Author's response to reviews

Title: The Analysis of Service Utilization of Community Health Centers Compared with Local Hospitals in China

Authors:

Xilong Pan (xilongpan@126.com)
Bin Cui (cuibin@bimu.edu.cn)
Xiaohang Wang (xiaohang-wang@163.com)
Zhang Hong (zhanghong7111@126.com)

Version: 5 Date: 27 January 2006

Author's response to reviews: see over
Reviewer’s report
Title: The analysis of utility efficiency of community hygiene resources in China
Version: Date: 1 1 December 2005
Reviewer: Niyi Awofeso

Reviewer’s report:
Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

1· It was not clear from the article whether the authors were discussing “Community Hygiene Resources”, or “Community Hygiene Concern”, or “Community Health Services”. Community Hygiene Resources fall within the realm of community health education, and are usually focused on evaluating methods for disease prevention, protection and cure, and disseminating information on best practice when evidence on effectiveness is found. Such health education activities were not described in depth in the article. For a concept described as “an important part of Chinese medical mechanism reform”, it was surprising that there are currently no scholarly articles on China’s ‘Community Hygiene Concern’ in biomedical or public health journals. The ‘main service items’ of Community Hygiene Concern, as described by the authors, touch on the core activities of the Chinese Public Health system. This leaves readers confused as to what issues the authors are actually addressing.

   We have correct the misuse or inaccurate terms in the article, such as altering “Community Hygiene Concern” for “Community Health Centers”; “the main job” for “the main work”. etc.

2· The ‘methodology and indicators’ section bears little relevance to the article’s topic and introductory sections. For example, in evaluating the efficiency of community hygiene resources, staff income should not normally be accorded such high priority. In contrast, the authors did not report any evaluation of the quality of hygiene information provided by the sites surveyed, appropriateness of dissemination media utilized, and/or the receptivity of end-users to the information provided.

   We have rewritten such parts as methods, results, discussion and conclusions.

3· The conclusions are rather discursive, and not well - linked to the findings from the survey. For example, it is unusual to suggest that; “community hygiene services must be adapted to the requirement of city medical and hygiene reform”. In fact, the rational sequence is for the reforms to be adapted to mutually identified community health needs. Also, the conclusions appear to over-emphasize a medical model for delivery of community health services.

   The conclusions have been changed as reviewer indicates.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Professional proof-reading, in order to correct lexical and structural errors, and thus make the article more reader-friendly.

1. Title:
The analysis of utility efficiency of community hygiene resources in China.
The “Title” of the article has been changed:
The Analysis of Service Utilization of Community Health Centers Compared with Local Hospitals in China.

2. Author:
Pan-xilong  Wang-xiaohang  Xu-dongjin

The “Author” of the article has been changed:
Pan Xilong1*, Cui Bin1* Wang Xiaohang1, , Zhang Hong 1

3. Abstract:
Background: As an important part of Chinese city medical mechanism reform, community hygiene concern (CHC) have been experimented all over the nation. Now it’s under substantial construction. However, CHC’s service actuality is far from its required function.
The last line of the background has been changed:
As an important part of China Urban Health System reform, Community Health Centers (CHC) have been piloted all over the nation, which are under substantial construction at present. However, the status in quo of the services of the CHC is far from the required. In order to assess the role of the CHC, we investigated the CHC in six cities in Eastern China to identify the utilization efficiency of community health resources in providing basic medical services and basic public health services.

Methods: We investigated the utility efficiency of the city hospitals’ and CHC’s resource. All data was inputted under SPSS software situation. Analysis methods mainly include Descriptive Statistical Analysis, Randomized Block Design ANOVA, Paired T Test, One-way Analysis of Covariance.
The last line of the methods has been changed:
Data were collected from local health bureau. All the data was processed with SPSS software. Analysis methods mainly include descriptive analysis, paired T-test and One-way ANOVA.

Results: Six main functions of CHC are not fully realized. CHC resource utility efficiency is low and its prestige is not good. It lacks funds seriously and runs with many difficulties. Residents don’t think highly of them.
The last line of the results has been changed:
Six main functions of CHC are not fully achieved and the resource utilization efficiency of the surveyed CHC is low and their prestige is not good. The CHC lacks funds support seriously and runs with many difficulties. The community residents have less positive attitude towards their services.

Key words: community hygiene concern (CHC); hospital; efficiency; hygiene
The “Key words” of the article has been changed:
Community Health Centers (CHC); Hospital; Service Utilization.

4. Background:
In the part of background, some paragraphs are omitted:
Before reform and opening up, Chinese CHCs are invested by the government and freely enjoyed by all residents. With the development of economy, medical industry is channeled into market-running mechanism. Government investment reduced and the CHC service shrunk. Some CHCs were even demolished or sold to individuals. In recent years, society’s complains about government hygiene reform emerge here and there. For example, in 2005, the authoritative research institution in China—Development Research Center of State Council P.R. China declared one of its research results that Chinese hygiene reform is not successful on the whole. One of the main reasons for the problem “difficult to see doctor” is that the CHCs construction is not perfect. So the object of this research is to
discuss the utility efficiency of community hygiene resources, identify whether CHC do the best it can in the community’s basic medical services and basic public hygiene services.[1]

At present, CHC’s functions mainly include: prevention, health care, health education, family planning, medical treatment and recovery. Chinese hygiene administration sectors have settled concrete tasks of developing “six to-doors” service, including health survey and physical examination to door, health file archived to door, health education and propaganda to door, prevention and care jobs to door, disease control and frequent visit to door, sending doctors and medicines to door.

Its main content is “one file, two handbooks, three cards”, i.e., family health file; health care handbook, service contract handbook; children’s health care card, health care card of people over 60, chronic disease management card.

5. Methods

We have supplement the context about the research method:

All the data used for analysis were collected from CHCs and local hospitals with the assistance of local health bureaus. In collaboration with the community members, an initial quantitative assessment was done to these facilities. At the same time, household survey was implemented in the community to find the residents’ knowledge about CHC.

We did this research in six cities in East China---Guangzhou, Foshan, Shenzhen, Fuzhou, Xiamen and Hangzhou. Data were collected from local health bureau including 3 hospitals and 3 CHCs in each city by sampling randomly. We investigated the health resources utilization of the medical facilities at city and community levels. All data is processed with SPSS software. Analysis methods mainly include descriptive analysis, paired T -test, One-way ANOVA, etc (table 1).

We also did household survey in the six cities to find out the residents’ knowledge about the six functions of the CHC. 500 questionnaires were completed in each city and altogether 3000 questionnaires were distributed. Finally 2563 questionnaires returned and found valid. The response rate was 85.45%. The following questions were analyzed (table 2).

6. Results

We have supplement the context about the research results:

<table>
<thead>
<tr>
<th>Table 2. The Residents’ Knowledge about the Function of CHC</th>
</tr>
</thead>
<tbody>
<tr>
<td>items</td>
</tr>
<tr>
<td>-------------------------------------</td>
</tr>
<tr>
<td>Prevention and control</td>
</tr>
<tr>
<td>Healthcare service</td>
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</tr>
<tr>
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</tr>
<tr>
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</table>

From table 2 we may find that the proportion of residents who know the function of medical treatment service is the highest, which is 98.6%, the next is the function of prevention and control. Awareness rate of “Community rehabilitation” is 42.2% because most of the residents consider the community rehabilitation as a part of the function of medical treatment. The residents have low awareness rate about the function of healthcare service and health education because most of the respondents think both functions should be implemented by health administration and are not the functions of CHC.

The residents have the same understanding about the importance of the five functions. All hope that
the CHC should be well constructed and effectively managed, but they have very low satisfaction to the services provided by the CHC at present. Satisfaction rates are all under 70% except “Health education”, which is 75.5%. The rate for “Medical treatment service” is only 21.9%, much lower than its awareness and importance rate. For “Community rehabilitation” the rate is the lowest, which is 18.5%. The main cause is the simple equipment level and poor service circumstance, which could not meet with their demands about rehabilitation service.

7. Conclusions

We have supplement the context about the conclusions: However, there is some problem in exerting CHC function:
(1) CHC service actuality is far from its required function. The rate of awareness about Community rehabilitation, Health care service and Health education is 42.2%, 35.3%, 31.8% respectively. These functions are not fully realized and utilized availably.
(2) At present, CHC main function is “medical treatment service,” Awareness rate of “Medical treatment service” is the highest, which is 98.6%. But the rate of “Satisfaction about the item” is the lowest, which is 21.9%.
(3) As a whole, utilization of big and middle hospitals is generally higher than that of CHC. Residents would go to local hospitals no matter their diseases are serious or not. This has led to the problem of too many people which described by Chinese Ministry of Health as “difficult to see doctor” and “expensive to see doctor” in some hospitals.

Reviewer’s report
Title: The analysis of utility efficiency of community hygiene resources in China
Version: Date: 17 December 2005
Reviewer: David Legge
Reviewer’s report:
Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
I think that the methods section is inadequate. Such a paper should report where the data came from (I believe they were from city officials rather than the agencies themselves but this should be noted). I presume that the authors also visited at least some CHCs and hospitals and that they spoke with various informants. Certainly their findings go beyond the relatively limited financial and throughput data reported. I think the methods section should describe the broad approach to this aspect of the data collection.

We have supplement the context about the research method including data sources, collection and result.

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
I think that it might be appropriate to acknowledge that the services being produced at the CHC and the hospital are not the same so the productive efficiency comparison is not really on a like with like basis.
Alleviating “Difficult to see doctor and Expensive to see doctor” is the important work of Chinese Ministry of Health in 2005. We investigated six cities in East China for their utilities of medical resources, identified whether CHC do the best it can in the community’s basic medical services.
Discretionary Revisions (which the author can choose to ignore)

I think that there are some aspects of CHCs in China that the authors should perhaps have mentioned. Many CHCs in China are owned and operated by hospitals and serve a strategic purpose of staking out the catchment area and funnelling customers into the higher earning environment of the OPD. Some CHCs are administered through local administrative offices and street committees which involve quite a different relationship with the hospitals. I would have been interested to know how many of the CHCs studied at each city were hospital administered and how many were independent.

In China, some CHC is affiliated to the hospitals, while some others are under direct management of local health bureaus.

On the other hand, We correct lexical and structural errors, and thus make the article more reader-friendly.

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<th>Just know it (%)</th>
<th>Think it important (%)</th>
<th>Satisfaction about the item (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevention and control</td>
<td>78.6</td>
<td>99.2</td>
<td>66.1</td>
</tr>
<tr>
<td>Healthcare service</td>
<td>35.3</td>
<td>72.8</td>
<td>62.6</td>
</tr>
<tr>
<td>Health education</td>
<td>31.8</td>
<td>76.1</td>
<td>75.5</td>
</tr>
<tr>
<td>Medical treatment service</td>
<td>98.6</td>
<td>83.6</td>
<td>21.9</td>
</tr>
<tr>
<td>Family planning</td>
<td>75.6</td>
<td>70.9</td>
<td>63.2</td>
</tr>
<tr>
<td>Community rehabilitation</td>
<td>42.2</td>
<td>67.9</td>
<td>18.5</td>
</tr>
</tbody>
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