

## China takes first steps toward healthcare and drug reforms

In the wake of a bribery scandal and a disastrous baby formula recall, Chinese leaders are carrying out a slew of healthcare reforms.

In mid-October, in part on the basis of recommendations from the World Health Organization and the World Bank, China's State Council published a proposal for healthcare reform online for one month of public comment. Part of the proposal states that by 2020, all Chinese citizens will be covered under one of three different government health insurance schemes. Currently, an estimated 35% of urban households and 43% of rural households cannot afford healthcare.

In 2003, the severe acute respiratory syndrome (SARS) outbreak underscored the problems of China's debilitated healthcare system. But China has been struggling to improve its healthcare system for the past three decades. Beginning in 1978, broad economic reforms shut down the communal farming system and ushered in the free market—and, with it, unprecedented prosperity.

These changes, however, also translated into the end of state-funded healthcare and, consequently, a decline in many indicators of general health.

In the 1960s, China's life expectancy was about ten years higher than it was in countries with similar GDPs. It has further improved

since then, but mostly in the wealthy urban provinces. For example, from 1981 to 2000, the average life expectancies in Beijing and Shanghai increased by about five years, to 76.1 and 78.1, respectively. Meanwhile, the life expectancy in Gansu, one of the poorest provinces, increased just 1.4 years, to 67.5, over the same time frame (*Lancet*, doi:10.1016/S0140-6736(08)61364-1; 2008).

After the public comments are collected, a revised healthcare plan will “definitely” be implemented by early next year, says Shenglan Tang, health advisor of the World Health Organization office in Beijing.

“China is now realizing that you can't just leave people to sink or swim when it comes to something essential like healthcare,” says Margaret Whitehead, professor of public health at the University of Liverpool, UK. “They've recognized they need to do something about it, but it's really a tremendous challenge.”

The same economic reforms that fragmented China's healthcare system have enabled the country's medical and pharmaceutical industries to grow exponentially. Drug sales climbed fourfold from 1990 to 2000—up from \$3.9 billion to \$19.7 billion (*Drug Inf. J.*, 37, 29–39; 2004).

Policy experts say that the food and drug industry has grown without adequate

oversight. This year, baby formula tainted with melamine, a chemical that is used to make plastics and fertilizers, has made more than 50,000 babies sick and killed at least four, leading to a massive public outcry and a product recall.

In March, China's State Council announced that the Ministry of Health (MOH) would be restructured to include the State Food and Drug Administration (SFDA), the regulatory agency whose leader was executed last year for taking bribes from pharmaceutical companies. Under the changes outlined in March, the MOH's responsibilities would include, among other things, approving new drugs, creating and enforcing regulatory policy and investigating accidents.

Moving the SFDA under the umbrella of the MOH—which has higher bureaucratic authority—is meant to enhance the coordination of SFDA's regulatory responsibilities. But Yanzhong Huang, director of the Center for Global Health Studies at Seton Hall University in New Jersey, questions whether the organizational changes are just swapping one ineffective bureaucracy for another. The MOH “still doesn't have adequate personnel or organization to regulate effectively,” Huang says.

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## Nobel decision stirs viral dismay

The Nobel Assembly at Sweden's Karolinska Institutet raised eyebrows last month when it announced the winners of the 2008 Nobel Prize in Physiology or Medicine. Although the accomplishments of this year's recipients are widely recognized, critics say that one important name is missing from the mix.

The award, worth 10 million Swedish

kronor (\$1.3 million), will be split among three virus researchers: Harald zur Hausen of Germany, who is credited with discovering that human papillomavirus can cause cervical cancer, and Luc Montagnier and Françoise Barré-Sinoussi of France for discovering HIV. But many researchers, particularly those in the US, are dismayed that HIV researcher Robert Gallo did not make the cut.

“Everybody I've talked to around the water cooler has the sense that he [Gallo] has been shafted,” says Abraham Verghese, professor of medicine at Stanford University in Palo Alto, California. Gallo's work on retroviruses and human immune cells set the stage for the discovery of HIV, Verghese adds. Although the French team was the first to isolate the virus, Gallo and his colleagues in the US established its link to AIDS (*Science* 220, 868–871; 1983; *Science* 224, 500–503; 1984). “Gallo showed the disease correlated with the virus,” says virologist Michael Emerman of the Fred Hutchinson Cancer Research Center in Seattle, who worked as a postdoctoral fellow in Montagnier's lab

between 1986 and 1989. “Gallo showed it before they did. His contribution is certainly worthy of a Nobel Prize,” Emerman adds, noting that the winners are also deserving.

In the 1980s, when researchers identified AIDS and its viral cause, a heated controversy erupted over who deserved credit for discovering HIV. The US and French governments stepped in, declaring Montagnier and Gallo as ‘co-discoverers’ of the virus that causes AIDS. And, in an effort to calm the storm, the two scientists even published a joint paper (*Nature* 326, 435–436; 1987) outlining how their discoveries unfolded. Since then, the controversy has periodically flared up. And the news of the Nobel Prize has far from put the issue to rest. “I was very saddened to learn that Dr. Gallo was not included,” says Victor Garcia-Martinez, an infectious disease researcher at the University of Texas Southwestern Medical Center in Dallas. “He is a towering figure in the field.”

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UPI Photo/ David Sipka

Missing from the picture: Some say Gallo is