Research on rehabilitation in the geriatric health services facility [Abstracts]

[Background]

The reimbursement for nursing care services has been revised from a perspective of reinforcing "return-to-homecare" and "homecare support" as emphasized features of geriatric health services facility in the revision of the fee-schedule of long-term care insurance services on April 2015.

In order to emphasize the functions of such facilities to enable patients to return home, it is crucial to put rehabilitation aiming at home return into perspective.

A previous study conducted at Roken showed that the functions of facility users who were capable of returning to homecare were improved during their stay in the facility, but they started deteriorating soon after leaving the facility.

Another study also showed that the areas of toileting, grooming, and putting on/taking off clothes were significantly improved during the facility stay among those who returned to home

Therefore, the following aspects were reviewed in this study: 1) rehabilitation necessary for patients to return to homecare, 2) specific rehabilitation activities, and 3) how workers in rehabilitation-related occupations and other occupations get involved in this process, and the effects of healthcare facilities categorized as the return-to-homecare reinforcing type, as well as other services.

[Purposes]

Based on the above background, the purposes of the study are as follows:

- 1.Review the rehabilitation aiming at returning-home care managed at geriatric health services facility.
- 2.Collect data related to the fee-schedules of long-term care insurances such as "short-term intensive rehabilitation" and others to understand their effect on the functional improvement.
- 3.One of the necessary functions for elderly people to return home is the ability to go to the bathroom (toileting) all by themselves. The training involves multiple specialties including rehabilitation, medical care, nursing care, and homecare services. Thus, a survey will be conducted for the current situation with regard to the rehabilitation management from a perspective of collaboration of multiple lines of work.

[Method]

Two types of surveys were conducted in this study: 1) the facility survey and 2) the user survey.

In the facility survey, the facility survey slips were sent by mail to all member facilities (3,589 facilities) of Japan Association of Geriatric Health Services Facilities. As respondents to the user survey, about five users were selected at each facility among those who were placed in the facility between August 1st and early October in 2015 (excluding short-term users) and had agreed to participate in this study. Their responses to the initial survey (conducted at the time of moving into the facility) and the follow-up survey (conducted 3 months later or at the time of leaving the facility) were collected by mail.

[Findings]

The facility survey was responded by 883 facilities. As to the user survey, 2,942 cases for the initial survey and 1,820 cases for the 3-month-later survey were collected, and among those 1,671 cases were linkable. For the purpose of this study, we focused on the cases of the 1,280 elderly people whose length of stay at the facility was less than 90 days. According to the findings from the user survey, with regard to specific rehabilitation activities provided by geriatric health services facility, muscle-strengthening exercises accounted for the majority of activities (84%) followed by walking training. In terms of ADL, toilet training accounted for the majority of activities. There is no significant variation in this trend in the initial and the 3-month-later surveys. As to the breakdown of the toilet training assessors, the majority were care-workers, which was followed by nurses. Meanwhile, medical doctors were involved in making plans for rehabilitation to the greatest degree, which was followed by PT and other rehabilitation workers, care-workers, and nurses, all of which accounted for more than 70% of involvement. With regard to the achievement status of the rehabilitation plan and nursing plan, 90% of the rehabilitation planning objective was achieved or mostly achieved, while only 40% of the nursing planning objective was achieved. For the 67 patients using a catheter, the goal was to remove the catheter from 22% of the patients; however, the catheter was actually removed from only 1.7% of the patients.

When comparing and analyzing the initial survey and the after-3 months-survey, the results of the ICF staging, FIM, and Timed Up & Go test demonstrate significant improvement after 3 months in terms of the barometer for overall "mobility and ADL" (walking + basic movement + toileting + bathing) and "social participation" (leisure and socializing). It is considered that functional data such as TUG are improved first, which will then lead to improvement of "activities" and "participation". This way, the rehabilitation as a whole is made up with a series of improvement one after another. When comparing the functional categories of geriatric health services facility, the facilities of reinforcing returning-to-homecare type (home return rate >50%) showed greater degree of improvement than other types of facilities, which demonstrates that

specific goals such as "returning-to-homecare" makes the purpose of rehabilitation clear. Compared to these effects, the effect of short-term intensive rehabilitation tended to be smaller.

Furthermore, the toileting behavior, especially the needs of "going to the bathroom all by themselves" and the involvement of multiple work areas, such as rehabilitation, medical services, nursing, services by care-workers, and homecare services, were studied. First, in observing the improvement in patients' toileting, 54% of the patients who had difficulty using the bathroom without assistance when they just moved into the facility (Stage 1) showed improvement and started going to the bathroom alone. Moreover, half of them eventually became able to use the toilet without care-worker's assistance.

[Discussion]

A true picture of the rehabilitation in geriatric health services facility became apparent in this study. The service of rehabilitation is not only provided by the rehabilitation staff members working under instructions of a medical doctor, but in reality, rehabilitation is practiced in collaboration of medical doctors, nurses, care-workers, nutritionists, and counseling workers. On the other hand, the current rehabilitation practice set the goal of the rehabilitation to improve physical capabilities through leg functional training and walking exercise. However, the main program of rehabilitation also remained the same as leg functional training and walking exercise after three months stay at facility. This suggests that the purpose of the rehabilitation might become rigid.

From these, the purpose of the rehabilitation should be attained in collaboration of multiple work areas, but not just a single rehabilitation worker. It is necessary to set a goal by simulating life scenes starting from leg functional training and walking exercises, and to ADL such as toileting and bathing, and then to IADL and social participation. Other than specialized rehabilitation workers, care-workers are also possible options as actual rehabilitation providers. Since care-workers take care of facility users around the clock, they may be able to approach real life rehabilitation by leveraging the essential care given by specialized rehabilitation providers. It is important to transfer the skills of the rehabilitation worker to other professions in the facility while conducting periodical assessments during the care. In order to do this, it is desirable to further prevail ICF staging, which is ICF-based assessment method to the specialized rehabilitation providers.

In the type of geriatric health services facility with higher home return rate (>50%), the tendency of improving functions, ADLs, IADLs, and social participation of the elderly has been acknowledged as higher than other types of facilities. This also suggests that the rehabilitation with a specific goal of returning to homecare may result in giving higher effects.

This study also emphasized the importance of rehabilitation for toileting. It indicated that the functional decline in ADL as a cause of the incontinence is related to the use of the urinary catheter. Therefore, there is a possibility of improving the incontinence by improving ADL through rehabilitation.

Higher functional improvement was confirmed in the observation of the index of ICF staging and FIM in cases of facilities with higher home return rate (>50%), and elderly people who received short-term intensive rehabilitation (physical and/or cognitive). Also, there was a tendency that a variety of programs were implemented for the users who showed improvement in the first 3 months. As for the involvement of workers from multiple areas, it was found that a number of work areas were involved both in planning and rehabilitation provision regardless of good or bad conditions.

[Conclusion]

The rehabilitation at geriatric health services facility is effectively functioning for the goal of returning-to-homecare of the users. The facilities with higher home return rate (>50%) showed a more significant effect on functional improvement of elderly people as well as the multi-professional collaborations in rehabilitation. This suggests great importance of having a specific purpose, "returning-to-homecare" in the rehabilitation. Topics such as providing a variety of rehabilitation programs were brought up. In particular, a greater positive effect on toilet training rehabilitation is expected. On the other hand, it was also brought up that the current rehabilitation programs are not necessarily user-oriented. For example, there may be disproportionate emphasis on leg function training in the rehabilitation programs provided in geriatric health services facility. Since there should be a specific goal which is easy to understand for the rehabilitation receivers, it is necessary to provide a rehabilitation program that is based on real-life situations. Therefore, the rehabilitation program must be reviewed to depart from the one focusing only on leg-function training to a more specific training menu that corresponds to life scenes.

In addition, more effective rehabilitation can be provided to elderly people through the cooperation of other care specialists in the facility. It is expected that the effect of rehabilitation would improve further by making use of the essence of the care provided by specialized rehabilitation experts because care-workers take care of the patients around the clock. Also, the collaboration of workers in multiple areas may be achieved by using the common language such as ICF staging.