](#) – November 8-10, 2012 in Louisville, Kentucky. It is never too early to put this great conference on your calendar. Students, be sure to plan for the post-conference as well.

[Tanzania](#) – Are you interested in a global health seminar for three weeks in Tanzania? This is primarily for pre-med, first and second year medical school students. Email [tyhopkins@gmail.com](mailto:tyhopkins@gmail.com) for more information.

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### **Of Brooms and Burglars**

by Judy Palpant

Dawn breaks in East Africa. The rooster crows. The birds chirp. Then sounds of rhythmic brushing reach the ears. Someone is sweeping a dung floor, a dirt compound or a concrete courtyard.

When I arrived in Kenya in 1980, I was baffled to find brooms without handles. Short ones made from the Turkana palm fronds, long ones made from Mombasa coconut tree bark. If necessary, one could break off a few young cypress twigs and bind them with sisal. Bending from the waist, the sweeper went to work.

Over time I preferred this type of cleaning—nose to nose with the grit and grime on the concrete floor in my Kenya home. I'd collect the clutter in a pile, pick out the trash and sweep the remainder out the back door.

On a recent return trip to East Africa, my husband and I rode a bus from Jinja, Uganda to Nairobi, Kenya. At the bus stop where we waited at 8 a.m., a woman held a large Jerrycan of water in her left hand and a short, stiff broom in her right. She poured water as she swept the concrete porch, cleaning it for the day. Later, from the bus window, I spotted an old woman stirring up a cloud of red dirt as she swept the path in front of her mud hut. I watched with satisfaction, glad I mopped and vacuumed before leaving for a month. I like returning to a clean house.

Sometimes one can be astonished by who sees the need and picks up the broom. Once on the wards in the Kenyan mission hospital where my husband Sam worked, a mess on the floor cried out to be cleaned. Without hesitation, the Kenyan male medical student stepped out of his expected role and took care of it. The nurses watched in



amazement. Nearly 30 years later, he's remembered for his humility and helpfulness, a witness to his Christian commitment.

By age three, our grandson Noah started assessing floors. "Nana," he'd say upon walking in the front door, "your carpet needs cleaning." I'd pull out the vacuum. With effort and pride, he maneuvered it into position and proudly made it gobble up the dirt and crumbs.

Jesus cleansed the temple at the beginning and end of His ministry here on earth. Astonished onlookers watched the ensuing chaos as He swept the place clean of money changers, returning it to its original purpose—a house of prayer.

In our month-long absence, thieves broke into our home through a basement window and made a clean sweep. They took our laptop computers and some jewelry—gold and silver clip earrings, the diamond pendant my parents gave me as a high school graduation gift, the Huguenot cross Sam hung around my neck on our wedding day and the blue sapphire necklace he presented to me on our 25th anniversary. They found nothing else of street market value.

We returned home to mopped floors and vacuumed carpets, but the burglars did a deeper cleaning, forcing a heart-checkup. Are we overly attached to our material possessions? Have we stored up our treasures in heaven?

I feel a cloud of emotions thinking about what is lost. Not unlike the dust stirred up by the woman sweeping the path to her hut, I can whip up a cloud of dirt that settles right back where it came. I choose not to live with regret and resentment about the past or fear of the future. At the same time, I am grateful for the One who lovingly searches and knows me. The Holy Spirit moves in and, using a short broom, powerfully washes me with the water of the Word and makes straight paths for my feet. Astonished by the mystery, I once again commit the waste management and security system of my heart into the Master Sweeper's hands.