

A MEDICAL BEHAVIOR QUESTIONNAIRE SURVEY OF CHINESE OFF-DUTY PERSONS

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Abstract - Economic globalization and rapid development worldwide has brought about great differences among different socio-economic classes. It seems that the lower socio-economic classes need more attention in order to prevent all kind of diseases and to promote their health status. Using a mobile questionnaire survey, 584 unemployed persons, in Hainan and Hubei provinces, P.R. of China, were investigated as to their basic family information, reimbursement of medical costs, and medical behavior. The results showed that these unemployed persons are concentrated in age >45, and have very poor family economic background. It seems that there is no relationship with their educational level. Their family economic situation has the greatest influence on their medical behavior. Most unemployed persons involved in this survey have negative medical behavior: they would like to find other sources of help instead of hospitals, even if they had fatal diseases, because their economic situation would not allow them to go to hospital, especially the higher-level hospitals. The authors' proposal is that the China's health administration should foster the establishment of a health insurance system for all citizens, and offer a more advanced benefit package for those lower class persons.

INTRODUCTION

In recent years, there has been an increasing emphasis on the delivery of preventive care in general practice. But differences in health status and health care utilization by socio-economic groups are well documented.^{1,2} Available evidence suggests that people from lower social classes receive less preventive care compared with people from higher social classes. For example, in The Netherlands males in lower social class showed a significant increase in risk of death from cardiovascular diseases compared with higher social classes.³ It is clear that in the prevention of avoidable mortality and morbidity, strategies should address the problems of differing patterns according to socio-economic group. In China, with the change since the 1980s from a strictly planned economic system into a free-market economic system, the socio-economic situation has greatly changed: numerous workers from state factories have been sent home with a low wage, and many even lose their jobs. Meanwhile unemployment has gradually become one of the big social issues and it is one of the important factors influencing economic development and social stability.

In China, there are two main types of unemployment: the first are those registered with unemployed centers, these people have “cut their ties” with their enterprise and are paid unemployment benefits. This type of employed correspond with western systems. The other broad type of unemployed is “*xiagang*” (off-duty) from the enterprise, these persons remain their ties with enterprise, but have not any job to do, and their subsistence allowance is paid by the enterprise. The reason why they have to be off-duty is mostly due to no business from the enterprises. In general, the *xiagang* persons will have been official unemployed after a long period off-duty. The official unemployment statistics count those registered with unemployment bureaus, but not *xiagang* workers. The official unemployment rate is 3-4%. The “real” unemployment rate, when *xiagang* workers are included is much higher. And some of the papers had described the serious situation of unemployment in China, but rare paper focused on their health status.⁴⁻⁸

In order to correspond with its world health status, the Chinese government is planning to develop a new health insurance system, which hopes to cover the entire body of citizens. In order to develop the new health insurance system, one requirement of background information is to know exactly the health surveillance and health awareness for the unemployed in different cities. The solution of this issue will benefit the design of the new health insurance system and will also benefit all citizens to have a stable and well-developed socio-economic environment.

In recent years, university students have been asked to know the sociality more during their summer vacation, and medical students are also requested to know the community social health status. Corresponding to the students’ task and government’s requirement, we proposed a series of questionnaires, with only the result from unemployed persons presented here. The aim of this study is to try to find this solution among different cities. We hope that this report will allow the readers, including health officers and researchers, to draw on the specific studies, and we hope that this result will be an important reference for Chinese government to build a rational, acceptable system.

MATERIALS AND METHODS

Investigators were chosen from senior medical students. After 3 days training, these investigators were sent to one of the selected cities in the summer 2001, and they selected a typical community for the questionnaire.

In total, twelve cities were selected for this questionnaire. These cities are distributed in Hainan province in the south part of China (the island province has been a special economic zone since 1990), and Hubei province in the central part of China. One community of each city was selected as the base of questionnaire survey. According to the background information provided by the community center, all the off-duty persons who left their job long than 3 months were invited to join this survey. A letter from the investigators was firstly sent to the off-duty persons, and interview was taken at their house according to their convenient time, .

As no similar study had been published, we decided to develop our own anonymous questionnaire according to the project objectives, with cooperation of the investigators. After two times pilot studies, we found that the interview took too much time for the interview, (average time for each interview was about 35 minutes), and the original questionnaire was not very clear. The final version of the questionnaire included 15 questions and take 20 minutes for the interview. Data requested included personal and family basic information, medical reimbursement, willingness to access medical treatment, and medical behavior.

RESULTS AND DISCUSSION

Subjects’ characteristics:

This survey used 600 questionnaires, and got 584 valid answers, so the received rate was 97.33%. The detailed information is summarized in Table 1.

The subjects’ situation is presented clearly in Table 1. The median age of the unemployed persons was 40, and most persons were concentrated around younger than 30 and older than 45 years old. Concerning the younger persons, although they were about 23.5% of the unemployed, most of them were even younger; they had lost their job as they could not adapt themselves to the realities of society when they graduated from school. Nevertheless, it is hoped that the younger persons may find a job in the future. For those older than 45, it is more difficult for them to find another job if no other social assistance system is available.

Table 1. The characterizes of the subjects

	Sampling size	Rate %
Genders		
Male	293	50.2
Female	291	49.8
Age distribution (Years)		
<30	137	23.5
30-	88	15.1
35-	110	18.8
40-	107	18.3
>45	142	24.3
Educational levels (years)		
<5	84	14.4
5-	244	41.8
9-	227	38.9
>12	29	5.0
Unemployment length (Month)		
<3	17	2.9
3-	21	3.6
6-	40	6.9
12-	191	32.7
>36	280	48.0
Family income (yuan)		
<250	76	13.0
250-	127	21.7
400-	100	17.1
500-	117	20.0
>700	164	28.1

Another result from the data in Table 1 is that there is no clear relationship between unemployment status and years of education. The unemployed persons have the same distribution of educational levels as the national distribution. According to the results of the 2000 census, most Chinese have 9-12 years of education.⁹

The average time of unemployment for these subjects was more than 3 years. Most unemployed persons have a very low family income: their average monthly income was 500 Yuan, which is hardly sufficient to maintain a three-person family.

Medical reimbursement result:

A medical reimbursement survey was also performed, and the results are presented in Figure 1. Normally, the employer pays the health insurance of workers. Workers pay their medical costs at hospital and get their medical reimbursement from the employer. If the workers lose their job, their medical reimbursement will become very complex: some of them may be fortunate, and receive full medical reimbursement, and some will not receive any. This result is very clearly demonstrated in Figure 1. Only 2% of the unemployed receive their whole medical reimbursement, and 21% of the unemployed persons may have their medical expenses partially refunded, however, most persons (77%) will receive no medical reimbursement as their previous factory has shut down. This serious situation will cause great economic and social pressure and will influence their medical behavior.

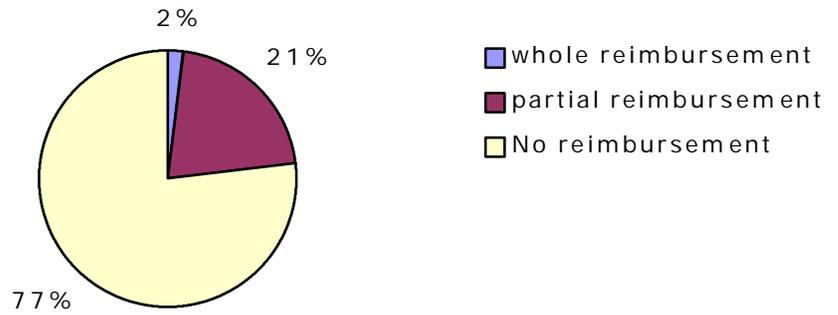


Fig. 1 Medical reimbursement situation

As we expected that their family economic situation and disease type were the most important reasons to influence the medical behavior of unemployed persons, a combined cross question was put to each unemployed person: “Will you first go to hospital when you are in the following condition?” Their answers are presented in Figure 2.

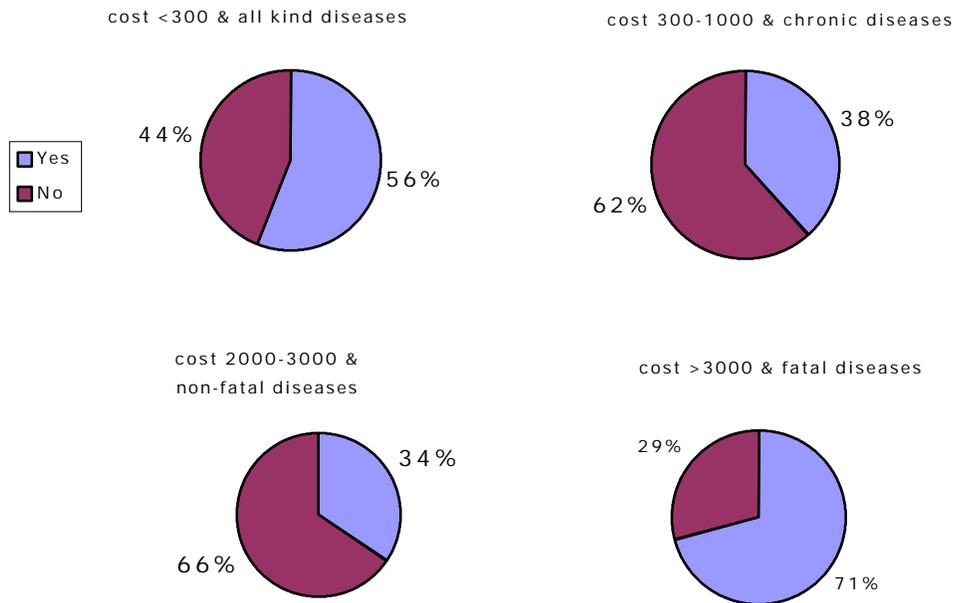


Fig. 2 the results for the economic and diseases combined question

- “Yes” means they will first go to hospital.
- “No” means they will select another method instead of a hospital.

From Fig. 2, we may easily infer that the unemployed persons will first go to hospital only in two situations: when the cost is less than 300 Yuan, and when they have fatal diseases, the positive answers are 56.2%, 70.9% respectively. Another very serious fact which needs to be noted is that there is still 29.1% of the unemployed persons will not as their first choice go to hospital even if they have fatal diseases: it means that their poor economic situation takes priority over their health, and that their economic situation does not allow them to consider what is necessary for their health.

The answers to the other two combinations also present negative responses: for chronic diseases and for a cost of 300-1000 Yuan the result was 61.6%, and for non-fatal diseases 65.6% of unemployed persons would not go to hospital for medical treatment.

A future exploration about their medical behavior was also performed. We designed a question for those who answered that they would first go to hospital, to explore which level of medical service they would choose. The result is listed in Figure 3.

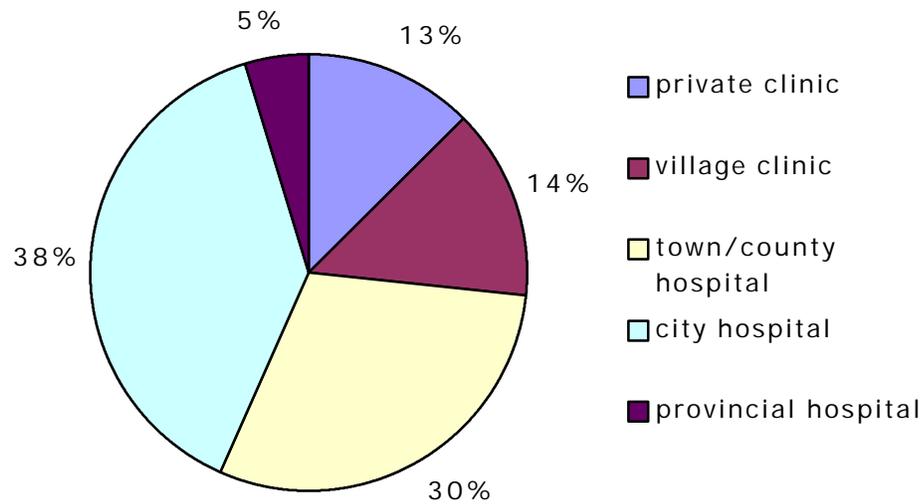


Fig.3 The medical behavior results of unemployed persons

We can draw the conclusion that first choice for those were willing to go to hospital was middle-level health services: 38.7% of them were willing to go to a city hospital, and 30.0% of them selected a town or county hospital. Only 4.6% of them would select a provincial hospital as their priority, while 30% of them would go to a private clinic where the health service is very poor.

One of the weaknesses of the present study is that we can not tell the difference between the two provinces, as they have differences on geographic and economic, and the diet custom, the authors wish to perform the difference test in the near future.

China has tended to trial different health insurance programs in different areas as there is a huge difference over the country. Hainan province will try to offer the full health security system as it has high capitalizes while Hubei province is planning to offer the minimum health insurance. The results of the present study will encourage the Hainan government to offer full coverage and will pressure the Hubei government to try to offer a better health insurance program.

Today Public Health is rapidly changing worldwide, and we will have to face new challenges; as examples, economic globalization and rapid development of technology and communication have changed the nature of safety and health at work, and new technologies and work patterns require a high degree of flexibility and adaptability to rapidly changing conditions. Moreover, we also have to deal with the classical patterns in linking population-based research with health promotion practice and health policy, because the final goal of health policy should be to provide people with a healthy and safe society, in which people may live a healthy life. For developing countries, the health strategy should always include all social classes, and pay more attention to the lower socio-economic classes because some studies have shown that perceived cost was a greater barrier for persons with low incomes and for those who were unemployed, uninsured and self-employed persons.^{9,10} Public health worker should concern this deterioration and give the priority in the research and political agenda with the employers, legislators and other relating persons.¹¹⁻¹⁴

CONCLUSIONS

This mobile survey investigated 584 unemployed persons in Hainan and Hubei provinces, and some conclusion may be drawn:

These unemployed persons are concentrated in age >45, and have very poor family economic backgrounds. It seems that there is no relationship with their educational level.

Family economic situation is their first factor that has a great influence on their medical behavior. Most unemployed persons involved this survey have negative medical behavior: they would like to find other sources of help instead of hospitals, even if they had fatal diseases, because their economic situation would not allow them to go to hospital, especially a higher level hospital.

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Acknowledgement

The authors wish to thank all the investigators chosen from students of Faculty of Medicine, Wuhan University for their hard work. The authors' appreciation goes to Mr. R. O'Brien, University of Adelaide Australia, for his linguistic correction. The authors also wish to thank Wuhan University, China, the Faculté de Médecine, Vandoeuvre-lés-Nancy, France, and the Italian Foreign Ministry for their financial support for this overall study entitled 'A comparative study of public health services in Europe and China'.