The Need and Its Influence Factors for Community-based Rehabilitation Services for Disabled Persons in One District in Beijing¹

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Purpose To explore the needs for basic community-based rehabilitation services for disabled persons in Xuanwu District, Beijing, China, and to identify factors which influence disabled persons to accept rehabilitation services. **Method** One hundred and eight disabled persons were selected by systematic sampling and simple random sampling to assess their needs for community-based rehabilitation services. **Results** Of the interviewees, 57.4% needed the community-based rehabilitation services, but only 13.9% took advantage of it. The main factors influencing the interviewees to accept these services were cost (P<0.05), knowledge about rehabilitation medicine (P<0.05); and the belief in the therapeutic benefit of the community-based rehabilitation services in Beijing and the needs for these services by disabled residents underscoring the need for improved availability, and for additional research.

Key words: Disabled; Rehabilitation services; Influence factors; Functional Independence Measure (FIM)

INTRODUCTION

Rehabilitation medicine (RM) is one of the four medical practices, along with prevention, treatment, and health care medicine, forming an integrated medical system^[1]. Both institution-based and community-based rehabilitation services have formed a comprehensive system providing timely and effective treatment for disabled residents in many countries^[2].

There is a shortage in China for these services. Many factors may influence the demand of the services^[3]. However, no study has been investigated whether these factors have statistical significances, and which condition of the needs for community-based rehabilitation services for the disabled residents in Beijing is. This study is to research these problems.

METHODS

The investigation was carried out in 8 resident communities in Xuanwu District, Beijing. One hundred and eight residents were selected using systematic sampling and simple random sampling. The survey was conducted by face-to-face interviews. All interviewers were trained.

Demographic characteristics: sex, age, status of the interviewees' disability; and so on was collected. They were also assessed by the Functional Independence Measure (FIM)^[4]. It has been widely used throughout the world, including China^[5].

The data was recorded in EPIDATA 2.1, and analyzed by SPSS 11.5.

RESULTS

General Data

One hundred and eight interviewees completed the questionnaire.

Demographic characteristics Of the interviewees, 64.8% were male and 35.2% were female. Their ages ranged from 31-80 years. The education level of 66.6% was high and middle school. The occupations of 63.9% were difficult to classify.

Status of the disability Of the interviewees, 78.7% had movement impairments, 6.5% had sensory impairments, 23.1% had speech or hearing or visual disabilities, and 11.1% had mental disabilities.

Diseases and injuries to the peripheral nervous system, fracture, low back pain, and injuries due to

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0895-3988/2006 CN 11-2816/Q Copyright © 2006 by China CDC accidents were the leading reasons for disability (69.4%).

66% of interviewees suffered from diseases or injuries for twenty years.

Medical expense The income of 28.7% of interviewees is from unemployment benefit. The cost of medical expenses was less than 5% of the total income for 87% of the interviewees.

The way of medical payment by interviewees included public health care, basic medical insurance (65.7%); at their own expenses (33.3%), and others.

79 interviewees (73.1%) thought the medical expenses were too high.

Selection of the rehabilitation site Of the interviewees, 78.7% lived close to the institutions with the service, but only 50% utilized these institutions.

The needs for each kind of rehabilitation service Most interviewees needed for rehabilitation training and treatment. The needs for rehabilitation knowledge occupied 59.3%, 78.1% among which wanted courses and reading materials about rehabilitation, and 46% wanted rehabilitation consultation.

Influence Factors

The acceptance of rehabilitation services within 3 months of the interview was used as the standard for interviewees to need the services. There were 21 factors might influence interviewees' needs to accept it, such as age, occupation, method of payment, and so on. The Chi-square test was used to analyze the influence factors. The results showed that three factors had statistical significances.

The Economic Factors

Seventy five interviewees (69.4%) considered the fee before accepting rehabilitation services. Compared with the group those who did not consider this factor (30.6%), the constituent ratio of interviewees who accepted the services was significantly different (Table 1).

TABLE 1

Relationship Between Considered the Payment Factor Before Seeking a Doctor, and Accepted the Services Recently

| Considered the Payment Before Seeking a Doctor | Accepted Rehabilitation Services Within 3 Months | |
|--|--|----|
| | Yes | No |
| Yes | 7 | 68 |
| No | 8 | 25 |

Note. P=0.047.

Understanding Rehabilitation Services

The component proportion between the degree of understanding of rehabilitation services and accepting it , were significantly different among these groups (P=0.017). 70% of the interviewees had little or no understanding of these services.

Attitude Towards the Therapeutic Benefits of Rehabilitation Services

The difference between the group of interviewees who believed rehabilitation services were beneficial and accepting it, was significantly different with the group of interviewees who did not believe (P=0.007, Table 2).

TABLE 2

| Relationship Between Believing in the Therapeutic Benefit of |
|--|
| Rehabilitation and Seeking the Services |

| Had Accepted Rehabilitation Services Within 3 Months | |
|---|-------------------|
| Yes | No |
| 14 | 57 |
| 1 | 36 |
| | Services V Yes |

Note. P=0.007.

DISCUSSION

Major Factors Influencing the Need for Rehabilitation Services

Economic factor The result (ibid) showed that economic factors may be a key factor influencing patients' decision to accept services. Financial resources may be priority to disabled interviewees. Most were unemployed or retired, and some (28.7%) only depended on their families or social subsidies. Therefore, it was reasonable for them to consider medical expenses before they saw a doctor. If they had disability for a long time, they would not accept rehabilitation because of the higher medical expense. They may have missed optimal chance to recover, made the disabilities more severe, and put a greater burden on society.

Knowledge of rehabilitation service Most of the interviewees did not have a deep concept on RM, and did not realize the importance of it. Hence to advertise community-based rehabilitation will be helpful for residents to know effects of RM and accept it more.

Belief in the therapeutic benefit of the community-based rehabilitation services Among the interviewees who accepted the rehabilitation services, those who believed in the therapeutic effects of rehabilitation service were much more than those who did not believe in it, but the former disabled who accepted it were only 20% in that group of interviewees. Although 97.1% of the interviewees did not live far from the institutes with the service, only 50% received it. Main reason might be the misunderstanding to the service of the interviewees. Therefore, providing some courses, pamphlets or brochures explaining RM is important for them to accept it.

CONCLUSION

A considerable gap exists between the supply of community-based rehabilitation services in Beijing and the needs for these services by disabled residents underscoring the need for improved availability.

Suggestion: reinforce the community-based rehabilitation services to make sure that the residents who need the service can utilize it in their community.

Carry out health education on the knowledge of community-based rehabilitation to make disabled can

utilize the services timely.

Put the therapeutic cost of rehabilitation services into the system of medical basic insurance for serious diseases.

Provide more jobs to the disabled to allow them to become financially independent.

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