

INTERVIEW

INTERVIEW WITH JEFFERY P. KOPLAN, MD MPH

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Dr. Jeffery P. Koplan was the Director of the U.S. Centers for Disease Control and Prevention (CDC) from 1998 to 2002, and is currently the Vice President for Global Health at Emory University and the Director of Emory Global Health Institute. Dr. Koplan began his public health career in the early 1970s, and has worked on virtually every major public health issue, including infectious diseases, environmental health issues, chronic diseases and the health toll of tobacco, both in the United States and around the globe. Recently, Emory Global Health Institute received a \$14 million, five-year grant from the Bill & Melinda Gates Foundation and established the China Tobacco Partnership program. Dr. Koplan is the principal investigator of the grant and is leading the partnership, which is devoted to reduce the burden of tobacco use in China.



Dr. Jeffery P. Koplan

In this interview with Drs. Zheng Li and Feijun Luo, Dr. Koplan talked about the Tobacco Partnership program, his over 30-year of involvement in public health in China, his observation on the changes occurred in China, and the differences between the public health systems in the United States and that in China.

1. Tobacco Control Partnership in China

Zheng: Last week I heard your interview with the National Public Radio about the newly established China Tobacco Control Partnership. Can you tell us a little about that project?

Dr. Koplan: It is a program that we have funding from the Bill and Melinda Gate Foundation. In some way it's another chapter of the work that I have done before with the World Bank — Health Loan #7 from a series of health loans that the World Bank granted to China. It was a health promotion project that included HIV/AIDS, also a tobacco control program in seven cities from late 1980s through mid-1990s. The program showed some success in cities such as Shanghai, Luoyang and Tianjin, which gave us some indication of the type of work that could be done on tobacco control in China. So with colleagues in China we obtained this grant. We currently are working in 17 cities, and we are working with 5 universities with the goal of establishing academic units that concentrate on tobacco control.

Zheng: It sounds that this project has a longer history than the recent grant and partnership program?

Dr. Koplan: Well, my own experience with tobacco control in China goes back years, and so is the Chinese effort on tobacco control. Therefore it has been ongoing for a while, but it certainly has its ups and downs over the years. There are formidable challenges, such as, as you know, the huge amount of smokers in China and the tobacco monopoly. Therefore, it is a huge task and definitely need more people than what we have currently to achieve the goal of tobacco control in China.

There has been a lot of research on tobacco products and their health effects. For example, the Environmental Health Laboratory at CDC has been very helpful in showing the considerable differences in chemical components post combustion of products made in different parts of the world. So comparing the same brand of cigarette sold here in the U.S. to those in China or in Johannesburg, South Africa, you got very different products.

Zheng: It's a very complicated issue.

Dr. Koplan: On one hand, it's not complicated at all. If you smoke, it's bad for you, it'll make you sick and it can kill you. That part is easy. But everything else is very complicated.

2. Over 30-years of working in China on public health front

Zheng: Judging from what you said, I can tell that you have been involved in numerous projects in China for many years. What made you so interested in China and how did you get started?

Dr. Koplan: I started in 1979, so it's been 32 years working in China, with over 50 trips to China and lots of collaborations. It has been very enjoyable and satisfying. My first project was the U.S.-China collaboration on public health and health services. It came out of the initial breaking of the impasse between the two countries after Nixon's visit to China in 1976. In 1979, I visited China as a member of an official US government team to look at potential collaborations. A year later I was asked to be the chairman of the team and from there it led to more involvements and projects. We were able to establish the primary (public health) institution in China, what was then the Shanghai Number One Medical College, later named Shanghai Medical University, now became part of the Fudan University. Prof Yang Ming-Ding, a very distinguished professor at Shanghai, was my counter-part. We did a lot of projects together, e.g. a scientific research study in Shanghai County, which at the time was a semi-rural area on the edge of the city of Shanghai, now it is incorporated as part of the metropolitan. That project involved multiple trips, lots of publication, and a whole issue of *American Journal of Public Health* was devoted to that study [1982, Volume 72, 9 Supplemental Issue]. At the same time, I started to work with the World Bank on many projects in China. Then I became heavily involved in the antecedent organization of the China CDC -- first the National Center for Preventive Medicine, which became the Chinese Academy of Preventive Medicine, later became the China CDC. So I had close ties to administration at China CDC from the beginning.

Feijun: So public health was one of the first top priorities between China-U.S. governments when the two countries just formalized their bilateral relationships in the late 1970s!

Dr. Koplan: Yes, it was one of several focus points between the two countries.

Feijun: Many Chinese were not aware of China CDC until the Severe Acute Respiratory Syndrome (SARS) outbreak in 2003. So I thought that public health was an unfamiliar concept in China before 2003.

Dr. Koplan: Well, China had had major public health undertakings, such as malaria control, eradication of leprosy, and lots of population-wide programs that were really public health, or a mixture of public health and preventive medicine. For example, community level of disease defense started out at the "bare-foot doctors" in villages. Their roles involved not only clinical care, but also responsibilities such as water and sanitation which is primary public health, infectious diseases and vaccination program which are a mixture of clinical care and public health. So there has been attention on this throughout the time, even goes back to before the revolution. There were active public health communities in Chinese institutions before the liberation occurred and there has been a strong thread of public health in the past 100-120 years of Chinese history. Sometimes it has been more prominent, and sometimes it almost disappeared, but it has always been there.

3. China and Public health in China: Changes, Strength and Challenges

Zheng: Over the past 30 years, do you see any changes in China and any changes on the public health front?

Dr. Koplan: There have been remarkable changes. For one, the economic system has completely been revolutionized, from the Marxist Maoist economy to a free enterprise capitalist system. The changes occurred include the level of industrialization, the shift from government-owned industries to private-hands, the closure of economically non-viable business, and the growth of

products that China is providing to the world. The growth of infrastructure in the country is immense and really unparalleled — roads, trains, airports, bridges and dams.

However, the wealth happened primarily along the east coast and southeast, and less so as you go further west. There is a greater urban-rural gap in development. Also in my opinion, there has not been a remarkable shift in gender roles, i.e., the limited role of women in business and government. I know that there's saying in China that "Women hold up half of the sky". Women may be holding up half sky, but they are not sitting up there at the top controlling the clouds.

There are changes in other fields too. From the health perspective, the epidemiologic transition from primarily infectious issues to more chronic diseases has occurred in most parts of the country. Of course in some areas such transition is far from complete, still with lots of tuberculosis and acute respiratory diseases. Nevertheless, the transition towards the chronic diseases is pretty notable in many parts. The life span in China, particularly on the eastern part of the country, is very much like the U.S. and other developed countries. The major causes of death, like everywhere else, are cancer, heart disease and stroke, etc.

While there are huge improvements on overall health status and life span, there are also factors that affect health negatively. Among those are changing dietary pattern, decreased levels of physical activity, ongoing exposure to environmental pollutants, and tobacco addiction by the male population in the country. Diabetes was very hard to find in China 30 years ago, as was overweight or obesity. That has changed dramatically. There are multiple studies showing that people are taking in more total calories, more calories from fat and animal fat, and high amount of sodium. With these came higher incidences of heart diseases, stroke, diabetes, certain types of cancers, etc.

Government policy, to some extent, has caused a reduction on physical activity among the population, such as encouraging ownership of automobile and limiting bicycle lanes on the roads. The shift towards automobile is huge, but with it came with a lot of headaches, especially from health and environmental perspectives.

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—Dr. Jeffery P. Koplan
Emory University



Dr. Koplan receiving consultation from a Traditional Chinese Medicine practitioner in Gonghe County, Qinghai Province.

4. Differences between the public health systems in China and the U.S.

Zheng: How is the public health system structured in China?

Dr. Koplan: China has a very developed public health infrastructure. It can be a very good example to many other developing countries at a similar stage. China's public health system is marketed through the name of "CDC". There are CDCs at different levels, for example, Hangzhou CDC (city), Zhejiang CDC (province), and China CDC (country). There is a good division of responsibility that goes from the local level to the provincial level and to the national level. The system has steadily improved itself over the years. At the beginning, like many other systems, there were many weaknesses and holes in it. As we discussed earlier, the SARS event played some role in strengthening China's public health system and catching people's attention to public health. I can tell you more in a few months since I will be reviewing China CDC as an external reviewer now that China CDC is 10 years old.

Feijun: What are the strengths of public health systems in each of the two countries?

Dr. Koplan: The U.S. has a longer time of operation and a better working relationship between different levels, even though there is still room for improvement. I think in some ways there are more defined distinctions between services provided from (CDC headquartered in) Atlanta and from the state health departments. U.S. CDC provides expertise to states. Every state can do epidemiology investigations on its own, but when problems reach certain level, CDC can come to help. It is very important to establish a collegial partnership between CDC staff and states and this is well understood by CDC teams. It would not work well if you say "[W]e are better than you, we are smarter than you, and we are more sophisticated than you." It is important to develop a relationship where one side may have more expertise in an area than the other but does not act in a way that makes people feel bad about it. That's part of the reason U.S. CDC is successful. CDC people cannot do investigations in states unless they are invited in by state health officials. Suppose you read big news about cholera outbreak in Louisiana, you can call Louisiana and ask what is going on. If they say they got the situation under control and they do not need you, you cannot go. I think China CDC probably can come in without requests from local provinces.

Another related factor is that U.S. CDC provides a lot of funding to state health departments. If you have a chance to visit a state health department, you will find many people working there are on salaries, funding, or projects from CDC. In China, the budget of China CDC is from the central government and the budget of Guangdong CDC is from Guangdong province. These can affect the relationships between CDC at national level and local CDC or health departments.

One thing I think we can learn from China is its surveillance systems. China has set up almost real-time surveillance systems in many places. If I see a patient in one of the city hospitals in Guangdong province, the information can be sent almost in real time electronically to Guangdong CDC and then to China CDC for analysis. So the electronic surveillance system is much better in China. Chinese visitors to U.S. CDC are surprised that the U.S. surveillance system still uses paper in some cases.

During a recent meeting, I said to the officials of the Chinese Health Ministry in an informal way that their system is much better than ours for getting something done in public health, "[Y]ou don't have to ask for permissions from a lot of people and you can get things done quickly." They said one would think that is the case, but between Beijing and some rural areas, there are a lot that get dropped out. I can relate it to a saying in Qing dynasty, something like "[T]he village is here and the emperor is far away."

5. Interest in Chinese Culture

Feijun: You are very familiar with Chinese culture and we heard several Chinese sayings or proverbs during our conversation. Can you tell us how you feel about Chinese culture and what is your favorite place in China to visit?

Dr. Koplan: I like to read Chinese history and literature, but my big regret is that I have never learned the language. The more I work in China, the more I learn how little I knew before. I never get tired of learning more about Chinese culture, history, and literature. China has incredibly rich culture and history. I went to the Symphony Hall in Beijing and attended music concerts and I like Beijing opera. I travelled around China and visited many places and found many different cultural items. I love Yunnan Province because of the minority groups who are colorful and friendly.



At altitude of 3600 meters outside of Xining, Qinghai, Dr. Koplan, in Boston Red Sox cap, meets two field workers harvesting fungi from hillside. One of them was wearing the cap of the New York Yankees, a fierce rival of Red Sox.

Disclaimer: The findings and conclusions in this interview are those of the participants of the interview and do not necessarily represent the views of the Centers for Disease Control and Prevention.