Community Service in Home Care for the Aged in Beijing

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Abstract. Increasing population aging is a trend in social development, so it is crucial to explore how to better provide old-age services. This paper uses the Chinese Longitudinal Healthy Longevity Survey’s 2014 cross-sectional data, and uses the logistic regression model to study the impact of four types of community services on the life satisfaction of the elderly, and analyzes the status of community service supply and demand in Beijing. Found that: Mental comfort services have the greatest impact on the life satisfaction of the elderly, followed by legal aid, and finally health services and life assistance. The four types of community aged care services in Beijing are in short supply. At the same time, there are problems such as single service types, fewer full-time staff and single operation methods. It is recommended to mobilize the power of all parties in the society to improve the old-age service system and increase the types of community services.

1. Introduction
In recent years, the proportion of China's aging population has been rising. The number of elderly people over 65 years old has increased from 88.21 million in 2000, accounting for 7% to 166.58 million in 2018, accounting for 11.9%. According to the National Committee on Aging, the number of elderly people in China will exceed 400 million in 2050, and the aging rate will increase to 30%, accounting for about a quarter of the global elderly population. Beijing is one of the earliest and most serious areas of population aging in China. In 1990, the population of people over 60 years old in Beijing reached 1.1 million, accounting for 10.27%. By the end of 2017, the elderly population aged 60 and above 3.33 million, accounting for 24.5%. The aging population continues to make the elderly’s pension problems worse.

Beijing proposed to build a “three-level and four-level” socialized aged care service system, use community resources to carry out old-age care, and provide help and support to the elderly in need, so that they can comfortably support the elderly in a familiar environment. Although certain results have been achieved, there are also problems such as insufficient supply and too few full-time staff.

2. Empirical analysis
2.1 Regression model construction
2.1.1 Data source
This article uses the cross-sectional data of the CLHLS in 2014. The survey covers 23 provinces, autonomous regions and municipalities across the country. The survey targets elderly people aged 65 and over and adult children aged 35-64. The total number of samples is 7192. One. This article will sample the age of less than 65 years old in the database and the non-home elderly (topic A5-1 "Who are you living with now", select 3 in the nursing facility), and select 8 community services and other service options. Samples that were not answered were excluded to eliminate errors in data acquisition, and the final number of samples was 6654.

2.2.2 Empirical model
This paper studies the impact of community service in the home care for the elderly on life satisfaction, and the results are divided into two types: satisfaction and dissatisfaction. Therefore, using the binary logistic model for analysis, the model is as follows:

\[
\text{logit}(P) = \ln\left(\frac{p}{1-p}\right) = \beta_0 + \beta_1 + \beta_2 + \cdots + \beta_k + u
\]
P represents the probability that an elderly person will be satisfied with life in the case of obtaining community services. The independent variable x represents the situation of community pension service, and the control variable z includes gender, presence or absence of a relative, presence or absence of a pension, self-care ability, and mental status variables. The self-care ability of life is measured by the basic daily living self-care ability (ADL), which is measured by the questions E1-E6, taking a bath, dressing, going to the toilet, walking indoors, controlling bowel movements, and eating. Any assistance "thinks that life can take care of itself, or life can't take care of itself." Descriptive statistics of variables are shown in Table 1.

Table 1 Descriptive statistics of variables (N=6654)

<table>
<thead>
<tr>
<th>variable name</th>
<th>Variable description</th>
<th>Mean</th>
<th>Standard error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life satisfaction</td>
<td>satisfaction = 1, not satisfaction = 0</td>
<td>0.6273</td>
<td>0.4836</td>
</tr>
<tr>
<td>Community care service</td>
<td>can = 1, can't = 0</td>
<td>0.6160</td>
<td>0.6399</td>
</tr>
<tr>
<td>Life assistance</td>
<td>can = 1, can't = 0</td>
<td>0.1255</td>
<td>0.3313</td>
</tr>
<tr>
<td>Health service</td>
<td>can = 1, can't = 0</td>
<td>0.5107</td>
<td>0.4999</td>
</tr>
<tr>
<td>Mental comfort</td>
<td>can = 1, can't = 0</td>
<td>0.2078</td>
<td>0.4057</td>
</tr>
<tr>
<td>Legal aid</td>
<td>can = 1, can't = 0</td>
<td>0.2708</td>
<td>0.4057</td>
</tr>
<tr>
<td>gender</td>
<td>male = 1, female = 0</td>
<td>0.4549</td>
<td>0.4980</td>
</tr>
<tr>
<td>pension</td>
<td>have pension = 1, no = 0</td>
<td>0.2041</td>
<td>0.5321</td>
</tr>
<tr>
<td>living with a loved one</td>
<td>live with others=1, live alone=0</td>
<td>0.8059</td>
<td>0.3954</td>
</tr>
<tr>
<td>Self-care ability</td>
<td>can take care of themselves=1, can't = 0</td>
<td>0.7332</td>
<td>0.4423</td>
</tr>
<tr>
<td>Mental condition</td>
<td>have stronger loneliness = 1, weaker = 0</td>
<td>0.2904</td>
<td>0.4659</td>
</tr>
</tbody>
</table>

According to model (1), we add control variables to the model, and the regression results are shown in Table 2. Model 1 is only the independent variable, and then Model 2 is the individual characteristic variable with age, pension, and whether or not to live with relatives. Model 3 is a control variable that incorporates self-care ability and mental status.

Table 2 Logistic model estimation results

<table>
<thead>
<tr>
<th>variable</th>
<th>model1</th>
<th>model2</th>
<th>model3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community care service</td>
<td>0.3091***</td>
<td>0.2929***</td>
<td>0.2892***</td>
</tr>
<tr>
<td>(0.0498)</td>
<td>(0.0499)</td>
<td>(0.0504)</td>
<td></td>
</tr>
<tr>
<td>Life assistance</td>
<td>0.1681**</td>
<td>0.1770**</td>
<td>0.1668**</td>
</tr>
<tr>
<td>(0.0780)</td>
<td>(0.0786)</td>
<td>(0.0794)</td>
<td></td>
</tr>
<tr>
<td>Health service</td>
<td>0.2380***</td>
<td>0.2223***</td>
<td>0.2228***</td>
</tr>
<tr>
<td>(0.0508)</td>
<td>(0.0512)</td>
<td>(0.0518)</td>
<td></td>
</tr>
<tr>
<td>Mental comfort</td>
<td>0.6153***</td>
<td>0.6146***</td>
<td>0.5850***</td>
</tr>
<tr>
<td>(0.0670)</td>
<td>(0.0676)</td>
<td>(0.6824)</td>
<td></td>
</tr>
<tr>
<td>Legal aid</td>
<td>0.3149***</td>
<td>0.2839***</td>
<td>0.2683***</td>
</tr>
<tr>
<td>(0.0585)</td>
<td>(0.0589)</td>
<td>(0.0594)</td>
<td></td>
</tr>
</tbody>
</table>

From the results of the model, the results are significant. The mental comfort and legal aid services have the greatest impact on life satisfaction. After adding various control variables, although the regression coefficient decreases slightly, the control variables are Various community services have a certain impact on improving the life satisfaction of the elderly, but the impact is not significant. Among the community aged care services, the services of spiritual comfort have the greatest impact on improving the life satisfaction of the elderly, followed by legal aid, health services and life care.
2.2 Various community service conditions in Beijing

In order to study the supply and demand situation of community service in Beijing, we select the data of Beijing, and use the topic F14 “What community services are provided by your community” for each community service supply. Use community service needs in Title F15, "What community services do you want your community to provide?" Then get the supply and demand status (mean) of Beijing for these four community services, as shown in Table 3.

Table 3 Status of community service supply and demand

<table>
<thead>
<tr>
<th>service</th>
<th>supply</th>
<th>demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life assistance</td>
<td>0.3810</td>
<td>0.4524</td>
</tr>
<tr>
<td>Health service</td>
<td>0.4524</td>
<td>0.5238</td>
</tr>
<tr>
<td>Mental comfort</td>
<td>0.1667</td>
<td>0.4524</td>
</tr>
<tr>
<td>Legal aid</td>
<td>0.3214</td>
<td>0.5007</td>
</tr>
</tbody>
</table>

As can be seen from the above table, there is a situation in which all the old-age services in Beijing have less supply than demand, especially for the difference of mental comfort services. At the same time, we have drawn the satisfaction of life-satisfying services for the elderly. The impact is most significant, so Beijing urgently needs to improve this situation and increase the demand for various types of aged care services, especially the services of spiritual comfort.

3. Policy suggestion

Build a multi-style home care service and strengthen the comprehensive service capacity of the home community. In terms of spiritual comfort, enrich the spiritual and cultural life of the elderly and improve the social participation of the elderly; in terms of legal aid, pay attention to the special needs and actual conditions of the elderly, and at the same time strengthen the aging of the country's national conditions, create a pension, filial piety, Respect the old social environment; in the aspect of health care, strengthen the training of professional nursing staff, strengthen the health knowledge publicity, and enable the elderly to establish correct health concepts; in the aspect of life care, improve the regular on-site service of community workers and provide targeted effectiveness service.

References