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## Internal migration and health in China



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China has a highly mobile population of 140 million rural-to-urban migrants (10% of the total population), a number that is expected to increase in the coming decade. Migrants tend to follow a temporary and circular pattern, moving between cities and provinces in search of improved opportunities. Overall, the migrant population tends to be younger, and is more likely to be male and single, than the general population, although more women and families have also started to migrate in recent years and more people are settling in cities. Indicators of socioeconomic status place the migrants below that of the urban population but above their rural counterparts.

Migrants are largely excluded from urban services, including access to public health. National policy has long been established on locality-based schemes that depend on household registration (*hukou*), which is not easily transferable from rural to urban areas. Migrants, therefore, do not qualify for public medical insurance and assistance programmes, and have to pay out-of-pocket expenses for medical services in cities.<sup>1</sup> City governments are faced with the dilemma of not wanting to overburden public finances by extending medical cover to migrants versus the need to provide some services to prevent potential public-health crises. Local policies are being piloted in various cities to meet this challenge.

The health-care community in China has focused on three main concerns about migrant health. The first is infectious diseases: this highly mobile group can be both victims and vectors of such diseases, which was particularly highlighted during the epidemic of severe acute respiratory syndrome. The range of diseases in migrants tends to be different from that in the non-migrant urban population. Migrants have more communicable diseases, such as acute respiratory infections, diarrhoeal, parasitic, and sexually transmitted diseases, and tuberculosis.<sup>2-4</sup> Hence health authorities are concerned about these diseases, especially sexually transmitted diseases and tuberculosis.<sup>5-7</sup>

The second issue is maternal health. On every indicator of maternal and infant health, the migrant population fares worse than the urban population.<sup>8,9</sup> Maternal health of migrants is a challenge for urban

health-care systems, and many cities have started pilot programmes to address needs. For example, Shanghai has experimented by offering subsidies to migrant women to be able to deliver in public hospitals (instead of illegal private clinics), and has achieved good outcomes.<sup>10</sup> But this success has created an ambivalent attitude about making the policy public for fear of attracting too many people into Shanghai.

The third concern has been occupational disease and injuries in migrant workers, including silicosis, chemical poisoning, and accidents caused by machinery. The outsider status of migrants in the city's health-care system, lack of medical insurance, weak enforcement of occupational health and safety regulations, and little awareness of occupational risks contribute to this widespread problem.<sup>11</sup> Improved access to proper emergency or preventive care can help this situation, but the solution goes beyond the health sector. Improvement will need much stronger governmental regulations and enforcement of safety laws at workplaces.

Those three main concerns, however, are only part of a broader picture that is poorly indicated in research about health issues for migrants. At the root of the issue is the self-selection of migrants that affects health in two ways. First, young and healthy people are more likely to migrate than elderly people, leaving the weak and sick at home. Second, more serious and incapacitating diseases and intensive-care

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conditions (including old age, pregnancy, and delivery of the newborn child) result in a migrant's return to the home in the village to seek family support and to avoid the high medical and living costs in cities.<sup>12,13</sup> In essence, the countryside is exporting good health and reimporting ill-health.

As a result, counterintuitively, rural migrants on average are healthier than the urban population. This situation has the perverse effect of making the total urban populations (with improved health-care systems) healthier than the rural population in terms of able-bodied workers per sick individual, while the burden of the negative consequences of migration is in the countryside (with poor health-care systems).

The ongoing rapid extension of the New Rural Cooperative Medical System, which now officially covers 87% of all villages in the country should, if it works, stem the crisis affecting the rural health-care system since the start of economic reforms.<sup>14,15</sup> However, the double self-selection of migration could overwhelm any rural insurance system in the future, by decreasing healthy contributors and increasing the number of unhealthy ones. On the other hand, studies that include migrants into the urban health system (in the form of reimbursement of some medical expenses incurred in their cities of work, rather than their original rural residences) are still at an early stage.<sup>16</sup>

Two additional issues deserve more attention. One is mental and behavioural health, a domain that is understudied in China. International experience suggests that, as with physical health, immigrants also have better mental health than the general population.<sup>17</sup> Whether this is true of China's internal migrants is unknown. Clearly, migrants face a different set of stressors from non-migrants that include high mobility, high risk, low social status, and separation from family and familiar social surroundings. We expect that their mental-health issues will have a degree of specificity that deserves more research and specific intervention.

The second area is risk perception. Apart from some research on views about AIDS and tuberculosis,<sup>18,19</sup> little systematic research exists on how Chinese rural migrants perceive health, disease, and the health-care system. Their high geographical mobility has consequences. When expected residency in a

given location is limited, strong disincentives exist for migrants to invest time and money in locality or employer-based insurance programmes, or even to invest in personal health and safety measures.<sup>20</sup> Youth mining (conscious and unconscious trading of future ill health for present economic opportunities) is a prevalent behaviour in migrant populations, and might cause grave health consequences in the long term.

What is needed is an understanding of how this group perceives the various possibilities for health care: self-medication, informal healers, traditional medicine, private clinics with varied levels of care, and more formal hospital treatment. These notions of risk and care opportunities, combined with their traditional models of medicine and of healing, play a big part in health-related behaviours in migrants. Understanding them will be crucial to prevention, intervention, and other health-related measures for the migrant population in China.

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## Preventing infections acquired during health-care delivery

In October, 2008, WHO issued an update on its global burden of disease study for the year 2004.<sup>1</sup> This comprehensive report assesses the health status of the world's population and focuses on major causes of morbidity, mortality, and disability for 135 diseases. Although acquiring an infection during the delivery of health care is considered the most frequent adverse event that threatens the safety of patients around the world,<sup>2</sup> health-care-associated infection (HAI) is not included in the global burden estimates. This omission is not the result of a flaw in the report's methodology, but rather due to the fact that HAI complicates many underlying diseases, and its diagnosis is complex and relies on multiple criteria. Additionally, national surveillance systems exist only in some, mainly high-income, countries, and obstacles to intranational and international benchmarking are many. Nevertheless, reports of 1.7 million HAIs in the USA in 2002,<sup>3</sup> 3 million in Europe in 2006,<sup>4</sup> and a 2–20-fold higher risk of acquiring HAI in developing countries<sup>5</sup> confirm that this is an appalling problem that affects millions of patients and spares no health-care setting worldwide.<sup>6</sup> More public-health action is needed to standardise surveillance methods, identify diagnosis criteria more applicable in low-income and middle-income countries, and generate reliable estimates of the global burden of HAI.

For many countries, the lack of data on the effect of HAIs is one of the main reasons why infection control is not yet considered a high-level priority in national health plans and policies. By contrast, England is a good example of a country where the availability of reliable figures on the burden of disease at national level has driven policy makers towards more responsible approaches. Since 2001, the UK has figured prominently among European countries with the highest prevalence of methicillin-resistant strains among *Staphylococcus aureus* isolates (MRSA),

with reported proportions ranging between 42.1% and 44.4% until 2006.<sup>7</sup> Against all predictions, overall MRSA prevalence fell to 35.6% in 2007,<sup>7</sup> and, more importantly, as recently reported by the mandatory surveillance system, the incidence of MRSA bacteraemia in England has been reduced substantially, to reach the national target of a 50% reduction over a 4-year period.<sup>8</sup> This promising improvement reflects at least in part the large efforts devoted to HAI prevention, hand-hygiene promotion (the “cleanyourhands” campaign), and MRSA control in particular, by the UK Department of Health and health-care institutions.<sup>9</sup> A further step forward has been taken with the recent inclusion of infection control, and in particular MRSA bacteraemia rates, among the indicators to assess the achievement of the new national targets for health-care quality.<sup>10</sup> This innovative, rigorous, and far-sighted approach should inspire other countries.

Most countries, however, do not have the capacity to reliably monitor laboratory data. The surveillance of outcome indicators such as HAI often poses many

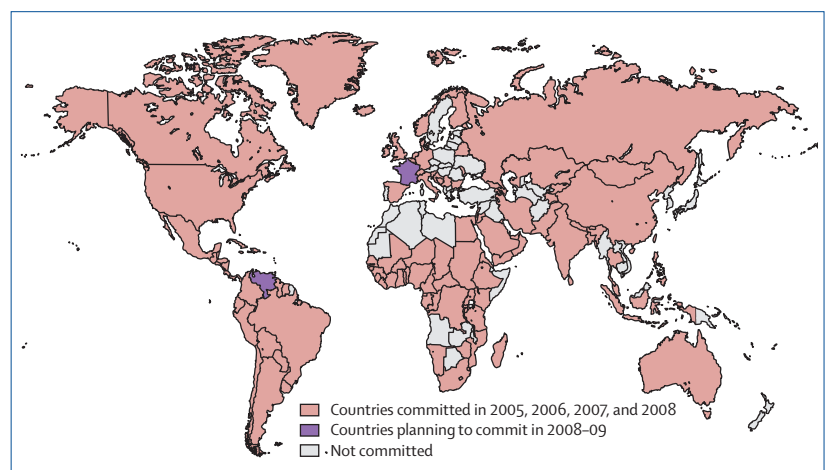


Figure: Country commitment by ministerial pledge to the First Global Patient Safety Challenge “Clean Care is Safer Care”

October, 2005, to October, 2008.<sup>16</sup>