

# FREE TIME ACTIVITIES OF SLOVENIAN ELDERLY WOMEN

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**Abstract:** *The main purpose of this study was to determine the ways of spending free time among Slovenian elderly women who participated in the project Sport for Healthy Life. A sample consisted of 64 women from the Central region of Slovenia, ages 66 to 78, divided into two groups: project members and a control group. Data for this study was gathered and completed in November 2008. The instrument used for analyzing the free time activities of elderly women was A Physical Activity Questionnaire for the Elderly (VOORRIPS, et al., 1991). The data has been processed by SPSS 8.0 software for Windows programme (BRYMAN & CRAMER, 1999). The level of statistical significance was set up at  $p < 0.05$ . Basic statistical characteristics were computed (absolute, relative frequency). The probability relations among the presented variables have been tested by the Chi-square. The main aim of this research is to obtain information how elderly women spend their free time with regard to no sport or sport related activities. The most frequently reported no sport related free time activities were predictable - watching TV and gardening, while among sporting free time activities walking in various forms (walking into nature, fast walking, slow walking) dominated. The presented data suggests that, due to the popularity of walking, cycling, mountaineering and swimming, and the time needed for practicing them, we could extend the creation of free time programmes and implementation into community centres and contribute to the quality of life of a wider population of the elderly.*

**Key words:** *elderly women, free time activities, sport activities, usage of free time*

## 1 Introduction

<sup>1</sup>Many studies have been undertaken to examine the effects of various physical activity programmes on the performance of the elderly. While the young people do the sport for fun and body development, the grown ups wish to maintain the body shape and strength, the elderly hope to slow down the aging process (Ulaga, 1998). Daily activities are important for the elderly and have positive consequences on safety and independence in home

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environment (Finkel, 2003). Free time activities, either not sport related or sport related among elderly women<sup>2</sup> present valuable information which enables us to plan activities more systematically and offers us the possibility of considering the personality of the senior population and their demands.

When choosing their favorite free time activities, the elderly face both objective and subjective barriers. For the elderly population, active participation in free time activities contributes to greater independence, a fundamental factor in everyone's life. Five lifestyle factors: physical activity, avoiding excessive alcohol, not smoking, avoiding excessive stress, and healthy diet, are all of significance in the maintenance of health and well-being (Glendhill, Mulligan, Salfrey, Sutton, & Taylor, 2007). The inactive elderly had higher depression scores than more active individuals, both in terms of light and strenuous exercise (Lindwall, Rennemark, Halling, Berglung, & Hassmen, 2006). Older individuals who were physically active were more than two times more likely and those with moderate levels of activity were over one and a half times more likely to be aging successfully than respondents who were not physically active (Baker, Meisner, Logan, Kungl, & Weir, 2009).

Understanding participants' physical activity experiences over the life course is an essential step toward the development of appropriate and effective physical-activity-promotion initiatives (Witcher, Holt, Spence, & O'Brien Cousins, 2007). The most popular activities among seniors were cycling, walking, swimming, and gardening. (Stiggelbout, Hopman-Rock, Van Mechelen, 2008). An overview of the sports activities of the Slovenian women proves that the most frequently practiced activities were walking and strolling (27%), swimming (20%), cycling (18%), mountaineering (14%), aerobics (12%), dancing (12%), morning gymnastics (12%), badminton (10%), running (9%), and alpine skiing (8%), (Sila, 2004). Active physical involvement of the elderly significantly contributes to the health status, longer living, functional abilities and subjective well-being (Chodzko-Zajko et al., 2009). Among grown up Slovenians in 2009, there were 23% inactive persons according to sport participation in their free time, while results for the European Union show the equivalent of 39% (Sila, 2010). Strojnik (2007) reported that 20% of women and 18% of men over 65 in Slovenia are practicing sport on a regular base. In the United Kingdom 10% of older adults (65+) are sufficiently active (Taylor et al., 2004) in United States this rate was 21.8% (Kruger, Carlson, & Buchner, 2007). A higher rate of sufficiently active older adults is observed in Australia, 55% (Brownie, 2005).

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Findings suggest that being physically active might not only have health benefits for older persons, but also leads to lower health-care costs (Martin, Paige Powel, Peel, Zhu, & Allman, 2006). Alexandris (2003) and Tokarski (2004) reported the traditional excuses among ageing women and men for not being involved in sport related activities range from 'I am O.K. without sport,' 'I don't have enough time,' 'I have other hobbies,' 'I don't have enough money,' 'I don't find friends suitable for practicing sport together,' 'Sport makes me tired' to 'Sport activity had no positive effect on me.' Such excuses of the elderly for not taking part in the sport related activities are de-motivational factors (Vlachopoulos & Gigoudi, 2008).

The health related quality of life of older adults is associated with both the intensity and the total volume of habitual physical activity undertaken and is significantly poorer in physically inactive older individuals (Yasunaga, Togo, Watanabe, Park, Park, Shephard, & Aoyagi, 2006). Strength and endurance for elderly could be gained through activities such as walking, strolling, stationary biking, housework, gardening, play with children, swimming and running with speed of 7 km/ per hour (Mišigoj-Durakovič, et al., 2003). Various researchers reported the unquestionable contributions and benefits of physical activity for the elderly regarding the cardio-vascular and muscular system (Oražem Grm, 2008), bone mass (Strojnšek et al., 2008), arteriosclerosis (Sasaki, 2006), thrombosis (Wang, 2006), cholesterol level (Hardman, 1999) and diabetes type-2 (Ryan, 2000). Regular physical activity is also extremely important for the mental health of the elderly (Mlinar, 2007). Socio-cultural situation should be considered also when designing interventions, for example walking, to increase the physical activity in older adults (Strath et al., 2009). Walking could keep sufficient mobility level for older adults (Marsh et al., 2009). Stiggelbout et al., (2008) reported that walking highly motivates older adults and fulfils their expectation to be physically active. A study about the most desirable sports among elderly women in Slovenia showed that the most prevalent sports according to their wishes were extended from bocchia, bowling, cycling, dancing, trekking, swimming, and volleyball to Nordic skiing, orienteering, and fishing (Vute, Novak, 2010).

### **The main aim and goals**

The main aim of this research is to obtain information how elderly women spend their free time. The paper analyses the responses of elderly women in order to find out:

- structure and time spent on no sport related free time activities among elderly women who have joined the Slovenian regional project *Sport for Healthy Life* and elderly women from the control group;

- structure and time spent on sport related free time activities among elderly women who have joined the Slovenian regional project *Sport for Healthy Life* and elderly women from the control group.

The findings about structure and time spent on free time activities among elderly women should open new perspectives on planning free time programmes for an ageing population and contribute to a better general understanding of elderly and their participation on non sporting and sport related activities and, particularly from the women's perspective.

## **Methods:**

### ***Participants***

The research sample consisted of a total of 64 elderly women: 32 women aged 65 to 78 from the town of Kamnik who joined the project *Sport for Healthy Life* and a group of 32 women aged 65 to 75 from the town of Kranj who did not join the project (control group). Both towns are located in central Slovenia. The examined participants from Kamnik had scheduled physical activity classes in a school gymnasium once a week, 60 minutes per class unit. Participants from Kranj (control group) did not participate in any of the scheduled sports activities in their community centers.

### ***Instrument***

Instrument for selecting the nonsport free time activities, sport related free time activities and time spent on those activities was A Physical Activity Questionnaire for the Elderly (VOORRIPS, et al., 1991). The instrument was translated into Slovene language. Respondents were asked to mark each activity they participated in.

### ***Procedure***

Data was gathered in November 2008. All data in our study was collected by personal interview to ensure that all respondents understood the content and meaning of the questions in the survey. Ethical standards of the Slovenian Research Commission were followed.

### ***Data analysis***

The data has been processed by SPSS 8.0 software for Windows programme (Bryman & Cramer, 1999). The level of statistical significance was set up at  $p < 0.05$ . Basic

statistical characteristics were computed (absolute, relative frequency). The probability relations among the presented variables have been tested by the Chi-square.

## Results

If we want to be able to highlight the role of free time activities of the elderly women, it is important to get a clear picture of the time and ways of spending their free time. With the inside view of sport related free time activities of elderly women, we intend to open a new dimension to be discussed and evaluated. Sport for the elderly is definitely a challenge for the future for various types of professionals.

### Elderly women and their usage of free time

Identifying the ways of spending free time is an important piece of information which could improve quality of life, especially for older adults.

**Table 1** *Time spent on no sport related free time activities among elderly women from project and control group*

| Hours per week | Project group<br>N = 32 |                 | Control group<br>N = 32 |                 |
|----------------|-------------------------|-----------------|-------------------------|-----------------|
|                | Numbers<br>N            | Percentage<br>% | Numbers<br>N            | Percentage<br>% |
| 0 – 5          | -                       | -               | 1                       | 3.1             |
| 6 – 10         | 3                       | 9.4             | 4                       | 12.5            |
| 11 – 15        | 5                       | 15.6            | 6                       | 18.8            |
| 16 – 20        | 2                       | 6.2             | 3                       | 9.4             |
| 21 – 25        | 4                       | 12.5            | 3                       | 9.4             |
| 26 – 30        | 7                       | 21.8            | 4                       | 12.5            |
| 31 – 35        | 2                       | 6.2             | 6                       | 18.8            |
| 36 – 40        | 2                       | 6.2             | 2                       | 6.2             |
| 41 – 45        | 2                       | 6.2             | 1                       | 3.1             |
| 46 – 50        | -                       | -               | -                       | -               |
| over 50        | 4                       | 12.5            | -                       | -               |
| over 60        | 1                       | 3.1             | 2                       | 6.2             |
| Total          | 32                      | 100             | 32                      | 100             |

21.8% of the women who participated in the project spent between 26 – 30 hours per week on their free time activities, 15.6% of them spent between 11 – 15 hours and 12.5% devoted 21 –25 hours per week to their free time activities. Among this group there were also 12.5% who filled their free time with activities in more than 50 hours per week. In the control group there were 18.8% of those who spent between 31 – 35 hours per week on their free time activities and also 18.8% of those who spent between 11 – 15 hours per week on them. 12.5%

in both groups devoted 26 – 30 and 6 – 19 hours per week to their free time activities. Free time activities that extend 60 hours per week were recorded on 1 (3.1%) woman in project group and 2 (6.2%) in the control group.

**Table 2** *Structure of no sport related free time activities among elderly women from project and control group*

| Activity                              | GR | Hours per week                     |      |             |      |             |      |                   |      | $\chi^2$ | P     |
|---------------------------------------|----|------------------------------------|------|-------------|------|-------------|------|-------------------|------|----------|-------|
|                                       |    | Not practicing or less than 1 hour |      | 1 – 4 hours |      | 5 – 8 hours |      | More than 8 hours |      |          |       |
|                                       |    | N                                  | %    | N           | %    | N           | %    | N                 | %    |          |       |
| Gardening                             | PG | 5                                  | 15.6 | 15          | 46.9 | 11          | 34.4 | 1                 | 3.1  | 16.672   | 0.074 |
|                                       | CG | 4                                  | 12.5 | 14          | 43.8 | 13          | 40.6 | 1                 | 3.1  |          |       |
| Babysitting                           | PG | 18                                 | 56.3 | 8           | 25.0 | 4           | 12.5 | 2                 | 6.2  | 8.052    | 0.428 |
|                                       | CG | 20                                 | 62.5 | 10          | 31.2 | 1           | 3.1  | 1                 | 3.1  |          |       |
| Reading                               | PG | 3                                  | 9.4  | 16          | 50.0 | 11          | 34.4 | 2                 | 6.2  | 5.165    | 0.740 |
|                                       | CG | 6                                  | 18.8 | 17          | 53.1 | 6           | 18.8 | 3                 | 9.4  |          |       |
| Watching TV                           | PG | -                                  | -    | 16          | 50.0 | 8           | 25.0 | 8                 | 25.0 | 12.951   | 0.114 |
|                                       | CG | 1                                  | 3.1  | 14          | 43.8 | 10          | 31.2 | 7                 | 21.9 |          |       |
| Cinema, theater, concert              | PG | 20                                 | 62.5 | 12          | 37.5 | -           | -    | -                 | -    | 3.085    | 0.544 |
|                                       | CG | 23                                 | 71.8 | 8           | 25.0 | -           | -    | 1                 | 3.1  |          |       |
| Handy crafts                          | PG | 9                                  | 28.1 | 17          | 53.1 | 3           | 9.4  | 3                 | 9.4  | 5.492    | 0.482 |
|                                       | CG | 17                                 | 53.1 | 14          | 43.8 | -           | -    | 1                 | 3.1  |          |       |
| Education                             | PG | 19                                 | 59.4 | 12          | 37.5 | 1           | 3.1  | -                 | -    | 7.003    | 0.220 |
|                                       | CG | 28                                 | 87.5 | 3           | 9.4  | -           | -    | 1                 | 3.1  |          |       |
| With friends, relatives               | PG | 3                                  | 9.4  | 19          | 59.4 | 7           | 21.8 | 3                 | 9.4  | 14.252   | 0.114 |
|                                       | CG | 5                                  | 15.6 | 22          | 68.8 | 3           | 9.4  | 2                 | 6.2  |          |       |
| Community services                    | PG | 13                                 | 40.6 | 17          | 53.2 | 1           | 3.1  | 1                 | 3.1  | 17.534   | 0.008 |
|                                       | CG | 28                                 | 87.5 | 3           | 9.4  | -           | -    | 1                 | 3.1  |          |       |
| Going out: restaurants, sweet shops   | PG | 22                                 | 68.8 | 10          | 31.2 | -           | -    | -                 | -    | 2.952    | 0.566 |
|                                       | CG | 25                                 | 78.2 | 7           | 21.8 | -           | -    | -                 | -    |          |       |
| Active involvement in cultural events | PG | 22                                 | 68.8 | 9           | 28.1 | 1           | 3.1  | -                 | -    | 6.776    | 0.238 |
|                                       | CG | 30                                 | 93.8 | 2           | 6.2  | -           | -    | -                 | -    |          |       |
| Extra work for money                  | PG | 25                                 | 78.2 | 4           | 12.5 | 2           | 6.2  | 1                 | 3.1  | 2.445    | 0.785 |
|                                       | CG | 28                                 | 87.5 | 2           | 6.2  | 1           | 3.1  | 1                 | 3.1  |          |       |
| Relaxing at home                      | PG | 19                                 | 59.4 | 9           | 28.1 | 4           | 12.5 | -                 | -    | 6.437    | 0.496 |
|                                       | CG | 18                                 | 56.3 | 10          | 31.2 | 3           | 9.4  | 1                 | 3.1  |          |       |

LEGEND: GR – group, N – Number, % – percentage, PG – project group, CG – control group,  $\chi^2$  – Chi-square, p – significance

According to the distribution of free time among elderly women who participated in the project and those in the control group, minimal differences were noticed. Both groups reached the highest scores, except in one case, in the same segments of hours spent per week on their free time activities. Most frequent spent time of 1 – 4 hours per week was recorded

for: gardening (project members 46.9%, control group members 43.8%), reading (project members 50.0%, control group members 53.1%), watching TV (project members 50.0%, control group members 43.8%), handy crafts (project members 53.1%, control group members 43.8%), time spent with friends and relatives (project members 59.4%, control group members 68.8%). Activities which are not actual for the respondents or they practised it less than one hour per week reached the highest scores in: babysitting (project members 56.3%, control group members 62.5%), going to cinema, theater, concert (project members 62.5%, control group members 71.8%), time spent on education (project members 59.4%, control group members 87.5%), going out to restaurants and sweet shops (project members 68.8%, control group members 78.2%), active involvement in cultural events (project members 68.8%, control group members 93.8%), extra work for money (project members 78.2%, control group members 87.5%) and relaxing at home (project members 59.4%, control group members 100%). The only difference was calculated on the item: working at community services, where project members spent significantly ( $P = 0.008$ ) more time than elderly women from the control group.

### Free time and sport related activities

Spending time on sport related activities is an important indicator of daily routine of elderly individuals in home environments. Such information could become an initiative for establishing active life style programmes for the elderly.

**Table 3** *Time spent on sport related free time activities among elderly women from project and control group*

| Hours per week | Project group<br>N = 32 |                  | Control group<br>N = 32 |                  |
|----------------|-------------------------|------------------|-------------------------|------------------|
|                | Nu<br>mber              | Perce<br>ntage % | Nu<br>mber              | Perc<br>entage % |
| 0 – 2          | 3                       | 9.4              | 3                       | 9.4              |
| 3 – 4          | 6                       | 18.8             | 6                       | 18.8             |
| 5 – 6          | 3                       | 9.4              | 4                       | 12.5             |
| 7 – 8          | 3                       | 9.4              | 4                       | 12.5             |
| 9 – 10         | 2                       | 6.2              | -                       | -                |
| 11 – 12        | 2                       | 6.2              | 3                       | 9.4              |
| 13 – 14        | 3                       | 9.4              | 2                       | 6.2              |
| 15 – 16        | 2                       | 6.2              | 1                       | 3.1              |
| 17 – 18        | 1                       | 3.1              | 1                       | 3.1              |
| 19 – 20        | 2                       | 6.2              | 1                       | 3.1              |
| 21 – 22        | -                       | -                | 1                       | 3.1              |

|         |    |     |    |     |
|---------|----|-----|----|-----|
| 23 – 24 | 1  | 3.1 | 2  | 6.2 |
| 25 – 26 | 1  | 3.1 | 1  | 3.1 |
| 27 – 28 | 1  | 3.1 | 1  | 3.1 |
| 29 – 30 | -  | -   | 2  | 6.2 |
| nad 30  | 1  | 3.1 | -  | -   |
| nad 40  | 1  | 3.1 | -  | -   |
| Total   | 32 | 100 | 32 | 100 |

The most frequent zone for spending time on sport related activities is 3 – 4 hours per week and is equally distributed (18.8%) between both groups of elderly women from the project group and the control group. Active sport participation of 29 hours per week or more is also equally distributed (6.2%), the same with participation which extends up to 2 hours per week (9.4%). Small differences between both groups were noticed in all other distributions of time spent on sport related activities.

**Table 4** *Structure of sport related free time activities among elderly women from both the project and the control group*

| Activity          | GR | Hours per week                     |      |             |      |             |      |                   |     | $\chi^2$ | p     |
|-------------------|----|------------------------------------|------|-------------|------|-------------|------|-------------------|-----|----------|-------|
|                   |    | Not practising or less than 1 hour |      | 1 – 4 hours |      | 5 – 8 hours |      | More than 8 hours |     |          |       |
|                   |    | N                                  | %    | N           | %    | N           | %    | N                 | %   |          |       |
| Aerobics          | PG | 28                                 | 87.5 | 4           | 12.5 | -           | -    | -                 | -   | 2.102    | 0.552 |
|                   | CG | 29                                 | 90.6 | 3           | 9.4  | -           | -    | -                 | -   |          |       |
| Fitness           | PG | 26                                 | 81.2 | 6           | 18.8 | -           | -    | -                 | -   | 0.702    | 0.704 |
|                   | CG | 30                                 | 93.8 | 2           | 6.2  | -           | -    | -                 | -   |          |       |
| Cycling           | PG | 19                                 | 59.4 | 10          | 31.3 | 2           | 6.2  | 1                 | 3.1 | 3.200    | 0.866 |
|                   | CG | 24                                 | 75.0 | 5           | 15.6 | 2           | 6.2  | 1                 | 3.1 |          |       |
| Fast running      | PG | 28                                 | 87.5 | 4           | 12.5 | -           | -    | -                 | -   | 0.008    | 0.927 |
|                   | CG | 30                                 | 93.8 | 2           | 6.2  | -           | -    | -                 | -   |          |       |
| Slow running      | PG | 26                                 | 81.2 | 6           | 18.8 | -           | -    | -                 | -   | 2.216    | 0.529 |
|                   | CG | 29                                 | 90.6 | 2           | 6.2  | 1           | 3.1  | -                 | -   |          |       |
| Fast walking      | PG | 18                                 | 56.3 | 12          | 37.5 | 2           | 6.2  | -                 | -   | 12.723   | 0.122 |
|                   | CG | 20                                 | 62.5 | 7           | 21.8 | 4           | 12.5 | 1                 | 3.1 |          |       |
| Slow walking      | PG | 15                                 | 46.9 | 13          | 40.6 | 4           | 12.5 | -                 | -   | 9.542    | 0.299 |
|                   | CG | 7                                  | 21.8 | 21          | 65.6 | 2           | 6.2  | 2                 | 6.2 |          |       |
| Mountaineering    | PG | 14                                 | 43.8 | 16          | 50.0 | 2           | 6.2  | -                 | -   | 16.455   | 0.021 |
|                   | CG | 28                                 | 87.5 | 4           | 12.5 | -           | -    | -                 | -   |          |       |
| Walking in nature | PG | 4                                  | 12.5 | 20          | 62.5 | 7           | 21.9 | 1                 | 3.1 | 9.334    | 0.407 |
|                   | CG | 4                                  | 12.5 | 20          | 62.5 | 5           | 15.6 | 3                 | 9.4 |          |       |
| Swimming          | PG | 20                                 | 62.5 | 11          | 34.4 | -           | -    | 1                 | 3.1 | 8.320    | 0.040 |



|                      |    |    |      |   |      |   |   |   |      |       |       |
|----------------------|----|----|------|---|------|---|---|---|------|-------|-------|
|                      | CG | 31 | 96.9 | 1 | 3.1  | - | - | - | -    |       |       |
| Bowling              | PG | 29 | 90.6 | 3 | 9.4  | - | - | - | -    | 3.339 | 0.068 |
|                      | CG | 32 | 100  | - | -    | - | - | - | -    |       |       |
| Dancing              | PG | 27 | 84.4 | 5 | 15.6 | - | - | - | -    | 4.167 | 0.244 |
|                      | CG | 31 | 96.9 | 1 | 3.1  | - | - | - | -    |       |       |
| Golf                 | PG | 29 | 90.6 | 3 | 9.4  | - | - | - | -    | 3.339 | 0.068 |
|                      | CG | 32 | 100  | - | -    | - | - | - | -    |       |       |
| Yoga                 | PG | 29 | 90.6 | 3 | 9.4  | - | - | - | -    | 3.339 | 0.068 |
|                      | CG | 32 | 100  | - | -    | - | - | - | -    |       |       |
| Alpine skiing        | PG | 28 | 87.5 | 4 | 12.5 | - | - | - | -    | 4.524 | 0.033 |
|                      | CG | 32 | 100  | - | -    | - | - | - | -    |       |       |
| Cross country skiing | PG | 28 | 87.5 | 4 | 12.5 | - | - | - | -    | 3.352 | 0.187 |
|                      | CG | 31 | 96.9 | 1 | 3.1  | - | - | - | -    |       |       |
| Skating              | PG | 29 | 90.6 | 3 | 9.4  | - | - | - | -    | 3.339 | 0.068 |
|                      | CG | 32 | 100  | - | -    | - | - | - | -    |       |       |
| Roller skating       | PG | 29 | 90.6 | 3 | 9.4  | - | - | - | -    | 3.339 | 0.068 |
|                      | CG | 32 | 100  | - | -    | - | - | - | -    |       |       |
| Horseback riding     | PG | 29 | 90.6 | 3 | 9.4  | - | - | - | -    | 3.339 | 0.068 |
|                      | CG | 32 | 100  | - | -    | - | - | - | -    |       |       |
| Boccia               | PG | 28 | 87.5 | - | -    | - | - | 4 | 12.5 | 4.524 | 0.033 |
|                      | CG | 32 | 100  | - | -    | - | - | - | -    |       |       |
| Oriental dancing     | PG | 31 | 96.9 | - | -    | - | - | 1 | 3.1  | 1.079 | 0.299 |
|                      | CG | 32 | 100  | - | -    | - | - | - | -    |       |       |

LEGEND: GR – group, N – Number, % – percentage, PG – project group, CG – control group,  $\chi^2$  – Chi-square, p – significance

Elderly women who participated in the project and those from the control group distributed their chosen sport activities in various zones according to the time they spent on them. The highest scores were found inside time sequence where respondents stated that they did not practise this activity or did it less than 1 hour per week, were: bowling (project members 90.6%, control group members 100%), golf (project members 90.6%, control group members 100%), yoga (project members 90.6%, control group members 100%), alpine skiing (project members 87.5%, control group members 100%), skating (project members 90.6%, control group members 100%), rolling (project members 90.6%, control group members 100%), horseback riding (project members 90.6%, control group members 100%), boccia (project members 87.5%, control group members 100%), oriental dancing (project members 96.9%, control group members 100%). In category 1 – 4 hour sport activities per week the elderly from the project group marked participation in 19 out of 21 activities listed in the questionnaire whereas the control group members marked 12 of them. The difference in participation was calculated in the following activities: mountaineering (P = 0.021),

swimming ( $P = 0.040$ ), alpine skiing ( $P = 0.033$ ) and boccia ( $P = 0.033$ ) where the elderly from the project group were significantly more active.

## Discussion

The purpose of this study was to examine the ways that elderly women spend their free time and particularly the structure and time spent on free time activities among elderly women who have joined the Slovenian regional project *Sport for Healthy Life* and those elderly women who were in the control group. Voorrips (1991) instrument was applied to get the respondents answers and round up the view of Slovenian elderly women towards spending their free time. It is important to know the range of preferred free time activities and time which they are willing to dedicate to the chosen activities either sport related or not. No doubt that participation in various free time activities makes a significant contribution to the quality of life and health of the aged. Our results on time spent on free time activities (Table 1) showed that Slovenian elderly women from the project group differ in some details from the control group. For the 21.8% of the project group members the most frequently spent time on free time activities is between 26 –30 hours per week (control group 12.5%), while the 18.8% of the control group members put time between 31 – 35 hours per week as predominant (project group 6.2%). The time spent on free time activities of the elderly combined into three categories show us that in category 0 – 20 hours per week project group members participated with 31.2% of their free time while control group members with 43.8%. Category 21 – 40 hours spending of free time activities per week is equal for both groups with 46.9%, in category 41 – 60+ hours per week the project group members are in advantage with 21.8% time while the control group stays at 9.3% of devoted time for free time activities. Evidently the project group is more active in upper level of time for the activities of their choices which could be the result of more systematic inclusion into programmed sporting activities and consequently the awareness of importance to be active. The structure of free time on non sport activities on elderly Slovenian women was observed in both groups (Table 2) although significance was reached only in the item: working at community services, where project members spent significantly ( $P = 0.008$ ) more time than elderly women from the control group.

Our study confirms that gardening seems to be interesting not only because of its healthy character, but also as an open air activity which could contribute to lower the family budget. Babysitting is also traditionally positioned social contribution of the elderly to the young families. Level of recorded reading habits show that reading can provide a pleasant and

useful relaxation. Watching TV is a predominant free time activity and an important daily routine for the majority of elderly respondents regardless of the participation group.

An Australian study of 3.955 women from 75 –81 shows that gardening occupied 23.3%, handy craft 14.3%, reading 7%, cooking 4.7% listening music 4.5%, voluntary work 20.1% and community services 13.5% of the elderly population (Adamson & Parker, 2006). Free time activities like watching TV, listening to the radio, art and craft, education, housework and travelling could increase the level of energy spent and contribute to relaxation of the elderly person (Ebersole & Hess, 1995).

A Canadian study (Fitzpatrick, 2009) suggested that free time activities increased physical health, reduced chronic illnesses and made positive contribution to the quality of life of elderly women in Montreal. Gautam, et al., (2007) found out that elderly from Nepal reduced the level of depression and raised the level of satisfaction with life through religious services, listening to the radio, watching TV and visiting friends and relatives. Importance of being with friends and relatives was reflected also in our survey where 31.2% project member respondents said that they spent 5 –8 hours per week or more with them while the control group score on the same item was 15.6%.

With regard to education matters, Slovenian elderly women dedicated from one to four hours per week to education (project group 37.5%, control group 9.4%) which is expression of relatively small but permanent need to gain new knowledge. Going out to the cinema, theatre, concerts or to restaurants and sweet shops reflect not only life long habits of individuals but also their financial situation. Frequencies of those events show us that four hours per week is a limit which respondents from our study did not exceed. Within these limitations was also the active involvement of elderly women in cultural events where we witness specific tradition in our society where singing choruses, drama performances, and art and handy craft exhibitions are not unknown. Money from extra work is definitely welcomed by the elderly but the opportunity to earn such extra money is relatively small which is also expressed in our research. Two other studies suggest that less education and lower income were related to less activity (Baron-Epel et al., 2005) and that financial capabilities, lifestyle and home environment have influences on sport preferences (Doupona Topič, & Sila, 2007). Time for relaxation at home has among elderly women obviously a wide specter of possible interpretations.

The amount of time spent on sport related activities among Slovenian elderly women (Table 3) showed that dispersion of their usage of free time on sport activities was surprisingly equally distributed to up to 30 hours activity per week, regardless of the group

they belonged to. Equally dominating was time span for sport related activities to 3 – 4 hours per week (18.8%). Half an hour per day for sport may not seem impressive, but makes a solid basis for all further steps up. Results proved that we found a representative among elderly women in a single time span which was listed on the table. To be precise, more than 29 hours per week for sport activities were accomplished by four elderly women (12.4%), two from each group. The overall picture of time spent on sport related activities among Slovenian elderly women confirms a high level of awareness of the importance of physical activity.

Table 4 offers a comprehensive overview of the sport activities that our elderly women do most frequently. In the current study we found four sport activities which statistically significantly differentiate both groups: mountaineering, swimming, alpine skiing and boccia. Except for boccia the mentioned sports are so-called Slovenian national sports and are practiced among the project group members more often. Results of the control group showed that boccia, oriental dancing, horseback riding, rolling, alpine skiing, yoga, golf, skating and bowling are more or less unpracticed. One explanation for this low participation is that certain risk factors such as injury and lack of partners' support prevail. The study has also indicated that most practiced activities among elderly women were cycling and walking in nature where spending time on both activities is close to being a regular every day event. Walking in nature, cycling, swimming, mountaineering, alpine skiing are favorite sports activities among Slovenian adults (Berčič, & Sila, 2007), Pori (2010) confirms that Slovenians select walking, swimming and cycling as most practiced sports, Australian women aged 75 to 81 preferred swimming, cycling and walking ((Adamson, & Parker, 2006). Walking is known to be the most common type of activity for older adults (American College of Sports Medicine, 2009). According to Hawkey (1991) model of classification of sports the most frequent participation in sport related free time activities among elderly women in our study was athletics group. The American College of Sports Medicine (2009) stated that aerobic endurance training can slow down age related physiological changes, reverse atrophy from disuse, help to control chronic conditions, promote psychological health and preserve the ability to perform activities of daily living. Varieties of running and especially walking as typical aerobic activities are well practiced among respondents from the project and the control group. Our impression is that elderly women know the benefits of being active and therefore use the opportunities which sports can offer.

## **Conclusion**

In conclusion, regular physical activity of the elderly should be monitored carefully and assessed by professionals. As shown in this study, the reported structure of free time activities among elderly women helped increase awareness of importance to be active. Activities connected with sport and consequently the structure of free time indicates the level of participation of the elderly women in their daily life. A future suggestion for practitioners and health care providers is to be informed about actual findings on free time activities of the elderly. This is a good starting point for promoting physical and psychological health of the elderly. Successful application of sports activities to elderly population also depends on the respect of the personal integrity, sport tradition of the country and adaptation flexibility. Once elderly recognise the advantage of using their free time for sport related activities, they will be able to find the sufficient time and motivation for practicing. The most frequently reported non sport related free time activities were predictable: watching TV and physically active gardening, while among sporting free time activity dominated walking in various forms (walking in nature, fast walking, slow walking). Despite some limitation of the study (small sample, measurement via self report) the interpreted results reflect the structure of free time activities (no sport and sport related) of elderly women in one of the regions in Slovenia. The obtained data suggest that certain non sport and sport related activities can be used in various intervention programmes. Research findings could contribute to the creation of new free time programmes and initiate further research in the field of elderly and physical activity.

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