Analysis of Rural Residents’ Participation in New Cooperative Medical System: A Case of Yunnan Province, China

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ABSTRACT

This research focuses on the problem of farmers’ unenthusiastic participation in the New Cooperative Medical System (NCMS) and took Yunnan Province as an example. We took the questionnaire approach to collect information of farmers’ participating action as well as participating willingness. Factor analysis and regression are used in this article to find the main factors affecting farmers’ willingness of participating NCMS. Solutions and suggestions to improve NCMS are also provided at the end based on previous analysis.

SOURCE OVERVIEW

The New Cooperative Medical System, hereinafter referred to as the NCMS, is an important measure for the Chinese government to establish a basic social security system. The system takes the form of “farmers’ voluntary participation, government subsidies” to provide rural residents with part medical insurance if insured farmer has significant disease. This looks-good social welfare policy, however, has not got active participation from farmers. The purpose of this article is to analyze and discuss the reason for farmers’ unenthusiastic participation. In order to research this phenomenon, we have adopted a questionnaire approach to take this study, as follows:

Geographical Choice of Investigation

We have selected Yatuan Village of Bole Town, Zhanyi County in Qujing City, Luoshui Town and Banqiao Town of Xuanwei City from the northeast of Yunnan Province; Danggou Group of Nanuoxiangzhe Village Committee, Yuanjiang County in Yuxi City from the central region of Yunnan Province; Xiaoyongping Village of

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Longyang District in Baoshan City from the west of Yunnan Province; and Yi-Nationality Village of Yuanyang County in Honghe State from the south of Yunnan Province as the field-visiting places. Our investigation is geographically representative as we have included different areas of four-direction in our investigate locations.

Observations Choice

The observations of the sample were randomly selected from rural residents, including residents live in village, town and county. The traffic conditions of survey places were neither better nor worse.

Investigation Time Period and Approach

We took questionnaire as the approach to investigate. The questionnaire was designed mainly with the reference to scholars’ experience of research in new rural cooperative medical system, combined with NCMS performance evaluation system and humanity and geographical characteristics of Yunnan Province. We finally filtered out 20 questions that possibly had significant impacts on farmers’ willingness of participating NCMS.

The time in which the investigation took place was the Spring Festival period in 2015. According to Chinese tradition, most migrant workers, students, agricultural workers would return home during the Spring Festival holidays. The sample included people from various backgrounds, and hence, was well representative of the population. In addition, the sample should be high credibility as the respondents of the sample were randomly selected in the five regions.

As a total, 100 questionnaires were issued during the investigation, and 98 questionnaires were collected and counted as valid data.

PRELIMINARY ANALYSIS OF THE OBSERVATIONS

Observations’ Basic Features

EDUCATION LEVEL

In the sample, education level which below junior high school was surveyed in 40.82%; the undergraduate level was accounted for 23.47%; and the junior college level was the least compared with others. Whose education level was junior college degree or above were either current students or migrant workers.

<table>
<thead>
<tr>
<th>TABLE 2-1. THE LEVEL OF EDUCATION.</th>
</tr>
</thead>
<tbody>
<tr>
<td>below junior high school</td>
</tr>
<tr>
<td>40.82%</td>
</tr>
</tbody>
</table>
MAIN OCCUPATIONS AND INCOMES

From Table 2-2 and 2-3, we can conclude that 47.96% of the sample was farmer who took farming as the main economic source of families; followed by migrant workers which was accounted for 21.43%. There were a few people working in commercial and service industry. The “others” includes students and workers in construction industry. Additionally, farmers were the majority of the sample and 48.98% of the observations’ per capita income was below RMB5000. We conceived that heavy economic burden may weaken farmers’ willingness to participate NCMS; farmers’ participation may increase along with the increasing of their annual income. The main reason behind this conception was that farmers would like to consider the expenditure and revenue from taking part in NCMS once their survival conditions were fully met.

<table>
<thead>
<tr>
<th></th>
<th>Farmer</th>
<th>Word in hometown</th>
<th>Officer in local village</th>
<th>migrant workers</th>
<th>commercial and service</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>47.96%</td>
<td>1%</td>
<td>3.06%</td>
<td>21.43%</td>
<td>9.2%</td>
<td>17.34%</td>
</tr>
</tbody>
</table>

TABLE 2-3. AVERAGE YEARLY INCOME FOR PER-PERSON(RMB).

<table>
<thead>
<tr>
<th></th>
<th>Under 5000</th>
<th>5000-10000</th>
<th>10000-20000</th>
<th>Over 20000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognition of NCMS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEVEL OF UNDERSTANDING</td>
<td></td>
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</tr>
</tbody>
</table>

Figure 2-1 shows farmers’ level of understanding to the NCMS. There were 67.35% farmers had a general understanding, 20.41% farmers had a better understanding; but still, there were 12.24% farmers said absolutely no understanding of NRCM.

FARMERS’ ACCESSING WAYS

Figure 2-1 indicates that the most three common ways farmers understand NRCM were oral diffusion among relatives, broadcasting in village and village mass meetings. Most farmers were not aware of the specific role of NRCM; their participation action was more like a “copycat behavior” as they did so just because of their friends and relatives’ involvement or the township committees’ participating requirements. After their participation, there was no sufficient continuously information that enabled farmers been
updated to new and deeper understanding of “new farming close”. These reasons together led that most farmers' understanding level of this system policy was still not high.

![Figure 2-2. Ways to Know the NCMS.](image)

**Farmers’ Satisfaction with NRCM**

Satisfaction with governmental compensation system

The following table 2-3 indicates that farmers’ overall satisfaction with NCMS was neither better nor worse. Relatively speaking, satisfaction with deductible and the range of compensation were slightly higher than the others, while that with compensation ceiling line was low. We understood that farmers’ satisfaction with each aspect of NCMS system may appear discrepancy due to different personal awareness, income, family conditions and physical health conditions, however, there was still an average of 20% of farmers reported displeased with the system on the whole.

<table>
<thead>
<tr>
<th></th>
<th>good</th>
<th>general</th>
<th>Not good</th>
</tr>
</thead>
<tbody>
<tr>
<td>deduction</td>
<td>26.53%</td>
<td>58.16%</td>
<td>15.31%</td>
</tr>
<tr>
<td>Compensation for top line</td>
<td>14.29%</td>
<td>54.08%</td>
<td>31.63%</td>
</tr>
<tr>
<td>scope of compensation</td>
<td>26.53%</td>
<td>57.14%</td>
<td>16.33%</td>
</tr>
<tr>
<td>Proportion of compensation</td>
<td>22.45%</td>
<td>59.18%</td>
<td>18.37%</td>
</tr>
</tbody>
</table>

Satisfaction with convenience of treatment and reimbursement procedure

Figure 2-2 shows that 27.55% farmers thought it was inconvenient to take medical treatment. The main reason was Yunnan is a mountainous area; medical care locations were far away from most rural residents’ home and they were traffic-inaccessible. And referring the procedures for the reimbursement of medical expenses, 43.88% of respondents said it was too complex.

![Figure 2-2. Convenience for NCMS.](image)
SATISFACTION WITH MEDICAL SERVICE

There are more poor villages in Yunnan mountainous area, medical conditions are relatively backward. Up to 42.86% farmers thought the medical service can’t meet the individual requirements. Two reasons leaded this phenomenon. Firstly, the harsh living conditions and low subsidies on the medical institutions in village have resulted in the loss of a large number of rural health personnel. Secondly, the obsolete equipments in village-level medical institutions and poor sanitation can’t bring actual benefits of NCMS to the farmers in such poor regions.

TECHNICAL TREATING AND SUGGESTIONS

Technical Treating

Given consideration of farmers’ participating willingness of the NCMS, this part will analyze what factor(s) affect(s) farmers’ participation in this system on behalf of the participants. The analysis will be conduct on the survey data which is obtained from the area which mentioned above.

In order to find out what factors are significant to farmers’ participating intension, we firstly use factor analysis method to extract data and then use the Two-variable Logistic Regression Model to analyze the factors which impact farmers’ willingness. There are 3 factors that finally come into the model. They are satisfaction with compensation (Significant Under the 1% Significance Level), compensation benefit (Significant Under the 10% Significance Level) and convenience of participation (significant under the 5% significance level). They are main influence factors for farmers’ willingness to participation the NCMS.

Political Suggestion

Carrying out of NCMS should comply the local farmer's fundamental states as well as their medical-care needs, and thus make the farmer's medical service is indeed guaranteed. The core of establishing a long-term sustainable NCMS. Based on the above analysis, we unfold some political suggestions relative to the factors that may affect farmers’ participation willingness.

STRENGTHEN CONSTRUCTION OF RURAL MEDICAL FACILITIES

Most of the farmers generally tend to be in larger hospital for treatment, rather than in village-level health agencies. This phenomenon has exposure that the medical personnel occupation quality is not high, medical equipment is backward and the level of diagnosis and treatment ability are low in rural health institutions to some extent. The provision of rural medical services has gradually cannot meet the actual needs of farmers. Yet when farmers choose to go to a municipal hospital, they get a little reimbursement of their medical expenses since reimbursement ratio of large hospital is
lower than that of rural health institutions. At the same time, long distance, inaccessible traffic and other inconvenience also increase farmer's medical cost. Considering such circumstances, relevant governmental departments should enhance the construction of grassroots medical institutions, increase investment in medical facilities, improve medical personnel’s quality, strengthen sanitary and service management, and eventually make the rural medical service can meet the farmers’ basic needs.

OPTIMIZE REIMBURSEMENT PROCEDURE AND IMPROVE COMPENSATION STANDARDS

Currently, the NCMS has covered nationwide rural area but with a low proportion of compensation. Meanwhile, the "catastrophic care" principle, to a certain extent, has restricted the compensation range of the NCMS that farmers participated in. On the other hand, the reimbursement procedure is complex, which increases the difficulty of reimbursement for farmers. Consequently, it is reasonable to suggest that the government and relevant departments should broaden the range of compensation, increase the standard of compensation and improve the proportion of medical compensation in the light of actual social and economic situation of each countryside or town, as well as farmers’ substantive requirements. In addition, government could minimize unnecessary process in reimbursement procedure in order to accelerate the disbursement of Farmers’ reimbursement funds.

CARRY OUT CORRESPONDING COMPENSATION POLICY

Corresponding compensation policy is mainly reflected in the following two aspects. First, government should reduce the adverse selection problem, which refers to that healthy people would not like to participate while infirm ones tend to take part in, that happened during the carrying out of NCMS process. This problem has caused that the government medical finance occurs deficit. In order to reduce the burden on the government, relevant departments could set up multi-level insurance costs; for example, determine the insurance level and amount-to-pay of this year by checking the insured person’s annual medical treatment situation and received compensation of lagged years. Secondly, policy makers could establish a one that especially for migrant workers. Since such workers always work outside for a long-period of time, they can hardly benefit from the NCMS even though they have participated; this can seriously reduce their enthusiasm of participation. Regarding to their situation, relevant government departments can then introduce remote medical treatment for migrant workers, for instance, run a qualification examination to establish reasonable remote medical compensation standard in terms of the original participating locations and medical payment of the insured persons.
ENFORCE SUPERVISION, MANAGEMENT AND EXTENT OF INFORMATION DISCLOSURE

In the implementation of NCMS, government plays a decisive role. According to current researches, some farmers do not fully trust the medical system. One of the measures that ensures the NCMS sustainable is to strengthen supervision over fund raising and the operation process. The government may periodically publish the use of the funds of NCMS, and at the same time, establish the mass-supervision-and-feedback mechanism, so that grasp participated farmers’ actual demand.

INCREASE THE PROPAGANDA OF NCMS

Most villages in Yunnan are located in mountainous area; traffic inconvenience and the backward of communication have severely hampered the propaganda of NCMS in such rural areas. Farmers cannot know to related information through effective ways, and needless to say, it is difficult for them to generate active participating willingness. Therefore, it could be effective to promote farmers’ participation by strengthening the propaganda of NCMS, farmers’ consciousness of health risk and farmers’ recognition of that system.

BREAK GEOGRAPHIC LIMITATIONS AND ACHIEVE NATIONWIDE INSURANCE

A large number of rural labor goes out to work, they would not like to participate in NCMS of their residence due to noting living at home in the most of time, and neither would them to participate in the system of their living place due to many restrictions. Regional limitations have seriously blocked the participation willingness as well as participation rate of these migrant workers. Therefore, only breaking the geographic isolation can make the farmer truly benefited from then NCMS.

REFERENCES

1. Shicheng Lv, Hua Li; Social Medical Insurance: Tendency of the NCMS [J]. Theoretical Exploration 2011 (2).
2. Chuangle Ge; A Study on Farmers’ Participation Willing for NCMS in West of China [J]. Anhui Agricultural Science 2010. 5.