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Too Costly To Be Ill: Health Care Access and Health Seeking Behaviors among Rural-to-urban Migrants in China

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Abstract

Of the 114 million rural-to-urban migrants in China, most have only temporary employment in the cities. Because of their non-urban residence, they are not entitled to many benefits and services accorded to most urban dwellers. Only limited research has been conducted on the health care access and health seeking behaviors of this population. This study, based on qualitative data from in-depth interviews with 90 rural-to-urban migrants, found that migrants had limited access to regular medical services. Lack of insurance coverage, high cost, and exacting work schedules have resulted in use of unsupervised self-treatment or substandard care. Their health seeking behaviors have led to suboptimal health consequences including delayed treatment of illnesses. Findings from this study underscore the importance of reducing institutional barriers to health services and providing affordable health care to this population.

Keywords

China; rural-to-urban migrants; health care access; health seeking behavior; affordable care

INTRODUCTION

Global literature suggests that migration is associated with increased health risks (Brussaard, van Erp-Baart, Brants, Hulshof, & Lowik, 2001; Darmon & Khalt, 2001; McKay, Macintyre, & Ellaway, 2003). Furthermore, migrants often have less access to community services especially health care services compared to local residents. Migrants' poor access to health care has been documented to lead to unsatisfactory health outcomes (Diaz, Ayla, Bien, Henne, & Marin, 2001; Pernice & Brook, 1996; Pudarcic, Sundquist & Johansson, 2000; Steyn, Kazenellenbogen, Lombard, & Bourne, 1997; Tie, 1999). However, the existing literature on migrants' access to health care as well as their health seeking behaviors has largely been limited to migrants in western countries (such as the United States and the Europe) and those seeking permanent resettlements such as international immigrants and war refugees (Darmon & Khalt, 2001; Diaz et al., 2001; Pernice & Brook, 1996; Pudarcic et al., 2000). In contrast, there is a

paucity of research in this field among the growing population of temporary, rural-to-urban migrants in developing countries, including China.

According to the recent statistics from the Chinese government, there are approximately 114 million rural-to-urban migrants in China, accounting for 23.2% of total rural labor and 9% of the total population in China (China National Bureau of Statistics [CNBS], 2003). This large scale migration has been generated by a surplus of agricultural labor in rural areas and the increasing income gap between rural and urban dwellers (Ma & Xiang, 1998). The majority of migrants come from poor rural areas in the interior provinces to search for better employment opportunities in the cities; thus forming a general geographic pattern of migration from the middle and western parts of China to the eastern and coastal regions. This large scale migration is one of the biggest internal migrations in China's history; and the momentum is expected to continue in the coming years (Shaokang, Zhenwei, & Blas, 2002; Li et al., in this issue).

The rural-to-urban migrants in China are young (47.3% are younger than 25 years old). About 10% of adult migrants (15 years of age and older) are illiterate, 24% completed elementary school, 52% completed middle school, and 13% graduated from high school (CNBS, 2001). As most of them have not received work skills training, they frequently undertake manual labor and personal services related to manufacturing, goods transportation, construction, entertainment, domestic service, and restaurant services (Jia, Li, & Ye, 2001; Zhang, L., 2001). Because of existing legal restrictions on employment and housing in urban areas, approximately 80% of the migrants neither maintain permanent relocation nor obtain urban household registration, known as "hukou" in China (Zhang, L., 2001), and therefore are often denied access to the rights and privileges traditionally granted to city dwellers.

China's rural-to-urban migrants have attracted attention domestically and internationally (Liang, 2001; Ma & Xiang, 1998; Solinger, 1999; Zhang, L. 2001). Earlier studies on China's migrant population have reported its "negative" impact on the urban society such as increasing criminal rates, increasing burdens on urban hygiene and social stability (Wong, 1994), and this population's threat to China's family planning policies (Beijing Bureau of Statistics, 1996; Tian, 1991; Zheng et al., 2001). Recent studies have focused on these migrants' limited resources such as their poor housing and living conditions (Shen, 2002; Wu, 2002) and their vulnerability to infectious diseases including HIV and STDs (Anderson, Qingsi, Hua, & Jianfeng, 2003; Li et al., 2004). However, studies on this population's health care access and health seeking behaviors have been limited; and available studies have primarily focused on female migrants and their reproductive health (Shaokang et al., 2002; Feng, Ren, Shaokang, & Anan, 2005).

China's health care system has undergone substantial reconstruction since 1978, when the country began moving from a planned economy to a market economy. The health care reform featuring "decentralization" and "marketization" has resulted in substantial and frequently unaffordable increases in the direct cost to patients, and reduction in health insurance coverage (Liu, 2004; Liu & Wang, 2001); therefore this reform has been criticized for causing growing disparity in access to health services, especially for the low income population in both urban and rural China (Akin, Dow, Lance, & Loh, 2005; Bloom & Xingyuan, 1997).

The health care reform in China has affected both the rural and urban health care systems (Shi, 1993). Approximately 80% of the country's total health budget is allocated to funding hospital-based medical facilities in urban areas, although urban residents account for just 30% of the country's population (Zhang, W., 2001). The urban population, who were formerly protected by government insurance scheme and labor insurance scheme in the 1980s, has been covered primarily by employment-based health financing or social insurance scheme since the 1990s, with more co-payment and less coverage. The urban residents were almost fully covered in the

1980s; but the coverage fell to 52% in 1993, and 39% in 1998 (Gao, Qian, Tang, Eriksson, & Blas, 2002). There is evidence that the urban residents covered with any insurance are those with regular employment or relatively high income (Gao et al., 2002).

For the rural population, the affordable and generally effective cooperative health insurance reached a peak in the middle 1970s when nearly 90% of the rural population was covered. In the 1980s rural cooperative health insurance collapsed; the coverage fell to only 5% in 1989 (Bogg, Dong, Wang, Cai, & Winod, 1996; Grogan, 1995). Virtually all rural residents must now pay for their health care at the point of service. A recent study found that 94.2% of the rural residents had to pay all health care expenditures out of their own pockets; a survey in 1998 indicated that 36% of rural residents did not receive any health services because they could not afford to pay (Mao, 2000). Another study in a rural area suggests that financial burden has been a primary reason for not seeking necessary care (Xu et al., 2004).

The rural-to-urban migrants were not covered by any insurance before migration. Because of their “rural residence” (i.e., not having urban household registration, or “hukou”), and the nature of the work available to most of the migrants, they often are not entitled to employment-based health insurance or preventive service available to urban residents, even though they are working in the cities. For example, only 22.5% of female migrants received any maternal health or family planning education, compared to almost 100% of urban residents (Zheng et al., 2001).

Several survey studies have suggested reduced access to health care among the Chinese rural-to-urban migrants (Feng et al., 2005; Guan & Jiang, 2004; Shaokang et al., 2002). Our quantitative investigation among rural-to-urban migrants in China has also suggested that increase in geographic mobility was associated with inferior health seeking behaviors (Li, et al., in this issue). However, qualitative studies on this issue from the perspective of rural-to-urban migrants have been very limited. Our present study, based on 90 in-depth interviews among rural-to-urban migrants in Beijing and Nanjing, will explore their perceptions related to health care access in the cities, perceived barriers to formalized medical care, health seeking behaviors, and the health consequences.

METHODS

Research sites

The data collection procedure of this study has been described elsewhere (Hong et al., in press). Briefly, this study included 90 semi-structured and open-ended individual interviews conducted in two major Chinese cities, Beijing and Nanjing. These interviews were designed to collect qualitative data regarding cultural and social context of rural-to-urban migrants' lives in the cities. The interviews also served as the formative phase of an HIV/STD intervention feasibility study among young migrants. Beijing, the capital city of the China, has a population of 13.82 million, including three million rural-to-urban migrants, and is located in Northern China (Beijing Bureau of Statistics, 2002). Nanjing, with a population of 5.6 million, including 800,000 migrants, is the capital city of Jiangsu Province in East China (Nanjing Bureau of Statistics, 2003).

Interview Guide

Open-ended interview guides with suggested probes were constructed based on several informal group discussions among young migrants, local community leaders (both formal and informal), health care providers, government officials and project staff. The group discussions were conducted to elucidate topics to be probed in the individual interviews among the migrants. The themes identified from the group discussions served as the foundation for

individual interview guides. The resultant interview guides included open-ended questions covering demographic information, migration experiences, living and working in the cities. Questions regarding migrants' access to health care services include their perceptions and experiences of seeking health care in the cities, their coping strategies and possible consequences. The interview guide used open-ended questions to encourage extended responses.

Procedure

A purposeful sample of 90 participants was recruited at the migrants' work places, labor markets, or homes through network sampling. Local community leaders (both formal and informal) in the migrant settlements served as facilitators for the recruitment process. Individual interviews were conducted in places established as convenient for the interviewees. All interviewers were trained faculty members and graduate students from Beijing Normal University and Nanjing University. Each participant was assured of his/her confidentiality in the study, and an informed consent form was signed before the interview started. Each interview took about 60 to 90 minutes; all interviews were audio-taped and transcribed. The Institutional Review Boards at West Virginia University in the United States, Beijing Normal University and Nanjing University in China approved the study protocol.

Participants

The 90 participants (50 in Beijing and 40 in Nanjing) ranged in age from 16 to 37 years and included approximately equal proportions of males and females. Nineteen of the participants were married; two were divorced, and 69 were single. Thirty-six had completed middle school (compulsory in China--although 14 of the migrants had no more than primary school education), nine had graduated from high school, and 30 had graduated from post-secondary schools (including vocational school, three-year colleges, etc.). Forty-six had first migrated to cities between the ages of 16 and 19. The duration of their stay in Beijing or Nanjing varied from one to more than 11 years.

Data Analysis

Data analysis began with multiple readings of the transcripts and field notes, which were in Chinese. Coding themes were developed drawing upon the constructs from the interview guide and new themes emerging during the interview and coding process (Silverman, 1993, LeCompte & Schensul, 1999). Text coding and analysis were then conducted in Chinese by members of the research team who are Chinese-English bilingual, following the procedures outlined in the recent qualitative literature (La Pelle, 2004; Ryan, 2004). For each coded transcript, detailed summaries were prepared in English. To minimize the translation bias, a substantial amount of original quotes were retained in the summaries. The summaries reflect the range of responses, with some indication of consistent responses. Because this study is focused on aspects of migrant's health care in urban areas, we have confined this analysis to these domains: access to health care services in the cities, perceived barriers to formalized medical care facilities, health seeking behaviors, and possible health consequences.

RESULTS

No health care coverage

None of the participants was covered by any health insurance, or was provided with health care benefits by their employers. They spent little on health care, with most reporting no expenditures or only several yuan a year (approximately 8 Chinese yuan=1 US dollar); and a few reporting expenditures of 50 to 100 yuan. The exceptions to this were the individuals who were involved in trauma or required surgery.

“Last time my wife came to Nanjing to visit me, she was hit by a car, and had to be hospitalized, we had to pay all the fees, and we spent about 3000 yuan.” [Male aged 27].

“I rarely spend any money on medicines. But last year, because I had stones in my urine and had to go to hospital. And my girlfriend was pregnant and had to do an abortion in the hospital. So I spent a lot of money [for health care] last year.” [Male aged 25].

Only two participants reported having received physical examinations, and both were required to do so to obtain health certificates for their work.

Low utilization of medical facilities

Medical services in urban China are delivered primarily through hospital-based facilities, which offer both in-patient and out-patient care (Cohen & Henderson, 1983). Chinese people usually refer to “medical facilities” as hospitals. When we asked the participants if there were any medical facilities in their neighborhood, some stated that they did not know, or that hospitals were too far away. Some migrants were able to identify the hospitals close by, but few had visited those hospitals.

“I don’t know, I am not sure. I usually do not go to hospitals.” [Male aged 23].

“I know there are many hospitals near by, I know them. But I have never been to any of them.” [Female aged 27].

“Medical facilities? Hmm, no, there might be some in XXX. But they are too far away.” [Male aged 21].

Many migrants pointed to pharmacies or small private clinics (usually unlicensed), and referred them as “medical facilities”.

“Yes, there is one, a pharmacy store.” [Male aged 20].

“There are many pharmacy stores close by, and there is a small clinic.” [Female aged 19].

“I know some pharmacy stores, but not hospitals. I usually do not go to hospitals.” [Female aged 23].

“I don’t know about hospital, but I know there is a pharmacy store.” [Female aged 27].

Reasons for not seeking formalized medical care

Too expensive—The majority of the participants reported that they never or rarely used hospital-based health care. Expenses were the most commonly cited explanation for their non-utilization.

“Honestly, people like us, came to work in Beijing, we dare not go to the hospital; it is just too expensive....” [Female aged 27].

“Unless I am really sick, I definitely will not go to the hospital. It is quite expensive.” [Male aged 24].

“Hospitals? There is nothing good about them! They only know how to charge you money!” [Male aged 30].

Some migrants who had experiences with hospital-based care and often felt that the services were not worth the charges.

“Once I went to a hospital, I found it was very expensive, and the doctors in the hospitals had very bad attitudes!” [Female aged 23].

“I spent 100 yuan in the hospital just for drips—I felt really bad about spending that money.” [Male aged 24].

One participant became quite agitated when talking about the costly services offered in the hospital. He shared his own experiences of seeking care for his son in a hospital:

“Hospitals in XX [name of the city]...to be honest with you, I can’t afford it. In my hometown, if you spend 1000 yuan, it must be a very serious illness; but in XX, 1000 yuan cost is very common. I just had an experience. My son’s hand was cut when he was playing, so I took him to a hospital. They wanted to charge 240 yuan for several stitches. They even wanted to charge 50 yuan for just cleaning the wound. I was really angry, so I left the hospital, and went to a small clinic nearby; they only charged 100 yuan for the same operation. I could say, the hospitals in XX are darkest in the world!” [Male aged 30].

I have no time—Some migrants reported that they had neither the time to be familiar with hospitals in their neighborhoods nor the time to visit any hospital for health care.

“I don’t know any hospital. Because I work from morning till night; and we can’t go out during work. In lunch time, they have the lunch boxes delivered to our work site.” [Female aged 27].

“We don’t go to hospitals usually. No time. Once I was really sick, but the work schedule was very tight. I was very sick and almost in coma, but I only stayed in the hospital for half a day, and got one shot, and I had to return to work after that.” [Male aged 26].

We should not be spoiled—For these migrants working hard every day, going to hospital seems a luxury for privileged individuals. As one remarked,

“Migrant workers like us, should not be spoiled.” [Male aged 22].

Some migrants believed that they themselves were the ones to count on, coupled with a sense of relying on luck.

“People like us working outside [the village] have to learn how to take care of ourselves. If you don’t take care of yourself, nobody will.” [Female aged 27].

We can’t get sick, or the boss will get rid of us—Taking a day off and visiting a doctor may be equally “unaffordable”. A 20 year old man used to work in an express-delivery company. One time he was seriously ill, but his employer refused to allow him to leave:

“My stomach and back were causing great pain; but my boss was very busy at that moment. I asked for a sick leave, he said, ‘you can’t. There are so many things for you to do.’ I had no choice but had to hold on. When I really could not hold on, my boss said, ‘tell you the truth, you really should not stop, you should hold on by biting your lips.’” [Male aged 20].

Another migrant reported that he and his coworker could not openly discuss their illnesses because of the fear of losing jobs.

“Some of my coworkers have arthritis or something. But even if we are sick we don’t say it. If we say it, the boss will get rid of us.” [Male aged 34].

Coping strategies

Since the many of the migrants do not seek health care in the regular medical facilities such as hospitals, how do they take care of themselves when they became ill in the cities? They appeared to employ a wide variety of coping strategies including “just hold on”, self treatment with over the counter (OTC) medicines from pharmacies, having home remedies, obtaining medicines from urban residents, and receiving care in private small (usually unlicensed) clinics. The very last resort was the hospital, but usually only after they tried many other efforts, and considered themselves to be seriously ill.

Just hold on—Many migrants neither took any medicines nor sought any medical care when they were sick:

“I usually just hold on. Usually after 7 days, I will be fine again.” [Female aged 19].

“Unless I am having a fever and can not move myself out of the bed, I will still go to work. If I am so sick [that I can not get off bed], I will go to a clinic to get a shot, and then go back to work. For us, we are already used to that.” [Female aged 30].

“I don’t take medicines, I just hold on. Because if you take medicines, you will feel very weak the next day, and can’t work.” [Male aged 22].

Go to buy some medicines in the pharmacies—The most frequently reported coping measure for illness was unsupervised self-treatment with OTC medicines from pharmacies. Buying medicines is considered an efficient alternative to seeking care from a physician, as it saves time as well as money.

“Because of our work, we often work long hours, so we don’t have much choice about what we eat and where we live, and we cannot care much about personal hygiene.... we usually prepare some medicines at home, if we get sick like a cold or something, we can be prepared for it.” [Male aged 21].

“I rarely get sick. If I do, I always have some medicines at home, no need to go to hospitals.” [Male aged 23].

“There are many drug commercials on TV. [If I get sick] I just go to buy some medicines. It takes 2 or 3 days, no more than one week and then I will be fine; no need to go to hospital.” [Female aged 30].

“If I get sick, I just go to buy some medicines in the pharmacy. My mom told me what to buy before I came here.” [Female aged 22].

“If I get sick, just a cold or fever, I just buy some medicines. Ten yuan of medicines will take care of that.” [Male aged 24].

Home remedies—Many migrants reported that they used traditional Chinese remedies for self-treatment.

“If I get sick, like a cold or running a fever, I never go to see a doctor. I usually boil some ginger tea, and it works well. I rarely even have medicines. Ginger tea is very effective.” [Male aged 21].

“In Spring when it is really windy, I often have a headache because of the wind, and I drink some alcohol to take care of that. When I have a cold and cough, I will buy some pears and cook them with rock sugar. After I eat that, I will be fine. I usually don’t take medicines.” [Male aged 29].

Some even performed surgical procedures for themselves.

“I never go to the hospital. Even one time when I was really in bad luck, and had a dozen corns on my foot, I didn’t go to the hospital. I bought a corn gel, and had an operation for myself. I bought a knife, and cleaned it with alcohol, and then I cut the corns out with the knife.” [Male aged 20].

Luckily my [urban] friends have insurance cards—The employed urban residents are usually insured through their employer sponsored health care and therefore are entitled to many subsidized medical services including discounted prescription drugs. Because migrants are not eligible for these services, some migrant workers reported they asked urban residents with insurance for help. Some migrants reported receiving prescription drugs from their urban neighbors or employers, who can easily get discounted medicines with their insurance.

“We can’t get any discount if we go to the hospitals, so we don’t go there. We just ask the regular employees [those with urban residence and health insurance, as opposed to the temporary workers] to buy some medicines for us. It is easy for them to get medicines.” [Female aged 26].

“I used to have very serious neurasthenia, I often woke up at midnight with nausea, and I almost lost my vision. So I had to go to hospital to get some pain killers. It is very expensive in the hospital, and luckily some of my friends have insurance cards. So I asked them to get the medicines for me.” [Male aged 22].

“I usually don’t care if I have a cold or have a fever, unless I really cannot hold on. Then I will ask for some medicines from my co-workers [those with insurance]. [Male aged 25].

Sometimes, the urban residents voluntarily offer the assistance. A women working as a domestic servant remarked:

“Sometimes I go to buy some medicines; but most of the time, the ‘young aunts’ [the urban residents in her neighborhood] give me the medicines. They said it is easy for them to get medicines. So I didn’t reject them and just took them.” [Female aged 35].

Sought substandard care—The high cost and inconvenience of the hospitals had led many migrants to turn to private and usually unlicensed clinics for diagnosis and treatment.

“If I get sick, like running a fever or something, I just go to the small clinics. The clinics are opened for us non-locals. They are run by migrants too, but it is only a single big room.” [Male aged 28].

The largely unmet medical needs and lack of access to professional health care among this large growing migrant population have encouraged the emergence of many private unlicensed clinics.

These clinics were welcomed by the migrant workers because of their convenient locations, flexible payment schedules, and low cost.

“There are many small clinics in this area, run by my fellow villagers. In our hometown, people are very poor. You get treatment but have no money, it is OK; you can pay it after the fall harvest. After you sell the crops and collect the money, then you pay the bill. They do the same here, you can get treatment without immediate payment. In my hometown you pay only 20 yuan for drips; here [in the small clinic], you only pay 30 yuan. But in hospitals, they will charge you at least 50 or 60 yuan. It is nonsense.” [Male aged 19].

“The small clinics are convenient and much cheaper. They are close to where I live. And they are for us--migrant workers. They can treat the common illnesses such as

cold, fever, and headache. It is good for us as long as they can tell us what kind of medicines to take.” [Male aged 28].

However, many of these clinics were run by unlicensed or under-qualified staff.

“They [the small clinics] don’t have the licenses; they just came and opened the clinics. And people in this area like to go to these clinics, because we can’t afford the big hospitals.” [Male aged 19].

Delayed treatment—Some migrants did seek medical care in hospitals but usually only after trying many other efforts, and perceiving themselves to be seriously ill. For migrants, hospitals are generally the last resort for care when they were left with no other choice.

“Illnesses are big or small. For small illnesses, you can just hold on by yourself; even some big illnesses, you can buy some medicines by yourself, plus there are many folk medicines. Unless you are really really sick, you don’t need to go to hospitals.” [Male aged 20].

Similar to other populations without health insurance, migrant workers often delayed necessary treatment.

“Many times when I am asleep, I often have cramps in my legs. I wake up and take a deep breath, it really hurts. After a while, it is gone, then I go back to sleep. And the next day it is the same. I know it might be due to lack of calcium. I haven’t seen a doctor for this. I am afraid it would be too expensive. I can’t afford the expenses.” [Male aged 21].

When they did receive health care in hospitals, the migrants were usually severely ill.

“Last year, I had no place to live, and stayed in the bar [where he works]. It was really cold in winter, really really freezing. I finally caught a cold, and it turned out to be very bad. I was running a fever, more than 39 degrees. I held on for 3 days, and had to go to a hospital, and had 3 bottles of drips. After a whole night [of staying in hospital], I got much better.” [Male aged 21].

“I went to a hospital once. I was working continuously for 48 hours. We stayed up a whole night, and then another night. Sometimes we ate a little bit at night; sometimes we even skipped lunch, or just had some instant noodles, and didn’t even have time to drink water. I finally got sick. All the medicines I took didn’t work, and had to go to a hospital.” [Male aged 24].

Another migrant relayed how they used hospitals for “big illnesses”:

“I only went to the hospital once. It was last year, I slept on a brick floor, and the next day I began to run a fever. I was really sick and homesick, and really wanted to go home. I had the fever for 3 or 4 days, and later on had to go to a hospital.” [Female aged 29].

Some even delayed treatment for infectious or severe diseases. For example a young man described his own experience:

“Last time I wanted to donate my blood, but they said my blood had some problem and asked me to have a test. I went to a hospital, and the lab showed it was positive for hepatitis B. But they said it is pretty expensive to treat it and it takes time. So I just let it be.” [Male aged 20].

DISCUSSION

In this study, we found that the high cost of health services and the lack of any health insurance have resulted in under-utilization of health care services among migrants, which had led to series of ineffective health seeking behaviors such as unsupervised self-treatment, going to unregulated clinics, or “just holding on” without seeking any medical care. By the time they did receive formalized or professional care, they were often seriously ill. These findings were similar to those studies regarding migrant populations in other countries (Bollini & Siem, 1995; Hansen & Donohoe, 2003). It is worth noting that the most frequently cited reason for their non-utilization and under-utilization of health services was affordability rather than availability. Our findings also suggest that long working hours, lack of sick leave, fear of losing jobs, and attitudes of urban health care providers are other reasons for their under-utilization of urban medical care facilities and their current suboptimal health care seeking behaviors.

We should note that such problems related to health care may not be limited to only the rural-to-urban migrants. In both the rural and urban areas of China, health care is becoming a fee-for-service commodity which is more available to the rich than the poor. As a result, access to health care is declining in many sectors of the Chinese population (Smith, 1998; Lampton, 2003; Liu, 2004). Inadequate access to health services and under utilization of health care among the rural population and urban poor (e.g. unemployed) have been reported (Gao et al., 2002). Therefore, we need to interpret the migrants’ health care behaviors within the social context of inequality in access to health care, one of the negative results of China’s health care reform (Akin et al., 2005). The “high cost” of seeking professional care as indicated in this study, goes beyond the monetary expenses or “out-of-pocket” payment, but reflects a range of institutional barriers including lack of legal urban residence (i.e., “hukou”), low social status, lower income, and denied entitlement to employer-sponsored health care benefits (Shaokang, et al., 2002).

The millions of rural-to-urban migrants account for 9% of total Chinese population. They provide massive and cheap labor which is instrumental to China’s economic development. In fact some observers suggest that China’s economic miracle is resting squarely on the shoulders of these migrant workers. Although they are helping to create the new affluence, only rarely are they reaping their fair share of the benefits (Smith & Fan, 1995).

Previous studies conducted among the migrant population suggest that their living and sanitary conditions are often below minimum standards (e.g., Li, et al., in this issue). Migrants in this study also reported that they worked at tight schedule and high pressure, and had poor working and living environments, which may further heighten the risk of introducing new diseases or increasing the prevalence of infectious diseases (such as malaria and TB) (Smith & Fan, 1995). Previous studies among Chinese rural-to-urban migrants found that many migrants were at high risk of HIV or STD; some of them also engaged in other risk behaviors such as smoking, drinking and substance abuse (Chen et al., 2004; Li et al., 2004; Lin et al., 2005; Yang et al., 2005). It is also believed that a fundamental challenge to China’s ability to deal effectively with the HIV epidemic lies in its poorly developed public health system and major disparities in health care, between the rich and poor, between rural and urban populations, and across different regions (Grusky, Liu & Johnston, 2002). The rural-to-urban migrant population, because of its migratory status and relatively low socioeconomic status, is especially vulnerable to the negative consequences of such disparities in health care.

The Chinese government and Chinese society in general are beginning to recognize the need for health care among the rural-to-urban migrants (Liu et al., 2002). The first health promotion activity targeting the migrant population took place in Beijing on April 2004 (China Population Network, 2004). However, greater efforts are needed to translate the concern into actual

policies and implementation. As noted in the Introduction, most of the urban residents who are employed receive health care benefits from their employers, but these benefits are not extended to rural-to-urban migrants even though they work in the cities as well. Recently, there has been a growing appeal to reestablish the Corporate Medical Services in rural China, and some pilot programs are already underway (Wang, Yip, Shang, Wang, & Hsiao., 2005). However, rural-to-urban migrants, because of the separation of their current residence (urban) and their permanent household registration (rural), would most likely be excluded from this proposed health care system reform.

The major limitation to this study is the lack of a comparison group for these migrants, either the rural residents, or their urban counterparts. The lack of comparison group precludes any conclusion about the relative standing of migrants' health care accessibility in comparison with other socio-economically disadvantaged groups in China (e.g., rural population, urban poor). For example, one may argue that these migrants, because of the increase of their disposable income and wider availability of medical facilities in cities, may actually be better off for health care access, in comparison with those still living in rural areas. Future study is needed to compare the health care access among different populations in China. Nonetheless, the findings of this qualitative study with a focus on rural-to-urban migrants, a rapidly growing and highly vulnerable population, have significant public health implication. Another limitation to this study is that the participants were recruited from two big metropolitan areas (Beijing and Nanjing), and might not be representative of migrant populations in small cities or other regions in China.

This study underscores the importance of providing affordable and effective health care services to this population. Given the large number of the migrants and the expected continuous growth of rural-to-urban migration in the coming years, prompt and effective actions are needed. We suggest the following actions to improve migrants' access to health care and promote their health. First, the government should implement the policies that require employers to provide equally affordable insurance coverage to both urban employees and migrant employees. The migrants should not be deprived of entitlement to health benefits and community services because of their household registration status. Second, the government should subsidize health care cost for the low-income migrants' or those self-employed. Subsidization should also be extended to those clinics that provide low-cost services to the low-income population (including migrants). Third, an immediate progressive solution to improve health care services among this population may include appropriate regulation and utilization of the private clinics, which are already popular within the migrant communities because they are accessible and affordable to the migrant population. The government should provide resources as well as oversight to ensure their quality services. Appropriate referral systems between private clinics and hospitals should be established so that patients who need complex evaluations or treatment could receive timely and quality services. Fourth, the rural-to-urban migrants' health can be further promoted by improving their working and living conditions. Finally, community-based health promotion programs should be designed and implemented in the migrant communities to improve their awareness of available resources of health care and preventive measures of health maintenance.

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References

- Akin JS, Dow WH, Lance PM, Loh CP. Changes in access to health care in China, 1989–1997. *Health Policy Planning* 2005;20:80–89.
- Anderson AF, Qingsi Z, Hua X, Jianfeng B. China's floating population and the potential for HIV transmission: a social-behavioral perspective. *AIDS Care* 2003;15:177–185. [PubMed: 12856339]
- Beijing Bureau of Statistics. Young women migrants in Beijing: major data from a survey on the migrant population. *China Population Today* 1996;13:27–40. [PubMed: 12320648]
- Beijing Bureau of Statistics. Migrant Population Development and Corresponding Policies. 2002. Retrieved November 25, 2005 from <http://www.bjstats.gov.cn/gcfx/tjbjgzl/rkjyzyzb/200112240167.htm>
- Bloom G, Xingyuan G. Health sector reform: lessons from China. *Social Science and Medicine* 1997;45:351–60. [PubMed: 9232730]
- Bogg L, Dong H, Wang K, Cai W, Winod D. The cost of coverage: rural health insurance in China. *Health Policy Planning* 1996;11:238–252.
- Bollini P, Siem H. No real progress toward equity: health of migrants and ethnic minorities on the eve of the year 2000. *Social Science and Medicine* 1995;41:819–28. [PubMed: 8571153]
- Brussaard JH, van Erp-Baart MA, Brants HA, Hulshof KF, Lowik MR. Nutrition and health among migrants in The Netherlands. *Public Health Nutrition* 2001;4:659–664. [PubMed: 11683558]
- Chen X, Li X, Stanton B, Mao R, Sun Z, Zhang H, et al. Patterns of cigarette smoking among students from 19 colleges and universities in Jiangsu Province, China: a latent class analysis. *Drug & Alcohol Dependency* 2004;76:153–163.
- China National Bureau of Statistics. News Release 2001. Beijing, China: 2001. Characteristics of Chinese rural migrants: 2000.
- China National Bureau of Statistics. China's Rural-to-urban migrants exceed 114 million (Chinese article). 2003. News Release 2004. Retrieved November 25, 2005 from <http://www.cqna.gov.cn/224055180973309952/20040629/1042012.html>
- China Population Network. Migrant Population: The public interest activity "Care for the well-being of migrant population" took place in Beijing (Chinese article). 2004. Retrieved November 25, 2005 from http://www.chinapop.gov.cn/rkx/zfdt/t20040420_12599.htm
- Cohen MS, Hendersen GE. Medical care in the People's Republic of China: access and cost. *Annual Internal Medicine* 1983;99:727–728.
- Darmon N, Khlait M. An overview of the health status of migrants in France, in relation to their dietary practices. *Public Health Nutrition* 2001;4:163–172. [PubMed: 11299088]
- Diaz RM, Ayla G, Bein E, Henne J, Marin BV. The impact of homophobia, poverty, and racism on the mental health of gay and bisexual Latino men: Findings from 3 US cities. *American Journal of Public Health* 2001;91:927–932. [PubMed: 11392936]
- Feng W, Ren P, Shaokang Z, Anan S. Reproductive health status, knowledge, and access to health care among female migrants in Shanghai, China. *Journal of Biosocial Science* 2005;37:603–22. [PubMed: 16174349]
- Gao J, Qian J, Tang S, Eriksson BO, Blas E. Health equity in transition from planned to market economy in China. *Health Policy and Planning* 2002;17:S20–S29.
- Grogan CM. Urban economic reform and access to health care coverage in the People's Republic of China. *Social Science & Medicine* 1995;41:1073–1084. [PubMed: 8578330]
- Grusky O, Liu H, Johnston M. HIV/AIDS in China: 1990–2001. *AIDS & Behavior* 2002;6:381–393.
- Guan, XP.; Jiang, MQ. Migrant populations' life and health services in the cities. In United Nations Online Network on Public Administration and Finance. Chinese Migrant Series. 2003. Retrieved November 25, 2005 from <http://unpan1.un.org/intradoc/groups/public/documents/apcity/unpan014918.pdf>
- Hansen E, Donohoe M. Health issues of migrant and seasonal farm workers. *Journal of Health Care for Poor and Underserved* 2003;14:153–64.
- Hong Y, Stanton B, Li X, Yang H, Lin D, Fang X, Wang J, Mao R. The migrant population in China: cultural clashes provide fodder for the emerging HIV epidemic. *AIDS and Behavior*. In press

- Jia, D.; Li, X.; Ye, L. Analysis on China's migrants in 90's. In: Wei, J.; Sheng, L.; Tao, Y., editors. *Studies in China Migrants*. People's Press; Beijing: 2001. p. 62-75.
- Lampton, DM. China's health care disaster. *Asia Wall Street Journal*. 2003. May 6, 2003, Retrieved November 29, 2005 from <http://www.nixoncenter.org/publications/articles/2003%20articles/Lampton050603.htm>
- La Pelle N. Simplifying qualitative data analysis using general purpose software tool. *Field Methods* 2004;16:85–108.
- LeCompte, MD.; Schensul, J. Analyzing and interpreting ethnographic data. Book 5. In: Schensul, J.; LeCompte, JMD., editors. *Ethnographer's Toolkit*. Altamira Press; California: 1999.
- Li X, Fang X, Lin D, Mao R, Cottrell L, Harris R, et al. HIV/STD risk behaviors and perceptions among rural-to-urban migrants in China. *AIDS Education & Prevention* 2004;16:538–556. [PubMed: 15585430]
- Li X, Stanton B, Chen X, Hong Y, Fang X, Lin D, et al. Health indicators and geographic mobility among young rural-to-urban migrants in China. *Journal of World Health and Population*. In this issue
- Liang Z. The Age of migration in China. *Population & Development Review* 2001;27:499–524.
- Lin D, Li X, Yang H, Fang X, Stanton B, Chen X, et al. Alcohol intoxication and sexual risk behaviors among rural-to-urban migrants in China. *Drug & Alcohol Dependence* 2005;79:103–112. [PubMed: 15943949]
- Liu GG, Zhao Z, Cai R, Yamada T. Equity in health care access to: assessing the urban health insurance reform in China. *Social Science & Medicine* 2002;55:1779–1794. [PubMed: 12383462]
- Liu XZ, Wang JL. An introduction to China's health care system. *Journal of Public Health Policy* 1991;12:104–116. [PubMed: 2056096]
- Liu Y. China's public health-care system: facing the challenges. *Bulletin of World Health Organization* 2004;82:532–8.
- Ma LJ, Xiang B. Native Place, migration and the emergence of peasant enclaves in Beijing. *China Quarterly* 1998;155:546–581.
- Mao, ZZ. Farmers' willingness to pay for cooperative medical system, Work paper for Takemi Fellow, Department of Population and International Health, Harvard School of Public Health. 2000. Retrieved on November 25, 2005 from <http://www.hsph.harvard.edu/takemi/rp167.pdf>
- McKay, L.; Macintyre, S.; Ellaway, A. Migration and health: A review of the international literature. Medical Research Council (MRC) Social and Public Health Sciences Unit, Occasional Paper No 12; University of Glasgow, Glasgow, UK. 2003 Jan.
- Nanjing Bureau of Statistics. Statistical Report of Economic and Social Development in Nanjing, 2002. 2003. Retrieved November 29, 2005 from http://tjj.nj.gov.cn/nanjing/d_showpage.jsp?articleid=3060&show_page_id=505
- Pernice R, Brook J. The mental health pattern of migrants: Is there a euphoric period followed by a mental health crisis? *International Journal of Social Psychiatry* 1996;42:18–27. [PubMed: 8730533]
- Pudarcic S, Sundquist J, Johansson SE. Major risk factors for cardiovascular disease in elderly migrants in Sweden. *Ethnicity & Health* 2000;5:137–150. [PubMed: 10984832]
- Ryan GW. Using a word processor to tag and retrieve blocks of texts. *Field Methods* 2004;16:109–130.
- Shaokang Z, Zhenwei S, Blas E. Economic transition and maternal health care for internal migrants in Shanghai, China. *Health Policy & Planning* 2002;17:S47–S55.
- Shen J. A study of the temporary population in Chinese cities. *Habitat International* 2002;26:362–377.
- Shi L. Health care in China: a rural-urban comparison after the socioeconomic reforms. *Bulletin of World Health Organization* 1993;71:723–36.
- Silverman, D. *Interpreting Qualitative Data: methods for analyzing talking, text and interaction*. Sage Publications; California: 1993.
- Smith C, Fan D. Health, wealth and inequality in the Chinese cities. *Health & Place* 1995;1:167–177.
- Smith C. Modernization and health care in contemporary China. *Health & Place* 1998;4:125–139. [PubMed: 10671017]
- Solinger, D. *Contesting Citizenship in Urban China: Peasant Migrants, the State and the Logic of the Market*. University of California Press; California: 1999.

- Steyn K, Kazenellenbogen JM, Lombard CJ, Bourne LT. Urbanization and the risk for chronic diseases of lifestyle in the black population of the Cape Peninsula, South Africa. *Journal of Cardiovascular Risk* 1997;4:135–142. [PubMed: 9304495]
- Tian X. Population Movement, marriage and fertility change. *China Journal of Population Science* 1991;3:27–44.
- Tie P. Survey of risk factors among migrants. *Disease Monitoring* 1999;14:229–230.
- Wang H, Yip W, Zhang L, Wang L, Hsiao W. Community-based health insurance in poor rural China: the distribution of net benefits. *Health Policy & Planning* 2005;20:366–74. [PubMed: 16143589]
- Wong L. China's urban migrants: the public policy challenge. *Pacific Affairs* 1994;67:335–355.
- Wu W. Migrant housing in urban China: Choices and constraints. *Urban Affairs Review* 2002;38:90–119.
- Xu B, Fochsen G, Xiu Y, Thorson A, Kemp JR, Jiang QW. Perceptions and experiences of health care seeking and access to TB care—a qualitative study in rural Jiangsu Province, China. *Health Policy* 2004;69:139–49. [PubMed: 15212861]
- Yang H, Li X, Stanton B, Chen X, Liu H, Fang X, et al. HIV-related risk factors associated with commercial sex among female migrants in China. *Health Care for Women International* 2005;26:134–148. [PubMed: 15804913]
- Zhang, W. Building for future: The social and financial structure needed to provide effective and affordable care. Symposium at the Health Care, East and West, Moving into the 21st Century Conference; Boston, MA. 2001 Jun.
- Zhang, L. Strangers in the City: Reconfigurations of Space, Power and Social Networks within China's Floating Population. Stanford University Press; California: 2001.
- Zheng Z, Zhou Y, Zheng L, Yang Y, Zhao D, Lou C, et al. Sexual behavior and contraceptive use among unmarried young migrant workers in five cities in China. *Reproductive Health Matters* 2001;9:118–27. [PubMed: 11468827]