Increasing Urbanization Brings New Challenges for Life Insurers

Across the globe, we've given up the tractor for the subway, the open sky for the concrete jungle. We are now an urban planet. What are the consequences of this urban growth to human health and wellness? Georgiana Pascutiu, M.D., RGA Medical Director, Global Medical Support, discusses the rise of urban disorders in the interview below.

Dr. Georgiana Pascutiu
Vice President and
Medical Director,
Global Medical Support
RGA International Corporation

Define urbanization.

Urbanization refers to the growth of rural communities into cities, and it's nothing new. Throughout history, cities have attracted people as centers of growth, learning, economic opportunity, and religious freedom. About half of the global population lived in cities by 2008; compare this to about 3% in the 1800s. But urbanization is also shifting to new locations: the first big wave occurred during the Industrial Revolution in the 18th century in North America and Europe. Looking ahead, much of the future urban growth is projected to take place in the Global South – in Asia, Africa, and Latin America. It is estimated that by 2050 about two-thirds of the global population will be calling cities home.

Why should insurers care?

Urbanization has health consequences. During the Industrial Revolution, migration was uncontrolled and cities were dirty, crowded places where epidemics frequently broke out. Diseases spread much more rapidly in densely populated urban areas. Health indicators back then looked much worse for urban residents, compared to rural ones.

Spectacular advances in medicine and public health helped industrialized countries overcome many infectious diseases in the cities, and now mortality rates look much better for urban residents compared to rural ones. But infectious disease remains a problem. While public health infrastructure is more robust in cities, transcontinental air travel means that infectious disease has the potential to spread much faster than at any other time in history. Consider the spread of SARS in 2003, when the disease disseminated from China to 17 countries in less than a week.

Has the nature of urbanization – and therefore risk – changed?

This is an important question for insurers. There may be such a thing as too much urbanization, too quickly. Urbanization looks completely different in the megacities of the Global South, when compared with the cities of North America and Europe. The problem is that infrastructure is not keeping up with population growth, and densely populated slums are forming within and around cities, without security or sanitation, and presenting huge public health and environmental risks. About one-sixth of the global population lives under these conditions.

So, which is better for your health and well-being: the urban or the rural lifestyle?

Urban life is a double-edged sword; there are health benefits and risks. Studies I discuss in my webcast have found that, in urban residents, there is a lower risk of undernutrition, yet a higher risk of obesity in children, when compared to rural residents. We see lower fertility rates and greater odds of hypertension, diabetes, and weight issues in urban populations. There may be more environmental hazards in cities, particularly indoor air pollution from industrial activities, transportation, and household fuel and waste burning. Air pollutants more prevalent in cities have been linked to higher rates of cardiovascular mortality, Chronic Obstructive Pulmonary Disease and lung cancers.

Why is this? City dwellers just tend to consume more food and energy, and therefore produce more energy. The so-called concrete jungle can become a heat island, trapping this energy along with atmospheric pollutants. This has the potential to change local weather patterns and rates of vector-borne diseases, which are highly sensitive to climactic patterns.

On the other hand, urban residents enjoy better sanitation, better technology, a wider range of food options and far easier access to public health services and other infrastructure. There are no simple yes or no answers.

You mentioned slums. It seems clear that risks are not distributed equally among all urban residents.

Today's cities are very heterogeneous. An extremely distressed neighborhood concentrates health risks and can become an incubator for disease in a way that a more affluent area would not be.

That leads us to toxic stress as a particular urban condition. Could you explain from a medical perspective?

Urban life affects brain biology and therefore health outcomes. Let's start with the fact that changes in our physical and social environment wrought by urbanization can be stressful. I did an experiment where I asked people to try and define an urban disorder, people talked about stress… anxiety… social isolation.

Think about an urban lifestyle: auto-dependency, long commutes and long working hours, lack of exercise, unhealthy diets of processed foods, fear of crime. Urban residents confront many stressors while being increasingly cut off from traditional networks of social support from family and friends. City residents may communicate frequently with a smart phone or social media, but the quality of those interactions can be lacking.

People are social animals; we want to develop genuine connections with one another, and our bodies are wired to react to isolation and other forms of stress in ways that protect us from predators – it's called the "fight or flight" response. Stress hormones release glucose into our blood stream and connect with areas of the brain that control mood, motivation, and fear. When stressors are always present, this reaction remains switched on and overexposure increases the risk of serious health conditions such as obesity and hypertension. Studies also suggest that the pain of social isolation may be as real to us as physical pain, and the stress from isolation and urban lifestyles can increase the risk that emotional disorders will manifest in those who are predisposed. In other words, a society that ignores our emotional needs is one that creates pathology.

But people flock to cities and benefit from rising incomes and greater opportunity, as well as better public health systems. This should extend longevity.

Life expectancy may be the most common indicator of population health, and life expectancy in developing countries is positively – but not significantly – associated with urbanization. Living in cities may help you live longer. And yet, do you live better? Just consider diet: urbanization presents us with an example of a social change that has a remarkable effect on what we eat. The word cooking itself has become anachronistic in many urban areas as residents don't have the time. Stressed people have high levels of the hormone cortisol, which can trigger the release of glucose into our bloodstream to give us energy to confront stress. It also activates a primal urge to eat rich, often less healthy food, which is easily accessible and contributes to chronic disease. At the same time, many urban residents also have greater access to a wider array of healthy foods that rural residents do not.

This is a trend that could be applied to developed nations, as well. Obesity has reached epidemic proportions in the United States, but research has found that rural counties are often home to poorer diets and more sedentary lifestyles than their urban counterparts. Again, it's complicated.

Does it come down to weighing different risks?

In many ways, yes. The modern-day applicant is varied, and health outcomes often are more a matter of individual choice than environment. One urban applicant could be a member of a wellness program, using wearable technology, getting checkups, and eating healthy foods, while another could be overweight, isolated and suffering from insomnia or diabetes. As with all factors affecting mortality, the challenge for life insurers is to design a portfolio products that serve applicants across the risk spectrum.