

Community Based Physical Fitness Class for the Healthy Aged Society in a Local City of Japan

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Abstract

Yukuhashi city is the medium sized local government with 71,906 population of which 16,238 were more than 65 years old (22.6%; end of March, 2010). We have made effort to organize a series of health promotion activities in order to realize a healthy aged society. In this article, we would like to introduce one of our community based physical fitness class.

Key words: Physical fitness class, community health, aged, Japan

❖ Introduction

Yukuhashi city is located at the north-east part of Fukuoka prefecture. It has 71,906 population of which 16,238 were more than 65 years old (22.6%; end of March, 2010). Among the aged, 14.2% were received LTCI services that was under the average rate of Fukuoka prefecture. From the beginning of LTCI scheme, Yukuhashi city has provided various types of preventive services for the frail aged, i.e., fitness class, catering services, mobile wheelchair rental services. Behind these services, we have a hypothesis that early interventive and preventive services could control the increase of users. Because of these efforts, Yukuhashi is the local government of the cheapest LTCI premium in Fukuoka prefecture (4,000 JPY per month per person, in 2012).

Another characteristic of Yukuhashi city is that there were about 70 voluntary fitness classes jointly organized by Yukuhashi city and Yukuhashi Council of Social Welfare, so called Iki-Iki saloon (active saloon). This saloon is held at the community hall that exists for each primary school district. This saloon is

effective to facilitate the community health activities. In this report, we describe this joint trial to manage the community based fitness class program.

❖ The Fitness Class for Prevention of Frailty

As a result of analysis of LTCI related data, we have the evidence that the aged with osteo-muscular problem is the most important risk group for future LTCI service users. For this reason, we tried to screen out such high risk group according to questionnaire survey by post. We have distributed the questionnaire to 430 aged persons who were randomly picked up from the citizen registry. We have received 307 responses (71.4%), of which 51 aged were evaluated as high risk group. We invited them to participate at the fitness class and finally 44 aged agreed to attend the class. In order to screen out the aged with cardiovascular problems who were not suitable as participants, all candidates received a medical check by their family doctors before attending the program.

Table 1 shows the content of program. The class was organized twice a week between September to December, 2011. For each time, three to four instructors (one is OT or PT) attended the class. In order to standardize the content of program, we have prepared a manual and organized a staff meeting for mutual understanding.

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Table 1 Daily schedule of fitness class

9:30AM	10:00 AM	10:30 AM	11:15 AM	11:30 AM
Reception Health check up (1)	Short lecture (2) Warming up (3) Stretching	Fitness activities - Using chair - Using mat (4) - On standing position (5) - Using Thera-Band (6) - Using Balance pad	Cooling down	Staff meeting

Numbers in parentheses correspond to photo below



Figure 1 Health check-up



Figure 2 Short lecture



Figure 3 Warming up



Figure 4 Activities using mat

In order to safely improve the physical strength of participants, activity level has been gradually increased, i.e., activities using chair → activities using mat → activities on standing position → activities using Thera-Band → activities using Balance pad. In order to motivate the participants to actively attend the class, we have made effort to create a friendly atmo-

sphere and to stimulate the mutual communication among them. Because of this effort, finally all of participants complete the program.

According to the open end questionnaire held at the end of class, most of the participants explained the positive effect of the class as followings:

- Reduced knee pain and lumbago



Figure 5 Activities on standing position

- Increased easiness of walking
- Increased easiness of waking up from the bed and standing up
- Reduced anxiety for slipping and fall

❖ Conclusion

It seems that this kind of community based physical fitness class is positively accepted by the elderly. Most of them explained their will to continue the physical activities and requested us to continue the class. However, it requires the budget. In fact the cost of this program was 2 million JPY of which 1.45 million JPY was for hired staffs. Two million JPN for 44 aged persons seems to be too costly as a publicly financed program. For this program, we could obtain the financial support from the Ministry of Health, Labour and Welfare as a model project. It does not seem possible to continue this kind of program without such a financial support. Thus we have to arrange a more feasible program from the financial viewpoint.



Figure 6 Activities using Thera-band

For example, the Iki-Iki hyakusai Taiso (the active centenarian physical fitness program) in Kochi city will be such a model¹⁾.

Furthermore, we have to evaluate the financial effect of this kind of activity, i.e. reducing cost of long term care insurance and medical insurance. For this purpose, we participate to the official program to analyze the health expenditures (medical insurance and LTCI) organized by Fukuoka prefecture. If the cost reducing effect is more than the cost of program, we can obtain enough budget. Now we are analyzing the cost effectiveness of our prevention activities using the above mentioned system. We would like to report the result of this investigation in the future literatures.

❖ Reference

- 1) Kochi city : <http://www.city.kochi.kochi.jp/soshiki/37/seijin-kaigoyobou1-2.html> (access 10 July, 2012).