Exploring Opportunities for Chinese Citizens Educated
Outside of China’s Higher Education System:
The China Center for Disease Control and Prevention Example

By

HanFu Shi

A Master’s Paper submitted to the faculty of
the University of North Carolina at Chapel Hill
in partial fulfillment of the requirements for
the degree of Master of Public Health in
the Public Health Leadership Program

Chapel Hill
Spring 2015

Lori A. Evarts, MPH PMP CPH
29 March 2015
Date

Heather Hill, RN, BSN, PHN IV
3/27/2015
Date
ABSTRACT

With the huge economy development in the 20th century, China had 264 million students who studied abroad by the end of 2012. However, a lot of Chinese students decided to stay in a foreign country and not go back to China after they completed their school/degree abroad. Data shows that there are more than 150 million Chinese students who decide to not come back to China and obtain employment for the betterment of their home country. In my paper, I will discuss why only less than half of Chinese students who study abroad chose to go back to China and serve their home country. In addition, I will use the Chinese Center Disease Control and Prevention as an example to show you a real work environment in China.

Key Words:
Chinese students, study abroad, oversea talent
ACKNOWLEDGEMENTS

I cannot express enough to thank my family members and my professors for their support and encouragement, both of my birth parents: Changhua Shou, my mother; Jingcun Shi, my father; Heather Hill, my American host mother; Craig Johnson, my American host father; Nate Johnson, my American host brother; David Steffen, my lovely boss at UNC; Lori Evart, my wonderful advisor at UNC.

It is always my dream to gain knowledge and earn a Masters of Public Health from University of North Carolina at Chapel Hill, the best public health school in the nation. I really appreciate my birth parents’ trust and funding to support me study in the United States for 7 years. Moreover, I am appreciate my advisor Lori Evart and my boss David Steffen who offered me a Research Assistant job during my study at UNC-CH. It not only helped me with my school funding, but also let me learn useful work skills and more public health knowledge in leadership. I enjoyed working for Dr. Steffen and our ACCLAIM program.

Finally, to my American family, especially my American mother Heather Hill. I will not have today’s success without your help. Thank you so much for sharing your love to a strange son from China. Thank you so much for taking your time to guide me to the right track. Thank you so much for always being there whenever I need.

My heartfelt thanks and loves to all of you, all the important people in my life!
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<tr>
<td>C-CDCP</td>
<td>Chinese Center for Disease Control and Prevention</td>
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<td>GPA</td>
<td>Grade Point Average</td>
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<td>RMB</td>
<td>Renminbi- the currency of the mainland of People’s Republic of China</td>
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<td>SARS</td>
<td>Severe acute respiratory syndrome</td>
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BACKGROUND

In the summer of 2014, I had the opportunity to undertake my public health field practicum experience at the Chinese Central Disease Control and Prevention (C-CDCP). My preceptors Dr. Wang Yu, Dr. Luo Huiming and Dr. Dai Zheng designed a wonderful practicum plan for me to learn about the organization. During my practicum, I gained an overall experience that allowed me to understand the different levels within the C-CDCP: State Level Central Disease Control and Prevention (Beijing Central Disease Control and Prevention); County Level Central Disease Control and Prevention (Chaoyang District Central Disease Control and Prevention); Community Level (Beijing Chaoyang District Central Disease Control and Prevention); and a few countryside Central Disease Control and Prevention offices in the Henan Provence. After my practicum, I better understood the Chinese public health approach and experienced the role of the Chinese Central Disease Control and Prevention. During this practicum experience I observed that most employees seemed to have doctoral degrees that were either from Chinese Universities or from the C-CDCP. This approach to the public health workforce is different from what I have learned about the United States Center for Disease Control and Prevention (US-CDC). Therefore, my master paper will explore opportunities for Chinese Citizens educated outside of China’s higher education system to be integrated into the Chinese public health workforce, using the Chinese Central Disease Control and Prevention as an example.
EDUCATION IN CHINA

The Ministry of Education runs the entire education system in China. By law, China has nine-years of compulsory education; all Chinese citizens are required to attend primary school for six years and middle school for three years to complete the secondary education requirement (The Central People’s Government of the People’s Republic of China, 2006). Normally after students finish the nine-year compulsory education, they will continue to high school for three more years. The most common curriculum in Chinese high schools includes coursework in Chinese, Mathematics, English, Physics, Chemistry, Biology, Geography, History, Ideology & Political Science, Music, Fine Arts, Physical Education, and Information Technology and so on. Chinese, Mathematics and English are the three main areas to be tested at the National higher Education Entrance Examination which is called Gaokao in China. According to the China Education Center, China’s education is the largest education system in the world. There were 9.39 million students taking the Gaokao on June 2014 (China Education Center, 2014).

I have observed that, in today’s China, you will not be able to find a good job if you have not graduated from a university. In this case, most Chinese students work very hard during high school in order to get a high score on their Gaokao. The biggest difference between Gaokao and American College Admission Exam (known as the SAT) is that Chinese students are only allowed to take Gaokao once in June during their senior year. If they miss this chance or if they did not earn a good score, they have to repeat their senior year at high school and take the Gaokao in the next year. In the United States,
the SAT is offered at least seven times each year and six times internationally. It is offered in October, November, December, January, March (U.S. only; SAT only), May and June (CollegeBoard, 2015).

To be educated is very important in Chinese culture. Most parents will try to pay tuition fees so that their children can earn their university degree. However, getting into a Chinese University is very competitive and obtaining a university degree is important to Chinese families. For this reason, more and more Chinese students decide to study abroad, to earn their undergraduate degree and possibly post-graduate or doctoral degrees.

CURRENT SITUATION OF CHINESE STUDENTS WHO STUDY ABROAD

The Chinese economy has experienced huge developments during the 20th century. According to Xinhua News Agency, by the end of year 2012, the overall total number of Chinese students who study abroad is about 264 million. However, the data also shows that only 109 million study abroad students returned to China from overseas (Xinhua News Agency, 2013). In the 2008, only 69,300 studying abroad Chinese students returned to China, and the number increased to 108,300 in the year 2009. In the next few years the growth rate saw nearly a 40% increase, there were 134,800 studying abroad Chinese students that returned to China in 2010, 186,200 studying abroad Chinese students returned to China in 2011 and 272,900 studying abroad Chinese students returned to China in 2012 (Xinhua News Agency, 2013). Moreover, the number of Chinese students studying abroad had a significant increase, especially in the last five years. The returning
student rate is increasing each year, however, the overall proportion of Chinese students trained outside of China is still low. We can see from the data, there are approximately more than 150 million Chinese students at the end of 2012 who decided to not return to China and obtain employment for the betterment of their home country.

With the fast developing economy in China, it seems like there would be more opportunities for work in China than in the United States. Dr. Cheung found from his research that Chinese students studying abroad who were majoring in business were more likely to return to China. Students who majored in business think China has more business and job opportunities (Cheung, 2014). With the fast growing economy in China, it will be a great opportunity for them to make more money and be successful in these careers. However, he found that students majoring in social science such as education, humanities, and physical sciences have less interest in returning home. For these students, the low income for these careers in China is the biggest factor stopping them from going back and to serve China (Cheung, 2014). The living expense is very high in today’s China. It is very hard for students majoring in social science to have a wealthy life after they go back to China.

From my personal experience, most American universities offer language school for foreign students who cannot pass their English exam and become a qualified student, at the undergraduate level. In general, these students will only take English classes at the language school until they pass all the requirements. For these Chinese students, many study abroad is because they did not attain a sufficient score on the Chinese National
College Entrance Examination. When these Chinese students get together, they will stay at home and cook together, play poker, watch Chinese television shows or films and so on, much like other college-aged American students. However, it seems that, Chinese students still cannot make a lot of American friends; this being true for even Chinese students who pass their English classes and start to take the real college courses. Further, it is hard for the Chinese students to work in an American classroom, to communicate with American students and try to understand their jokes. Chinese students are skilled at passing exams of a quantitative nature, but not on creative thinking and independent thinking. Therefore, these students often study alone and only focus on how to pass exams and get a high GPA. The solitude of the Chinese students seems to be the cause for not experiencing the overseas culture seems to be due to this is often the first time for most Chinese students to begin an independent life upon entering the university. As a consequence, the first thing they will do is get together with their compatriots rather than exploring the American university life and its culture.

As an example, Mr. Wang conducted interviews with Chinese who studied abroad at Ohio University in 2012 (Wang, 2012). His report showed the proportion of Chinese students studying abroad is at 35 times more than 6 years ago. However, Chinese students continued to wallow in the Chinese circle because their barriers of language and culture. It appears as if these Chinese students studied abroad in the United States, but did not experience the overseas culture. During the year of 2004 to 2010, Mr. Wang found the number of Chinese undergraduate students increased from 17 to 603 students at Ohio
University. At this school, 81% of international students came from China. One of the campus housing facilities at Ohio University, Scott Quad, has 218 residents and 180 of them were Chinese. Chinese students were beginning to complain about there being too many compatriots in this campus facility and there was no chance for them to speak English and also make friends with American Students (Wang, 2012).

Therefore I do not think this type of Chinese studying abroad students had the opportunity to really learn useful knowledge about the culture in the United States. It will not help China to develop that much even they come back to China and serve the country. To study at an American university, the ideal Chinese student will not only gain useful knowledge, but also learn working and living skills in the real world. American universities provide a variety of courses and will train students to become versatile people. Moreover, American universities also provide on-campus work opportunities for students. This can help students get ready for the real society after they graduate. A good study abroad student should have a good GPA and complete his school degree. At the same time, a good study abroad student should have work experience and engage in many culture experiences at American colleges. Chinese government should invite more qualified Chinese study abroad students to return to China and serve for their home country and share their knowledge and experiences.

QUALIFIED AS GOOD TALENT BY CHINESE GOVERNMENT

The Chinese government welcomes qualified “overseas talents” into the Chinese
workforce to serve for their home country. On the website of The Office of Education Affairs of the Embassy of P. R. China in USA, there are three different programs that welcome Chinese “overseas talents”. They are Qianren Jihua, Chunhui Jihua and Bairen Jihua (The Office of Education Affairs of the Embassy of P. R. China in USA, 2015).

First, according to the Qianren Jihua’s official website says that people qualified for Qianren Jihua are those that:

1. Received a PhD from an overseas educational institute
2. Are no more than 55 years old
3. Will work in China more than 6 month every year
4. Meet one of the following conditions:
   a) An equivalent of professorships in a prestigious foreign university or research institute
   b) A senior position in a well-known international company or financial institution
   c) Own an overseas business with independent intellectual property rights or a core technology and familiar with the relevant industries and international rules of entrepreneurial talent
   d) Possess a China needed high-level creative talent

Second, according to the Bureau of Personnel Chinese Academy of Sciences official website says that people qualified for Qianren Jihua are those that:
1. Had four or more years full-time foreign work experience after obtaining a doctorate degree

2. Are no more than 40 years old (can extend to 45 years old if the person is excellent)

3. Have conducted research in which, the results reached an international level and published influential papers in important core journals or has key technology with important inventions and patents.

4. Has achieved academic standards as a school professor or researcher and has the ability to lead a team and make research innovations with international standards

5. Candidates must have worked in a full-time position

Third, according to the Office of Educational Affairs of the Embassy of P. R. China in the USA official website says that people qualified for Chunhui Jihua are those that:

1. Obtained a doctoral degree

2. Had academic achievement in his professional field

(NOTE: All translations are provided by myself from The Office of Education Affairs of the Embassy of P.R. China in USA.)

HISTORY OF THE CHINESE CENTER DISEASE CONTROL AND PREVENTION

The Chinese Central Disease Control and Prevention grew from the China Preventive Medicine Center and was officially formed on December 23rd, 1983. In 1986, the China Preventive Medicine Center changed their name to the Chinese Academy of
Preventive Medicine. Then, on January 23rd, 2012, the Chinese Central Disease Control and Prevention was established and was based on the Chinese Academy of Preventive Medicine, the Industrial Hygiene Institute of the Ministry of Health, the Chinese Institute of Health Education and the China Rural Water Supply Technology Center. (Chinese Center for Disease Control and Prevention, 2013).

Chinese Central Disease Control and Prevention used to be located nearby downtown Beijing. It was only two miles south from Tiananmen Square, which is the center of the city of Beijing. After the severe acute respiratory syndrome (SARS) outbreak occurred in China, the Chinese government realized the importance of disease control and prevention in China. During 2003, the Chinese government started the process of building a new Chinese Central Disease Control and Prevention in the suburban area in Beijing. This new location is about thirty miles north from Tiananmen Square. The reasoning for the relocated and new Chinese Central Disease Control facility outside the city center was that it contains a variety of biocontainment laboratories, and it was smart to locate this agency far away from the center of town.

**MISSION OF TODAY’S CHINESE CENTER DISEASE CONTROL AND PREVENTION**

According to C-CDCP’s brochure, C-CDCP’s mission is to foster safe and healthful environment, maintain social stability and promote the health of people through prevention and control of disease, injury and disability (Chinese Central Disease Control
and Prevention, 2013). In addition, C-CDCP is under the leadership of the National Health and family Planning Commission. C-CDCP emphasizes: activities of national diseases control and prevention; provides public health technical instruction and support, training and quality controls; plays the role of the national team in diseases prevention and control, emergency response and capacity building of public health information (Chinese Center for Disease Control and Prevention, 2013).

CURRENT EMPLOYEES AT CHINESE CENTER DISEASE CONTROL AND PREVENTION

This data shows that at the end of 2012, the C-CDCP had 2,042 full time employees, 83% of them had a professional and technical position, 9% of them had a management positions and 8% of employees had service staff positions (Chinese Center for Disease Control and Prevention, 2013).

However, there is more current data that I was able to request from the Director of China CDC, Dr. Wang Yu, and it provides the statistics for current employees (as of 2014) at Chinese Center for Disease Control and Prevention. The reason I asked for this data was to determine and detail the structural proportion of the C-CDCP concerning the following characteristics: male and female, age structure, degree structure, job categories and staff who have study abroad experience. This data provides the exact numbers until December 31st, 2014, and are shown in the Tables that are presented on the next page (above in Chinese and below in English).
Let’s review the data from each of the categories. In general, there are 2,247 people that work for Chinese Center for Disease Control and Prevention. There are 43% male employees and 57% female employees at Chinese Center for Disease Control and
Prevention. Next, we can see from the age structure that 39% of employees are equal to or younger than age of 35 years old, 15% of employees are at the age from 36 to 40, 14% of employees are at the age from 41 to 45, 12% of employees are at the age from 46 to 50, 13% of employees are at the age from 51 to 55, 6% of employees are at the age from 56 to 59 and only 1% of employees are equal to or older than the age of 60. Moreover, the data also shows that 22% of employees at Chinese Center for Disease Control and Prevention have a doctoral or PhD degree, 36% of employees have a master degree, 24% of employees have a bachelor degree and only 18% of employees have an Associate degree or below. At the same time, we also can see 87% of employees have professional and technical positions, 7% of employees have a management position and 6% of employees have service staff positions. Last, these data shows that 143 employees at the Chinese Center for Disease Control and Prevention had study abroad experience. This represents only 6% of all employees at C-CDCP. Further, 60 of them have a doctoral or PhD degree and 83 of them have a master’s degree. Together employees represent only 12% of all doctoral trained employees and 10% of all master’s level employees (Data Statistic of Currently Employees at Chinese Center for Disease Control and Prevention, 2015). From the data we can see that C-CDCP should provide more opportunities for Chinese students who undertake undergraduate and graduate studies overseas to return to China in career positions that allow them to serve their country and also earn a suitable salary to support a good standard of living.
GRADUATE SCHOOL AT CHINESE CENTER FOR DISEASE CONTROL AND PREVENTION

Chinese Center for Disease Control and Prevention has its own education and training school and the C-CDCP’s graduate school was established in 1984. C-CDCP offers a variety of degree programs, including one for the key discipline in Beijing which is the pathogenic biology degree, two doctoral degree programs of the First-level Discipline on basic medicine and public health and preventive medicine, eight doctoral and master’s degree programs of the Second-level Disciplines, and also full-time/part-time master of Public Health degree programs. Right now C-CDCP has 177 master’s advisors and 64 doctoral supervisors including 1 academicians of the Chinese Academy of Sciences and 3 academicians of the Chinese Academy of Engineering. In addition, as of December 2012, a total of 633 doctoral degree and 1,732 master’s degree have been conferred by C-CDCP There still are 566 current students, including 164 doctoral candidates, 192 research-based graduates students, 75 full-time and 89 part-time MPH students and 30 post-doctoral professionals are studying at C-CDCP. Moreover, C-CDCP has a joint public health professional training delivery program with Griffith University in Australia, which was established in 2007. In total, 52 public health professionals were sponsored and got their training in Australia and 33 students have received their master degree from Griffith University (Chinese Center for Disease Control and Prevention, 2013).
WORKING ENVIRONMENT AT THE CHINESE CENTER FOR DISEASE CONTROL AND PREVENTION

It seems that the younger aged employees will not work for a long period of times at the Chinese Center for Disease Control and Prevention. From the data provided (C-CDCP as of the end of 2014), we can easily see that Chinese Center for Disease Control and Prevention has 39% of employees equal or younger than the age of 35, however, the numbers of middle age group are decreasing from the age of 36 to 50.

In my opinion, there are a few reasons for this. The first reason is the salary at Chinese Center for Disease Control and Prevention does not seem high enough to support the required living expense in the city of Beijing. A second reason is the transportation system to go to and from work is a problem at Chinese Center for Disease Control and Prevention. C-CDCP is too far away from downtown Beijing and most employees have to spend approximately four hours commuting to and from work every day. For example, during my practicum experience, I went to the bus station every day at 6:30 a.m. and took the only bus available that travels to the Chinese Center for Disease Control and Prevention in order to start work around 8:00 a.m. every day. Then at 4:00 p.m., I took the only bus available back to downtown Beijing that arrived around 6:00 p.m. in the afternoon.

Based on my experience, the 35% of the employees in the youngest age group working at C-CDCP may focus on their work with limited salaries, seems to be before they have a family. However, once they have a family these individuals have to shift their
priorities to be able to spend enough time to take care of their family and with reasonable salaries.

Next, I feel that Chinese Center for Disease Control and Prevention focus too much on professional research. The 2014 data show that 87% of employees have professional and technical positions, only 7% of employees have a management positions and 6% of employees have service support positions. In my opinion, Center for Disease Control and Prevention should have a multicultural work environment and also should focus both on research and policy making. C-CDCP should work to hire employees with various types of academic training (majors and backgrounds) and different degree levels such as honoring the skills and experiences of master’s trained individuals. In the current situation, C-CDCP limits their employees’ types and at present they cannot seem to introduce a reasonable amount of qualified Chinese “overseas talents”.

The last area of concern that should be discussed is the likelihood that Chinese “overseas talents” may have different ideas and work styles and this could become an issue with Chinese employees who are trained by Chinese Center for Disease Control and Prevention. For example, during my practicum, I met so many C-CDCP employees that had their graduate or doctoral degree from the education training program at Chinese Center for Disease Control and Prevention. The positive side is this is a large group and these people know China CDC’s work process and do not need additional training when they start to work at China CDC. However, the negative aspects are these employees only know the public health by China CDC’s definition. Also, most of these employees only
have a research-based background. In addition, I also feel that students who are trained by C-CDCP have a limited vision of real life public health problems and it is not easy for them to accept knowledge or work procedures by other public health agencies or organizations from the western or even the international world. The public health they are facing every day in the C-CDCP’s university is different than what people are learning in the United States and globally. The current culture at the C-CDCP includes employees with different opinions about new employees with “overseas talents”; often they will not fully support these introduced overseas talents at work and it will affect their work performance.

RECOMMENDATIONS

1. To let everyone have an equal work environment. In China, work environment are “guanxi-based” structure. The social connections associated with an individuals can let you be successful or not and impact someone’s career. Cheung’s research also shows that the key concern identified by overseas educated respondents that pushed them not to return home was the “guanxi-based” structure in the workplace in China (Cheung, 2014). For example, at C-CDCP, they have a lot of physical science major students. We should avoid a guanxi-based environment and provide a nice research environment to let C-CDCP employees focus on their works.

2. To pay “overseas talents” with a fair salary. In China we have a saying that
goes, *send him to Beijing if you love him, because Beijing is heaven. However, send him to Beijing if you hate him, because Beijing is hell.* One of the reason people say this is because living is expensive in Beijing. Data provided by State Council of the P.R. China shows that the average salary in Beijing in the year of 2013 is 5,793 RMB (The State Council of the P.R. China, 2014), however, you probably need to pay at least 4,000 RMB for a two bedroom apartment rental every month. From my practicum experience, I learned that people at C-CDC only make 5,000 to 6,000 RMB every month and this is definitely not enough monthly salary for supporting a family (personal communications).

3. To improve the education system for children in China. Cheung’s research shows that another reason Chinese students preferred staying in the U.S. was a desire for their children’s futures than for their own (Cheung, 2014). People worry that their children will face the strict Chinese education systems that their parents were running away from.

CONCLUSION

The number of Chinese students who are studying abroad is increasing every year. Currently, a study Chinese abroad student will not be considered special any more than in the past. However, in today’s China, it is increasingly more important to introduce qualified overseas Chinese talents back into the Chinese work force to allow them to serve their home country. This effort should focus on the qualified overseas talents rather
than introducing any type of Chinese studying abroad students back to China. I suggest that a qualified student should well know both Chinese and American culture and also one who can apply their knowledge in their career in the future. In addition, the Chinese government should create opportunities for a nice work environment and preferential treatment to promote the introduction of qualified overseas Chinese back into China in a professional manner to use their knowledge and experiences to help China continue to develop in the future.
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