It is estimated that the total medical cost attributable to overweight and obesity might be 21.11 billion Chinese Yuan (RMB, approximately US\$2.74 billion), which accounted for 25.5% of the total medical costs for the four major obesity-related chronic diseases namely hypertension, type 2 diabetes, coronary heart disease and stroke, or 3.7% of China's national total medical costs in 2003. The medical cost associated with obesity could increase rapidly in the future. The economic costs related to the nutrition transition, in particular, the changing lifestyles and increase in obesity and related chronic disease in China, may represent 4-8% of China's economy.

The United States can serve as an example to indicate the seriousness of the financial consequences of the obesity epidemic, and to show that the warnings made recently for China can become true if its growing obesity epidemic could not be controlled effectively. One of our recent studies projected that in the United States, medical costs attributable to overweight and obesity have already reached 72-82 billion US dollars and accounted for 12-13% of total US healthcare costs. The total healthcare costs attributable to obesity/overweight would double every decade to 860.7-956.9 billion US dollars by 2030, accounting for 16-18% of total US healthcare costs, if the obesity trend continues in the U.S.

China already has had the largest number of overweight and obese people on earth. Timely attention and adequate effort should be made to prevent childhood obesity and to address the rapidly growing obesity epidemic in China. Comprehensive, national programs should be developed. In particular, while today China is making great effort and investing heavily to improve her citizen's health and access to healthcare service (e.g., the Healthy China 2020 Program), multiple parties such as parents, children, health professionals, schools, media, food industry, and the central and local government agencies should all be involved for promoting healthy lifestyles and for the prevention of obesity. China should learn from the failure and successful experience of other countries in combating the obesity epidemic. Promotion of healthy lifestyles including healthy eating and adequate physical activity and avoiding first and second-hand tobacco smoking is important for the Nation's long-term development and for Chinese people's health and life quality This should be included as an important part of national priorities.

References:

Ji CY, Cheng TO. Epidemic increase in overweight and obesity in Chinese children from 1985 to 2005. Int J Cardiol. 2009;132(1):1-10.

Wang Y, Mi J, Shan X, Wang QJ, Ge K. Is China Facing An Obesity Epidemic and the Consequences? The Trends in Obesity and Chronic Disease in China. Int J Obesity 2007;31(1):177-88.

Wang LD, 2005. Report Series 1: China National Nutrition and Health Survey 2002. Public Health Publishing House, Beijing (in Chinese), page 30.

Wang Y, Lobstein T. Worldwide Trends in Childhood Obesity. Int J Pediatric Obesity 2006;1:11-25.

INTERVIEW

INTERVIEW WITH DR. LINCOLN CHEN

Dr. Lincoln C. Chen is President of the China Medical Board (CMB), an independent American foundation endowed by John D. Rockefeller to advance health in China and Asia by strengthening medical education, research, and policies. He was the founding director of the Harvard Global Equity Initiative (2001-2006), and in an earlier decade, the Taro Takemi Professor of International Health and Director of the Harvard Center for Population and Development Studies (1987-1996). Dr. Chen is renowned for



Dr. Lincoln C. Chen

his research and advocacy in human resources for health. He was the Special Envoy of the WHO Director-General in Human Resources for Health (2004-2007), and the Founding Chair of the Global Health Workforce Alliance (2006-2008). In this interview with the China Health Review, conducted by Zhuo (Adam) Chen in March 2010, Dr. Lincoln Chen explained his views on major challenges in human resources for health, critical health issues in China, as well as CMB's plan in capacity building in China.

1. Major Challenges in Human Resources for Health

- <u>Adam:</u> In your opinion, what are the major challenges in human resources for health in China and globally?
- <u>Dr. Chen:</u> In general sense, China and global challenges are fairly similar in that there are quite often shortages of [health] workers, in particular poor countries or poor regions and poor communities. Some of the shortage is due to mal-distribution, e.g., urban concentration and rural deficits. In many countries, including China, you may have unemployed graduates [in cities] in a midst of shortages in remote and rural communities. In these cases, the national skill mix may not be the most appropriate for equitable health access in the country because you may have either not enough or the wrong type of workers.
- <u>Dr. Chen:</u> We also do not have strong information systems or strong knowledge base in this area. In part, this gap is due to insufficiently high priority. In part, it is due to time scale because so many of the problems take a long time to resolve; so it does not get into a political cycle or a management cycle. These are decade-long types of issues rather than short-term issues.

2. Role of Human Resources for Health in Health Systems

- <u>Adam:</u> China has been reforming its healthcare system. While much of the debate has been focused on access to health insurance, do you think there is a role for human resources for health or medical/public health education?
- <u>Dr. Chen:</u> I definitely think so. In terms of all resources for health systems, financing is only one, and by no means the most important. Human resource obviously is another absolutely vital resource. This is not to say that one is more important than the other but both are necessary conditions alone insufficient but necessary conditions. If you don't have adequate finance or you don't have health workers, then obviously no matter what you do, you cannot progress. By the way, I would also put knowledge or technology as the third resources.

3. Recommendations for China's Health Policymakers

- <u>Adam:</u> If you were being asked by policymakers about priority setting in human resources for health in China, what would be your recommendations? More generally, do you have any recommendations for priority setting in China's health system?
- <u>Dr. Chen:</u> I think China has gone through quite an energetic medical educational reform to revamp and integrate medical education into comprehensive universities over the last decade. The result of this is still not entirely clear, but there has been a massive expansion of professional medical education in China. Three educational tracks have becoming clearer -- the 8 year, 5 year, and 3 year medical degrees. Less clear is reform directions in public health and nursing.
- <u>Dr. Chen:</u> A comprehensive re-examination of medical education in China is warranted. At the CMB, we are considering a White Paper on medical education in China, as part of our 100 anniversary celebration. We probably will be doing this in collaboration with a consortium of Chinese universities, including international advisors a well. We would like a more comprehensive look at the whole situation. The target is 2014, 15 years after China's comprehensive university reform. There is a lot of debate as whether it has helped or not helped medical schools. Probably right now, I would say, there is more negative than positive effects, in part because

positive effects haven't yet been realized. The positive effects are multidisciplinary, and more resources. The negative effects are that faculty tends to become more segmented, and with independent deans and so forth.

4. China Medical Board's Plan in Capacity Building in China

<u>Adam:</u> Can you tell us about CMB's strategic plan in building up stock of human resources for health in China?

<u>Dr. Chen:</u> We're continuing to focus on medical education. We have four programs. We have supported a series of medical education centers to innovate with new curricula. These are in Shenyang, Xiangya, Xiehe, and Chengdu. We have also started a rural medical education network in the nine western provinces. We also have brought eight of the nursing schools together into a network. In an April conference, we hope to be doing the same in public health.

5. Return of Western Trained Chinese Talents

<u>Adam:</u> With China's living standard improving drastically over the recent decades, many Chinese talents that have received degrees from Western universities are setting their feet back into China, be it temporarily or long-term. Among them particularly are the economists. This appears to be a rather successful model that has a good track record in integrating returning economists into the Chinese institutions. What do you think about the health sciences? The new Peking University Center seems to have made a fresh start but what are the challenges and potential pitfalls?

<u>Dr. Chen:</u> Economists have done very well in China, obviously. Both the economics profession and China's economy have done well, developing from a Marxian-based to a market-based system.

<u>Adam:</u> There is a huge infusion of western trained economist going back to China and there are quite a number of universities with faculty members who are western trained. Do you think medical education will take that route too?

<u>Dr. Chen:</u> There is an attempt in medical education to take that route. The attempt has been in biomedical technology oriented research. It hasn't yet happened to social policy, management, and health system fields. We are trying to support a new Center in Peking, which is to be launched in April [2010], but other universities have also come forward. Some are centers, some programs, some individual projects.

<u>Adam:</u> So the Center in Beijing is the first of a series?

<u>Dr. Chen:</u> The Peking Center has made an announcement to launch itself. It will have a special autonomy academically, and also will provide compensation that is more competitive. It will also promote much wider interactive academic sharing and communications, and support visiting scholars and travel for the faculty. It would be like the Peking Economics Center [note: the China Center for Economic Research at Peking University], that Justin Lin of World Bank started 15-20 years ago. But, this would be a model for health policy and health system sciences. Whether other universities would be doing this or not, whether they have the capacity and resources and whether CMB has the capacity and resources, are still evolving questions.

6. Health Disparities in China

<u>Adam:</u> China's economic development has been accompanied by a widening income gap, which may lead to disparities in access to healthcare and ultimately health disparities. Do you think human resource for health has a role in reducing such disparities? More generally, what are the steps that China's health system should use to address the widening health disparities?

<u>Dr. Chen:</u> Obviously, the widening health disparities primarily reflect the widening socioeconomic disparities in the country, [that is, social determinants of diseases,] which result from a large share

of biases in healthcare system because without the income and financing, the poor regions can't mount the same type of healthcare system as the wealthy regions. Although, as you know, not all the developments in the wealthy areas are positive for health, e.g., environmental changes and so forth. I think the government is committed now to trying to achieve universal coverage of a core set of basic services. And how they would do that, I think that's the question. I think the health insurance [coverage rate] is already up to over 90 percent. But its benefits are very poor, very weak. So, between now and maybe 2020, that coverage can increase, but should aim to cover core basic services for everybody.

<u>Adam:</u> Are there are other interventions that might be used?

<u>Dr. Chen:</u> I think there are needs of more participation from the citizenry, because the emerging problems cannot all be addressed by the government. For example, environmental

many areas that citizen actions can be helpful to the government.

health needs citizen watch to detect, report, and respond to pollution threats. Citizens must be involved for good health protection in China.

<u>Adam:</u> I think there is an increasing trend of civil participation but do you think it is enough? <u>Dr. Chen:</u> I think it is happening with HIV/AIDS and environmental area. More will be happening with areas like tobacco, the quality of healthcare, responsiveness of the providers. There are

participation from the citizenry, because the emerging problems cannot all be addressed by the government. For example, environmental health needs citizen watch to detect, report, and respond to pollution threats. Citizens must be involved for good health protection in China.

There are needs of more

—Dr. Lincoln Chen, CMB

7. Words to Readers

<u>Adam:</u> Can you say a few words to CHPAMS members and readers of China Health Review?

<u>Dr. Chen:</u> I think it is fine to have a newsletter review, but my sense is that a passive review will be useful but will not serve all the purposes. It may be better to set up some kind of chat, or internet links of some kind, where there are some kinds of [pooling] for news articles about things in China or research articles, and these get posted like Net citizens' debate and discussions in English, involving overseas Chinese communities.

<u>Adam:</u> We have a section called Perspectives. Readers of articles in previous issues or other sources who have thoughts to share might do so in Perspectives. We also have a section called Research Twitter. It's a brief introduction of new research that appeared in peer reviewed journals. We also have policy updates, which are selected from Chinese sources.

<u>Dr. Chen:</u> It is good to be interactive in some way with debate and discussion. I think there are a lot of issues worthy of informing and debate.

8. Further Thoughts

<u>Adam:</u> In China, data are not publicly available. Do you think it is a hurdle?

<u>Dr. Chen:</u> Oh, it's same problem here as well, to some extent. In addition to access to data, data quality is a problem, because so much of the survey data are collected by government administrators. Respondents could have some reservations in responses to government survey takers. Some of them are not professional survey people, really officials going to fill out the forms. You got a lot of issues here and these are worthy of discussion.

Note: Dr. Zhuo (Adam) Chen is affiliated with the U.S. Centers for Disease Control and Prevention. 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.