The China Health Policy and Management Society

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CHINA HEALTH REVIEW

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The China Health Policy and Management Society

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EDITORIAL

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Improving population health and eliminating health inequity are of growing importance to China. Anyone who opens an online Chinese news portal are likely to stumble on headline news related to health, be it mental health (the series of suicides among Foxconn workers), or food safety (contaminated baby formula), or health systems (the new rural cooperative medical insurance). Existing news portals and online communities rarely offer an opportunity to examine the social and economic roots of these problems or issues, to discuss the possible consequences and policy implications, or to debate on potential solutions. The need to establish a forum for discussions and reviews, and to provide a portal for health research, policy and practice updates in China is noted by members of the nascent China Health Policy and Management Society (CHPAMS). And voila! You are reading the very first issue of China Health Review -- the official magazine of the CHPAMS!

China Health Review, hereafter referred to as The Review, is devoted to discussions of population health issues in China. It is a collective effort of many members of CHPAMS, of which the brief history will be laid out by Dr. Jian Li later in the section *About CHPAMS*.

A key component of the Review is an overview on a population health topic from a subject expert. In this issue, Dr. Youfa Wang of Johns Hopkins University brings us a thought-provoking review on the emerging obesity epidemic in China. As China is going through an economic transition, nutrition and epidemiology transitions are to follow. The direct and indirect consequences of such changes are discussed in the section *Topical Review.*

During the opening ceremony of the 2008 Beijing Olympic Games, an NBC commentator had the following comment on the amazingly synchronized drum and moving block performances powered by thousands of actors. "They did it with people! ... It's unbelievable." Yes, people is the immense resource that was harnessed at the ceremony, has been harnessed in the everyday lives of human kind, and will be harnessed in the process of making Chinese people healthier and stronger. We had the honor to interview Dr. Lincoln Chen, President of the China Medical Board, on the issue of human resources for health. Readers can find his incisive comments and visions in the *Interview* section.

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In a world with zillion pieces of information swooping around, you probably do not have time to read every piece of news or every scientific article. Rather, you will probably like the contents in *Research Twitter*, which summarizes academic papers on China's health issues, and *Policy and Practice Updates*, which provides you latest news on health policy and practice in China. In this issue, we have summarized recent research papers on population health topics in China and updates on essential drug system and public hospital reforms.

The last section, *News and Announcements*, brings you event news, information calls, and announcements that are relevant to China's health issues. We wish you would start to think about contributing to the Review. We also hope the announcements we collected are useful for your research and career.

Bon reading!

ABOUT CHPAMS

A Brief History of the China Health Policy and Management Society

As its economy boomed in the past several decades, China is now facing both huge opportunities and massive challenges to improve its health care system, and ultimately, improve the health of its people. The fragmented health system, significant disparity in health status across different sub-populations, ongoing epidemiological transition, and the worsening environmental condition, etc., point to an immediate need for a large-scale health system reform. The success and sustainability of this historical reform hinges on a thorough understanding of fundamental issues in China's health care system, and the emerging of a generation (or generations) of well-trained researchers and professionals equipped with needed skill sets to tackle such issues.

CHPAMS was founded for this exact reason. In 2008, with the support from China Medical Board (CMB), an independent U.S. foundation that aims to advance health in China and other Asian countries, a group of overseas Chinese young scholars from several top U.S. public health schools and research institutes gathered together and founded the China Health Policy and Management Society (CHPAMS) in Cambridge, MA. As an independent nonprofit organization, CHPAMS was founded with an overarching goal to improve the health of Chinese people through advancing population health research in China. In particular, it aims to foster academic exchanges and collaborations among health scholars from academic communities in China and overseas, to facilitate young scholars who are working or studying overseas to return to work at China, and to help building health research capacities in Chinese institutions.

In February 2009, being still a very young organization, CHPAMS selected about ten young health scholars to participate in the Second West Lake Forum on Health Policy in China, a conference funded by CMB and hosted by Zhejiang Medical University. This conference

brought together top academics and more than 100 health leaders from China to discuss key economic and policy issues in China's current health reform, including Professor William Hsiao from Harvard University, Professor Qide Han, the Vice-Chairman of the People's Congress, and senior leaders from the Ministry of Health. The West Lake Forum also featured CHPAMS' debut – Dr. Lincoln Chen, the President of China Medical Board formally announced the formation of this Society at the conference. Its initiatives and mission were highly applauded by both health researchers and policymakers at the meeting.

In December 2009, CHPAMS received a seed grant from CMB to support its ongoing activities in the next two years. This fund will be used to build CHPAMS' infrastructure, membership base, and to support the publication and circulation of its' own magazine – China Health Review (CHR). Meanwhile, we are actively planning for a series of exciting activities, including forming an advisory board, merging with several other organizations with similar objectives and missions, organizing seminars given by renowned health scholars in the U.S. or China, and planning for annual conference for our members and other interested health scholars.

We are very excited about the idea that through CHPAMS we can participate in China's health care reform, and eventually get our voice heard and make a difference! It is also our hope that CHPAMS will serve as a platform for young and established health scholars to network with each other and to grow professionally. We look forward to having you joining this Society! We believe that with your participation and support, the Society as a whole and we as individuals will grow in tandem.

For more information about this Society, please visit our website at www.chpams.org. If you have any feedback to our work or are interested in joining this Society or participating in any of our activities, please do not hesitate to contact us at chpams.org@gmail.com. Thank you for your interests, and the warmest welcome from the Planning Committee!

Jian Li, PhD, MS, Cornerstone Research

On behalf of
The Planning Committee of
The China Health Policy and Management Society (CHPAMS)

TOPICAL REVIEW

The Growing Obesity Epidemic and Its Health and Financial Consequences in China

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INTRODUTION

Over the past three decades, China has enjoyed impressive economic development. Chinese People have experienced many dramatic changes in their lifestyles thanks to the increases in family income and availability of food as a result of China's economic reform and the growing global trade. People's lifestyles are becoming increasingly sedentary. Compared to other groups, children and adolescents are likely to be affected to a greater extent by these changes, partially due to China's 'one-child policy'.

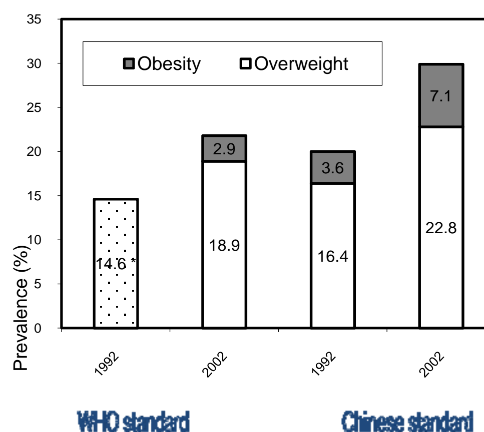
Increasing research including ours suggests that the prevalence of obesity has increased in China both in children and adults.

With the increase in obesity, obesity- and diet-related chronic diseases such as hypertension, cerebrovascular disease (CVD), and type 2 diabetes also increased over the past decade and have became the most important preventable cause of death. On the other hand, data collected from pre-school children show that undernutrition remains a public health concern, particularly in poor and rural areas. This article discussed the obesity related issues in China, predominately based on some of our recent research.

PREVALENCE AND TRENDS OF OBESITY AMONG ADULTS IN CHINA

In China, people are considered overweight if their body mass index (BMI) ≥ 24. If their BMI ≥ 28, they will be considered as obese. In general, the World Health Organization (WHO) recommends use of BMI cut points of 25 and 30 to classify these conditions for international use.

Figure 1. Increase in the prevalence (%) of overweight and obesity among adults (aged >=18 y) in China based on the WHO and Chinese standards: 1992 to 2002



Based on data from the 1992 China National Nutrition Survey and the 2002 China National Nutrition and Health Survey. Based on the WHO standard, obesity was defined as BMI>=30 and overweight 25<=BMI<30; Chinese standard, obesity BMI>=28 and overweight 24<=BMI<28.
**The combined prevalence, the prevalence of obesity was not reported.*

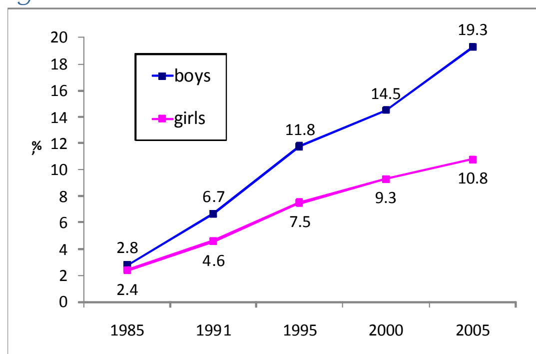
Nationally representative data have been collected in China allowing for examining the time trend in obesity. Between 1992 and 2002, the prevalence of overweight and obesity increased in all gender and age groups, and in all geographic areas. Using the WHO BMI cut points (BMI ≥ 25), among adults in China, the combined prevalence of overweight and obesity increased from 14.6% to 21.8% during this period, while based on the Chinese standard (BMI ≥ 24), it has increased from 20.0% to 29.9% (Figure 1). Middle-aged men and women were more likely to be overweight or obese than their younger and older counterparts. Take Beijing as an example of major cities in China, approximately 60% of Beijing adult residents were overweight or obese (BMI ≥ 24) and 20% were obese (BMI ≥ 28) in 2002.

The available data show large disparities between regions and groups, even among urban areas. In major cities, during recent years, the prevalence of obesity has increased more dramatically than in inland cities. Similar to the situation in some other developing countries, there are large urban-rural differences in the prevalence of overweight and obesity in China (both in adults and children), and the prevalence in urban areas is higher. Different from most industrialized countries, in China people with higher income and better education are more likely to be overweight or obese.

PREVALENCE AND TRENDS OF OBESITY IN CHILDREND IN CHINA

The 2002 China National Nutrition and Health Survey (CNHNS) data show that the prevalence of overweight and obesity in children aged 0-18 years was 4.1% and 2.1%, respectively. In urban areas, the combined prevalence was 12.9% among school-age children (≥ 7 years). In northern coastal big cities, the combined prevalence had reached 32.5% in boys and 17.6% in girls (both ≥ 7 years) in 2005 (Ji & Cheng, 2009), which is similar to the level in some industrialized countries (Wang & Lobstein, 2006). Data collected in another series of representative cross-sectional surveys in metropolitan areas from elementary and secondary school students show that the prevalence of overweight and obesity in boys and girls have increased remarkably, approximately by 10 times (see Figure 2, Ji and Cheng, 2009). Similar as for adults, there are large between region and groups

Figure 2. Trends in prevalence (%) of overweight and obesity among Chinese school age children: 1985 - 2005



Based on Chinese BMI cut points.

differences in the prevalence and trends. For example, in large cities such as Shanghai and Beijing, one in every five children is overweight or obese.

TRENDS IN MORBIDITY AND MORTALITY OF NONCOMMUNITABLE CHRONIC DISEASES IN CHINA

Table 1 shows the trends in the prevalence of obesity-related chronic diseases between 1993 and 2003 based on national monitoring data published by the Chinese Ministry of Health. Over this period, the morbidity rate (per 1,000) of infectious disease dropped, while that of nutrition-, endocrine- and metabolism-related disease (NEMD) more than doubled. The prevalence of diabetes tripled and that of hypertension more than doubled. The CNHNS02 data show that nearly 1/5 of Chinese adults had hypertension and dyslipidaemia, respectively. Thus, a large number of people in China were affected by obesity-related chronic disease.

Similarly, during this period, total mortality rate and the mortality rate of infectious disease was reduced remarkably, but the mortality rate for NEMD and its proportion of the total death increased. The mortality rates of heart disease and CVD decreased in urban areas, but increased in rural areas. The reduction in the mortality rates of heart disease and CVD in urban areas was smaller than that of total mortality. This may be due to improved health care and treatment for these conditions in urban areas while the morbidity of these conditions increased in both urban and rural areas. For example, urban patients who suffered from heart attack or stroke were less likely to die than their rural counterparts, since they had better access to medical service. CVD had already become the leading cause of death in China by the 1990s.

MAIN FACTORS THAT HAVE CONTRIBUTED TO THE INCREASE IN OBESITY AND OTHER NONCOMMUNITABLE CHRONIC DISEASES IN CHINA

Obesity is believed to be the result of a number of biological, behavioral, cultural, social, and environmental factors and the complex interactions between them that promote a positive energy balance. It is argued that the rapid increase in the prevalence of obesity worldwide over the past

Table 1. Trends in morbidity (per 1000) in China, 1993 - 2003

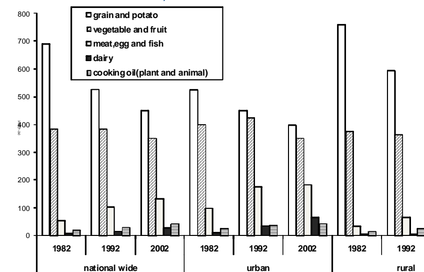
	1993	1998	2003	Annual increase (in %)
Infectious disease	5.3	4.8	2.7	-0.26
Cancer	1.9	2.1	2.1	0.02
NEMD*	3.1	4.7	7.5*	0.44
Diabetes	1.9	3.2	5.6	0.37
Circulation system disease	31.4	38.8	50.0	1.86
Heart disease	13.1	14.2	14.3	0.12
Hypertension	11.9	15.8	26.2	1.43
Cerebrovascular disease	4.0	5.9	6.6	0.26

Data from the Chinese Ministry of Health: Annual Statistical Reports of Death, Injury and Cause of Death in China, 1993-2003. People of all ages were included.
*NEMD, Nutrition, endocrinology and metabolism related disease. The coding system of NEMD was changed in 2003, i.e., several diseases were grouped into other categories. Otherwise, the figure would be higher. The diagnostic criteria for diabetes were comparable over time. (Wang et al, 2007)

two decades probably suggests that environmental factors, but not genetic factors, are the major risk factors, because genetic factors cannot change so dramatically within such a short period.

The rapid increase of obesity and the large disparities between population groups and regions in the prevalence and secular trends in China are particularly a result of the rapid economic development and shifts in people's lifestyles and the differences in these shifts over the past two decades. The following highlights several such indicators. China's per capita GDP has increased dramatically in the past two decades. This results in a steady increase in family income and improvements in people's living standards. On the other hand, this may have a number of unintended consequences such as shift in people's lifestyles.

Figure 3. Trends in food consumption (grams/per day per reference man) in China: 1982, 1992 and 2002



**The 1982, 1992, and 2002 China National Health and Nutrition Survey. Reference man refers to adult men with light to medium physical activity.*

Chinese citizens have experienced many dramatic changes in their lifestyles, including dietary intake and physical activity. Chinese diet has shifted from a traditional dietary pattern, which typically contains large quantities of plant foods including grains and vegetables, to the Western dietary pattern characterized by high intakes of meats, fat, and sugar (Wang, 2005). Nationally representative data show that the consumption of animal foods and dairy products have increased, while the consumption of plant foods, including grains, fruit, and vegetable has steadily decreased, especially in urban areas. Consumption of cooking oil increased dramatically, especially of plant cooking oil (Figure 3).

Western fast food industry has marketed aggressively in China, and Western fast food (which remains much more expensive than local food) and locally marketed and produced similar high-fat and energy-dense food are becoming an important part of urban children's diet. Based on a recent report, by 2008, KFC has more than 2,200 outlets in some 450 cities and McDonald's has 950 outlets in China.

Changes in China have also contributed to the growing sedentary lifestyle among children and adults in China. Screen time, such as time spent watching television, playing computer and video games, has increased. For example, the television ownership increased from 17.2 per 100 urban households in 1985 to 134.8 to 2005. Changes in the means and options of transportation could be another factor. For example, during recent years, the use of bicycles has continued declining as a result of more convenient public transportation system, taxi, family-owned motorcycles and automobiles. According to China's Bureau of Statistics, urban household automobile ownership had increased by 1,160 times between 1999 and 2006. One study shows that 14% of the Chinese households acquired a motorized vehicle between 1989 and 1997. The odds of being obese were 80% higher for adults in households that own a motorized vehicle, compared to those that do not.

DISCUSSION AND CONCLUSIONS

China has experienced many rapid economic and social developments and changes over the past three decades. These have resulted in a number of major shifts in people's lifestyles, most of which have contributed to overconsumption of foods but reduced physical activity. Thus, China now is seeing a rapidly growing obesity epidemic.

Obesity increases the risks for many chronic diseases such as hypertension, type 2 diabetes, coronary heart disease, and stroke; therefore, the epidemic increases healthcare costs. Childhood obesity could track into adulthood and has a lot of health and financial consequences.

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.

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INTERVIEW

INTERVIEW WITH DR. LINCOLN CHEN

Dr. Lincoln C. 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

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

Adam: In your opinion, what are the major challenges in human resources for health in China and globally?

Dr. Chen: 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.

Dr. Chen: 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

Adam: 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?

Dr. Chen: 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

Adam: 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?

Dr. Chen: 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.

Dr. Chen: 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

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

Dr. Chen: 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

Adam: 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?

Dr. Chen: 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.

Adam: 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?

Dr. Chen: 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.

Adam: So the Center in Beijing is the first of a series?

Dr. Chen: 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

Adam: 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?

Dr. Chen: 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.

Adam: Are there are other interventions that might be used?

Dr. Chen: 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 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 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.

—Dr. Lincoln Chen, CMB

Adam: I think there is an increasing trend of civil participation but do you think it is enough?

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

7. Words to Readers

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

Dr. Chen: 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.

Adam: 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.

Dr. Chen: 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.

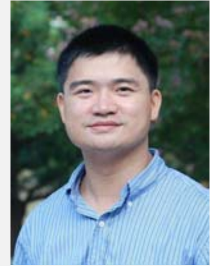
8. Further Thoughts

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

Dr. Chen: 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.

RESEARCH TWITTER



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Peters TM, Moore SC, Xiang YB, Yang G, Shu XO, Ekelund U, Ji BT, Tan YT, Liu da K, Schatzkin A, Zheng W, Chow WH, Matthews CE, Leitzmann MF. "Accelerometer-measured physical activity in Chinese adults." ***American Journal of Preventive Medicine*** **2010, 38(6):583-91.**
This study aims to target public health interventions and identify personal characteristics associated with physical activity and sedentary behavior in urban Chinese adults. The authors used multiple logistic regression to examine demographic, anthropometric, and lifestyle factors in relation to levels of physical activity and sedentary behavior assessed by Actigraph accelerometers among a sample of 576 men and women aged 40-74 years from Shanghai. *Authors concluded that physical activity promotion programs in urban China should target older people, obese individuals, and cigarette smokers, as these population subgroups exhibited low levels of physical activity.*

Zeng Y, Gu D, Purser J, Hoenig H, Christakis N. "Associations of environmental factors with elderly health and mortality in China." ***American Journal of Public Health*** **2010, 100(2):298-305.**
The paper examined the effects of community socioeconomic conditions, air pollution, and the physical environment on elderly health and survival in China. Data from a nationally representative sample of 15,973 elderly residents of 866 counties and cities were examined with multilevel logistic regression models in which individuals were nested within each county or city. *Authors conclude that efforts to reduce pollution and improve socioeconomic conditions could significantly improve elderly health and survival in China.*

Yu X, Abler D. "Interactions between cigarette and alcohol consumption in rural China" ***European Journal of Health Economics*** **2010, 11(2):151-160**
The paper analyzed interdependencies between cigarette and alcohol consumption in rural China, using panel data for 10 years (1994–2003) for rural areas of 26 Chinese provinces. Taxes are often recommended as a tool to reduce alcohol and cigarette consumption. *This paper found that the demands for both cigarettes and alcohol are very sensitive to the price of alcohol, but not to the price of cigarettes or to income, which suggests that taxes on alcohol can have a double dividend but an increase in cigarette taxes may not be effective in curbing cigarette or alcohol consumption in rural China.*

Fang P, Dong S, Xiao J, Liu C, Feng X, Wang Y. "Regional inequality in health and its determinants: evidence from China." ***Health Policy*** **2010, 94(1):14-25.**
This research aims at measuring the degree of regional health inequality in China and identifying its determinants. The paper found distinct regional disparities that were mainly reflected in "Maternal & Child Health" and "Infectious Diseases", not in average life expectancy. The regional health inequality was increasing with economic growth and was associated with not only the distribution of wealth, but also the distribution of health resources and primary care services. *Policy makers need to be aware that health indicators may not be sufficiently sensitive; transition economies are facing the greatest challenge in developing a fair and equitable health care system; and that primary health care plays a more important role than hospital services in reducing regional disparities in health.*

Gao X, Jackson T, Chen H, Liu Y, Wang R, Qian M, Huang X. "There is a long way to go: a nationwide survey of professional training for mental health practitioners in China." ***Health Policy*** **2010, 95(1):74-81.**

This nationwide survey of professional training for mental health practitioners investigated socio-demographic characteristics, training experiences, and training perceptions of mental health service providers in China. From a total of 2000 questionnaire packets distributed via regular mail, the final sample comprised of 1391 respondents (525 men, 866 women). *The paper made three general recommendations based on the analysis of the responses, increased input from professional organizations of disciplines involving mental health service provision, a bigger role in developing accredited professional training programs for universities and colleges; and mandate of on-the-job supervision and continuing education within discipline-specific training programs.*

Wong IO, Lindner MJ, Cowling BJ, Lau EH, Lo SV, Leung GM. "Measuring moral hazard and adverse selection by propensity scoring in the mixed health care economy of Hong Kong." ***Health Policy*** **2010, 95(1):24-35.**
This paper evaluates the presence of moral hazard, adjusted for the propensity to have self-purchased insurance policies, employer-based medical benefits, and welfare-associated medical benefits in Hong Kong. Based on a 2005 population survey, authors used logistic regression and zero-truncated negative binomial/Poisson regressions to assess the presence of moral hazard by comparing inpatient and outpatient utilization between insured and uninsured individuals. *The findings suggest that employment-based benefits coverage lead to the greatest degree of moral hazard in Hong Kong.* Future studies should focus on confirming these observational findings using a randomized design.

Wei X, Li R, Zou G, Walley J, Newell J, Liu Z. "Evaluating the policy of setting up microscopy centres at township hospitals in Shandong China: experience from patients and providers." ***Health Policy*** **2010, 95(2-3):113-21.**
This paper assessed the performance of microscopy centers (MCs) in Shandong province from both patient and provider perspectives. A survey of 245 TB suspected cases was conducted in 8 counties of Shandong stratified by MC performance. Seventy-two health providers and administrators were interviewed at the township and county levels. *The authors found the general performance of MC was poor and concluded that the national MC policy fell short of its goals in Shandong. Neither patients nor providers were interested in using MC in its current form.*

Yang H, Dib HH, Zhu M, Qi G, Zhang X. "Prices, availability and affordability of essential medicines in rural areas of Hubei Province, China." ***Health Policy and Planning*** **2010, 25(3):219-29.**
This paper investigated the availability of essential medicines and their prices in Hubei province. The survey assessed the prices and availability of essential medicines using the World Health Organization and Health Action International methodology. Data were collected from 18 public hospitals and 18 private pharmacies. *The survey revealed low procurement prices but poor availability in the public sector. Various policy adjustments could increase the availability of essential medicines and reduce their prices for the low income population.*

Li YH, Tsai WC, Khan M, Yang WT, Lee TF, Wu YC, Kung PT. "The effects of pay-for-performance on tuberculosis treatment in Taiwan." ***Health Policy and Planning*** **2010, 25(4):334-41.**
This study investigates the effectiveness of the 'Pay-for-Performance on Tuberculosis' program (P4P on TB) system in terms of cure rate and length of treatment. The study obtained information on all TB cases in the national data sets of Taiwan for the years 2002 to 2005. *The study found that both the cure rate and average length of treatment for cured cases improved significantly after the implementation of the P4P on TB program in Taiwan. P4P hospitals had significantly better treatment outcomes. Patients' age, income level, the physician density of a patient's place of residence, and whether the hospital has joined the P4P on TB program are factors affecting the treatment outcomes of TB patients in Taiwan.*

Zhang L, Cheng X, Liu X, Zhu K, Tang S, Bogg L, Dobberschuetz K, Tolhurst R. Balancing the funds in the New Cooperative Medical Scheme in rural China: determinants and influencing factors in two provinces. ***International Journal of Health Planning and Management*** **2010, 25(2):96-118.**

This paper explores the financial management of the New Cooperative Medical Scheme (NCMS) in China through a case study of the balance of funds and related factors in six counties from two provinces. *The study found that the opportunities to sustainably increase the financial protection offered to enrollees are limited by the financial pressures on local government, specific political incentives and low technical capacities at the county level and below. The analysis suggested that in the short term, efforts should be made to improve the management of the current NCMS design, which should be supported through capacity building for NCMS offices.* However, further medium-term initiatives may be required including changes to the design of the schemes.

Yang CW, Fang SC, Lin JL. Professional knowledge creation in the hospital sector: a qualitative study in Taiwan. *International Journal of Health Planning and Management* 2010, 25(2):169-91.
This paper aims to develop a professional knowledge creation model for the hospital sector with a case study in Taiwan. *The findings suggested that the hospital's professional knowledge creation is influenced by knowledge stock, social ties and isomorphic pressures as propositions argued. However, hospitals' attempts to keep aligned with their highly institutionalized environments may pay more attention to both existing knowledge stock and the process of professional knowledge creation for their survival.* This study contributed to the development of hypotheses in the future quantitative study for building a generalized knowledge creation model for the hospital organization.

Rudan I, Chan KY, Zhang JS, Theodoratou E, Feng XL, Salomon JA, Lawn JE, Cousens S, Black RE, Guo Y, Campbell H; WHO/UNICEF's Child Health Epidemiology Reference Group (CHERG). "Causes of deaths in children younger than 5 years in China in 2008." *Lancet* 2010, 375(9720):1083-1089, [Erratum in: Lancet. 2010 May 15;375(9727):1694.]
This paper identified the main causes of deaths in neonates (<1 month), post-neonatal infants (1-11 months), and children (<5 years) in China using information that was available to the public. Publically available Chinese databases contain much important information that has been underused in the estimation of global and regional burden of disease. *On the basis of trends, preterm birth complications are expected to become the leading cause of child mortality in China, whereas deaths from congenital abnormalities, accidents, and sudden infant death syndrome are predicted to continue increasing in importance in the long term.*

Tsai J, Shi L, Yu WL, Lebrun LA." Usual source of care and the quality of medical care experiences: a cross-sectional survey of patients from a Taiwanese community" *Medical Care* 2010, 48(7):628-34.
This study used a recent patient survey to examine the relationship between having a usual source of care (USC) and the quality of ambulatory medical care experiences in Taiwan, where there is universal health insurance coverage. The study design was a cross-sectional survey of 879 patients in Taichung County, Taiwan. *The paper concluded that in a region with universal health insurance, patients with a USC reported higher quality of medical care experiences compared with those without a USC. Beyond the provision of health insurance coverage, efforts to improve quality of care should include policies promoting USC.*

Yang W, Lu J, Weng J, Jia W, Ji L, Xiao J, Shan Z, Liu J, Tian H, Ji Q, Zhu D, Ge J, Lin L, Chen L, Guo X, Zhao Z, Li Q, Zhou Z, Shan G, He J; China National Diabetes and Metabolic Disorders Study Group. "Prevalence of diabetes among men and women in China" *New England Journal of Medicine* 2010, 362(12):1090-1101.
A national study was conducted from June 2007 through May 2008 to estimate the prevalence of diabetes among Chinese adults. The age-standardized prevalence of total diabetes (which included both previously diagnosed diabetes and previously undiagnosed diabetes) and pre-diabetes were 9.7% (10.6% among men and 8.8% among women) and 15.5% (16.1% among men and 14.9% among women), respectively, accounting for 92.4 million adults with diabetes (50.2 million men and 42.2 million women) and 148.2 million adults with pre-diabetes (76.1 million men and 72.1 million women). *Factors associated with the prevalence of diabetes are age, weight, and*

urban residence. Diabetes has become a major public health problem in China and that strategies aimed at the prevention and treatment of diabetes are needed.

Avraham Ebenstein and Steven Leung "Son Preference and Access to Social Insurance: Evidence from China's Rural Pension Program" ***Population and Development Review*** **2010, 36(1): 47-70.**
The introduction of a voluntary old-age pension program in rural China in the 1990s presents the opportunity to examine (1) whether parents with sons are less likely to participate in pension plans and (2) whether providing access to pension plans affects parental sex-selection decisions. *The paper found that parents with sons are less likely to participate in the pension program and have less financial savings for retirement and that an increase in county-level pension program availability is associated with a slower increase in the sex ratio at birth.*

POLICY AND PRACTICE UPDATES

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The Pilot Reform of Public Hospitals officially launched
Source: China Economic Times 2010-02-24

Five central government bodies including Ministry of Health jointly released the "Guidelines for the Pilot Reform of Public Hospitals" (Guidelines). The Guidelines emphasize the public servant role for the public hospitals, aiming to gradually eliminate the hospital drug mark-ups which have been a major source of hospital revenues. The lost drug revenue will be compensated with several new income sources: prescription fee which is to be included into the reimbursement list of health insurance plans, increased physician service charge, and more government subsidy.

The Guidelines also emphasizes the cooperation between the government and the market mechanism, encouraging private capital to invest in the health care delivery system, allowing the creation and development of hospitals of different ownership types. The Guidelines have appointed 16 experimental cities for the pilot public hospital reforms, i.e., Anshan, Shanghai, Zhenjiang, Xiamen, Weifang, Shenzhen, Qitaihe, Wuhu, Ma'anshan, Luoyang, Ezhou, Zhuzhou, Zunyi, Kunming, Baoji, and Xining.

The essential medicine system: harder than expected
Source: 21st Century Economic Report 2010-03-16

According to the China health care reform agenda, the essential medicine policy would be reinforced among 30% of the health care infrastructure units (community and county clinics) by the end of 2009 and covers 60% of these units in year 2010. The essential medicines are to be purchased and redistributed to these clinics by the provincial health bureaus through a standard channel, and "Zero mark-up" policy will be maintained to make sure the hospitals and clinics do not have any added revenues in the final sale of the drugs. However, according to recent survey study by Zhu Hengpeng, Research Associate in Chinese Academy of Social Sciences Institute of Economics, this essential medicine policy is having great difficulty in implementation on the local level. After eliminating the drug revenues, local hospitals can no longer make ends meet with the current means, and the local governments do not have enough resources to cover the financial loss either. Increasing diagnostic charges and introducing the prescription fees have been seen as a solution, but according to Zhu, they also will not produce sufficient revenue to compensate for the lost income.

NEWS AND ANNOUNCEMENTS

CALL FOR SUBMISSIONS: CHINA HEALTH REVIEW

The China Health Policy and Management Society (CHPAMS) is pleased to invite submissions for its online magazine, China Health Review (CHR). The CHR is intended to promote health research, policy, practice, and education related to China and the general population health sciences by providing research and policy updates, topical reviews, and other appropriate information. Targeted audience includes (1) academic researchers within and outside of China; (2) policymakers within China; (3) other interested parties including nonprofit organizations and business leaders as appropriate.

CHR is published quarterly. Additional thematic or special issues will also be considered as the availability and quality of materials and/or the occurrence of major CHPAMS-sponsored events warrant. Please review the following instructions for detailed information on how to submit manuscripts to be considered for publication in CHR.

Instructions for Authors

CHR is soliciting submissions of manuscript for the following sections: *Topical Review*, *Perspectives*, and *History Speaks*. ***Topical Review*** are systematic, critical assessments of literature and data sources pertaining to a topical issue determined as appropriate by the Editorial team. They generally should be kept within 2000 words. Manuscripts in the ***Perspectives*** section are short reviews that, in most instances, highlight an article(s) that appears in the same or recent issue of the Review. Perspectives that are not tied to an article are narrower in scope than Topical Review of the Field articles and allow more lively and timely discussion of a topical issue. They generally should be kept within 1000 words. ***History Speaks*** is devoted to historical population health matters and prominent figures of significance to China or Chinese people. They generally should be kept within 1500 words.

In addition, CHR welcomes short submissions to two other sections, *Research Twitter* and *Policy and Practice Updates*. ***Research Twitter*** provides brief summary of most recent research reports appeared in academic journals and grey literature that are relevant to health issues in China and Chinese people. Maximum length per summary: 120 words. ***Policy and Practice Updates*** provides brief summary of updates in health policy and practice that appeared in relevant policy briefs, news release, and popular news sources. Maximum length per summary: 120 words. Please contact Section Editors listed below for questions, information or submission.

All submissions should be typed, double-spaced, as Word documents only. Manuscripts should conform to the style of the fifth edition of the Publication Manual of the American Psychological Association. All submissions should be submitted electronically to the attention of the Editor. Authors must ensure that their manuscripts are appropriately identified. All submissions, if accepted, shall indicate author's consent to assign CHR rights to disseminate in its final form. However, authors retain the copyright. In particular, publication in CHR does not preclude authors to submit and publish an edited version of the manuscript in a peer-reviewed journal or as a book chapter.

Review Process

Submissions will be reviewed and edited by CHR's editorial team.

Contact Information

Inquiries about CHR and submissions can be addressed to the Editor-in-Chief, Dr. Zhuo (Adam) Chen (ChinaHealthReview@gmail.com). Submissions to the ***Research Twitter*** and ***Policy and Practice Updates*** should be addressed to Dr. Feijun Luo (frankie_luo@yahoo.com) and Dr. Xuezheng Qin (qin.econpku@gmail.com), respectively.

CALL FOR APPLICATIONS

Associate and full Professorships; Lectureship at the PKU China Center for Health Development Studies (CCHDS)

Peking University China Center for Health Development Studies (CCHDS) is established by Peking University Health Science Center in collaboration with China Medical Board in US (CMB). It is launched on April 26, 2010, with the aims of serving the China health reform and developing China's health sector by high quality research, education, and advisory services. CCHDS is to be directed by a Governing Board consisted by distinguished professionals.

CCHDS offers a variety of job opportunities to both Chinese and international candidates.

1. Position and research areas
   Positions: Associate and full Professorships; Lectureship
   Areas: areas of health policy and systems research including health economics and financing, human resources, public health policies, and global health.

2. Requirements

2.1 Associate and Full-Professorship
   PhD degree and aged below 50 years old for full professors (could extend to 55 years old for particular cases); 45 years old below for Associate Professorship positions.
   Applicants have experiences in research and teaching in recognized universities and obtained titles of professorship level positions.
   Applicants can teach at least one core course and have experiences in supervising graduate students.
   Applicants are advanced in health policy and systems research and would like to devote to scientific research.
   Applicants have the spirit and manner of team work.
   Applicants from overseas institutions should have at least 9 months working experience in China.

2.2 Lectureship
   PhD degree, preferably from overseas universities.
   Applicants can teach at least one of the core courses and supervise graduate students.
   Applicants would like to devote to scientific research.
   Applicants have the spirit and manner of team work.

3. Benefit and income
   Full Professorship: university permanent academic position, RMB 300K-400K for basic annual salary and position reimbursement; and RMB 300K-500K support for research when recruited.
   Associate Professorship: university permanent academic position, RMB 200K-300K for basic annual salary and position reimbursement; and RMB 100K-200K support for research when recruited.
   Lectureship: non-permanent university academic position; when promoted to be Associate Professors, status will be changed to university permanent position. Basic annual salary ranges RMB 100K-150K.

4. Application

4.1 Associate and Full-Professorship
   Required materials for initial selection: detailed Chinese or English CV with a photograph, including education, working experiences, teaching tasks, research projects, research grants, and publications.
   Materials for further selections: Those who pass the initial assessment will be requested to submit: three reference letters from professors; selected full-text publications; application form; copies of education certificates.

4.2 Lectureship

Detailed Chinese or English CV with a photograph, including educations, working experiences, teaching tasks, research projects, research grants, publications, and copies of education certificates.

5. Contact information

There is no application closing time at present. Please submit your application to:
Address: No 1 Administration Building, Peking University Health Science Center, Xueyuan Rd 38, Haidian District, Beijing, 100191, China
Contacts:
Hou Jianlin: houjianlin@gmail.com
Zhou Wenping: wp2818@163.com; 010 -82802497

Post-doctoral Fellow Position on Obesity, Chronic Disease and Child Health at Johns Hopkins University

A post-doctoral research fellow position is available in the Center for Human Nutrition, Department of International Health, Bloomberg School of Public Health, Johns Hopkins University. The candidate may be involved in several ongoing research projects depend on his/her background and research interests including those related to obesity; health disparities; associations between social, behavioral, and environmental factors and risks for chronic disease such as metabolic syndrome, cardiovascular disease, and type 2 diabetes. Some of the projects are funded by the National Institute of Health, USA. Some are US-based and some are international projects, and some are based on existing data, which provide good research, training and publication opportunities under the guidance of Dr. Youfa Wang. Ideal applicants should have a PhD in human nutrition, epidemiology, or other related areas with related research experience, strong data analysis and communication skills, and good publication record. In addition, candidates with formal training and research experience in systems analysis are desired.

Candidates should apply according to the JHU Admissions Office Guidelines (http://www.jhsph.edu/Admissions/index.html). Before submitting a formal application, the candidates should submit an inquiry, CV, statement of research interests, up to three sample publications, and names of three references via e-mail to: Dr. Youfa Wang.

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Two Postdoctoral Fellowships for Obesity and Cancer Research
One Project manager for research of lifestyle and cancer survival
at Virginia Commonwealth University

Two 2-year post-doc fellowships are available for nutritional epidemiology of obesity and cancer. The successful candidates will contribute to several research projects, including a clinical intervention of obese children and a prospective study of quality of life of cancer survivors. The research will be at the interface of nutritional / lifestyle factors and biochemical markers, focusing on their roles in the disease development, such as cancer, diabetes, and obesity. The fellows will have an active role in these studies, and be encouraged to take leadership in the ongoing individual projects and collaborate with faculty throughout the university. Successful candidates must possess a doctoral degree in nutrition, epidemiology, environmental health, or other related

fields with training in public health, demonstrate strong quantitative skills, and have the ability to work cooperatively and collegially with students and faculty.

We are also seeking a project manager to oversee an epidemiologic study of lifestyle and cancer survival. The position includes oversight of study protocols, coordination of field collaborators, and collection of bio-samples and questionnaires. Successful candidates must have experience of project coordination and master degree in public health and have the ability to work cooperatively and collegially with study sites.

The Department of Epidemiology and Community Health at Virginia Commonwealth University (VCU) is a vital and growing research and teaching department in the School of Medicine (http://www.epidemiology.vcu.edu/). VCU is in Richmond, the capital of Commonwealth of Virginia. It boasts one of the country's most comprehensive health sciences centers -- the Schools of Medicine, Pharmacy, Nursing, Dentistry, Allied Health Professions, and the Massey Cancer Center. The Department is ideally located in Richmond, Virginia, the state's capital and close to Washington D.C., which provides excellent opportunities for interaction and research collaboration with practitioners and policy makers in state and federal agencies.

Application closing date: Until Filled

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