

FORMS OF PHYSICAL ACTIVITY PERFORMED BY HANDICAPPED PEOPLE IN THEIR FREE TIME. THE EXAMPLE OF GDANSK CITIZENS

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Abstract: The article briefly explains the problem of physical exercise performed by handicapped people in their leisure time. It shows the results of research carried out among disabled people from Gdańsk and the neighbouring areas. Special attention was given to the problem of disabled and their awareness of physical activity. Respondents were asked several questions concerning their disability and physical activity. Results of the study show that physical activity among disabled people is often restricted to the obligatory rehabilitation; financial and technical conditions are mentioned as the most important barriers refraining them from this type of leisure.

Key words: physical activity, leisure, recreation, disabled people, Gdańsk

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PHYSICAL ACTIVITY

Physical activity is one of the most important elements of healthy lifestyle. Exercise affects the centres and functions of physiological systems that are linked to it (Bytniewski, 2006). Physical activity should be undertaken on a daily basis or at least two to three times per week. It is one of the essential aspects guaranteeing a correct development of personality, health, body immunity and efficiency (Barankiewicz, 1998). Physical activity in a certain degree allows to level disability and has influence on better psychological and psychomotoric development (Karpińska-Sukiennik & Filipiak, 2005). In addition to that it has good impact on the osseous, muscular, circulatory, respiratory and nervous systems (Czarkowska-Pączek & Przybylski, 2006). Physical activity plays a very important role in many disease and disorder therapies (Jaskólski & Jaskólska, 2005).

As physical activity has a very positive influence on disabled people's health it is important to ask what is the actual level of physical activity among handicapped and what function it plays in their lives. Considerations should take into account different needs of

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man and women during planning and undertaking physical activity. It is also important to identify the obstacles arising when disabled people engage into this type of activity.

Studies show that till 2002 in Poland only 4-8% of adults where undertaking an appropriate amount of physical activity. The remaining 92% of society practiced physical exercises occasionally or never. This phenomenon is often called „*physical activity privation*” (Lewicki, 2003, p.22).

Leisure time is in the scope of interests of many specialists from different scientific disciplines and for that reason it is difficult to find one unequivocal definition of this phenomenon. The most common is the definition proposed by Joffre Dumazedier a French sociologist, who defines leisure as an activity that the individual may indulge of his own free will - either to rest, to amuse himself, to add to his knowledge or improve his skills disinterestedly or to increase his voluntary participation in the life of the community after discharging his professional, family and social duties (Dumazedier, 1960).

The contemporary human being, involved in professional career and attracted by an extremely intense life forgets sometimes how important leisure time is in his life. Compared to previous years, time left over from work is limited and life style devoted to consumption is source of less free time. People are unable to organize the small amount of free time they have left, often they don't see any possibilities of using it (Siwiński et al., 2003).

It is important to remember that leisure time fulfils many functions in human life, it is not only a time of laziness or active rest, as shown by Kamiński (1964) it is also a time for self-education. According to Czajkowski (Czajkowski, 1979) there are few important aspects of leisure time, it includes socio-economic, psychological, health and pedagogical aspects. Among the factors influencing the activity of people during leisure time one could name biological, psychological, socio-demographic and economic elements.

The question that arises at this moment concerns the possible ways of using leisure time by handicapped and the meanings assigned to it.

DISABILITY

The number of people with disabilities is growing. One of seven polish citizens has a disability and disabled people constitute 16% of Poland population (Bergier & Kubińska, 2006). Disabilities are caused by various factors differential in terms of quality and quantity. Table 1 shows a number of causes for disabilities and their presence among city and country inhabitants (in percentages).

Table 1. Causes of disabilities and percentage of disabled in cities and villages
(Data source: Cywińska – Wasilewska, 2004)

Cause of disability	% of appearance in cities	% of appearance in villages
Cardiovascular system diseases	28,6	26,2
Respiratory system diseases	7,8	7,9
Glands of internal excretion and metabolism diseases	3,5	4,5
Psychological disorder	6,0	9,0
Nervous system and sense organs diseases	9,1	13,5
Digestive system diseases	4,3	4,8
Osteo-muscular system and connective tissue diseases	29,9	21,3
Traumas and poisoning	9,1	9,4
Other	1,7	3,4

The notion of disability includes different functional restrictions of human individuals in each society. These restrictions are a result of failure in the ability of carrying out any activity in a way that is recognized as normal, typical in human life. They may have a temporary or permanent, overall or partial character and they may refer to the sensory, physical or psychological sphere (Dykcik, 1997).

It is commonly considered, that a disabled person is one for whom the handicap of psycho-physical functions causes functional limitations of life abilities and activities in a degree that hampers the possibility of undertaking appropriate social roles (Dziedzic, 1996).

Despite a constant grow in the number of disabled, knowledge about them and especially about their needs is still very small among society. A common type of unawareness occurs when adopting an overprotective attitude towards disabled or when intentionally avoiding contact with them. To overcome this negative phenomenon several actions, like social campaigns and integration programs in schools, are undertaken. These projects help change social awareness, but there is still too little of them and their effect is too small.

REHABILITATION

Rehabilitation consists of restoring the altered functions of the patient. It includes using medicine, social and professional actions. The main aim of rehabilitation is to restore the lost abilities or to develop replacement abilities that will allow the disabled to participate in everyday life as well as in social and professional activities. At this point we can also mention social rehabilitation which aims at working with those who have social problems and cause upbringing difficulties. The aim of social rehabilitation is to form correct social behaviour and ethic attitudes. We can call this „*raising from the beginning*”.

There is three main categories of disabled:

1. people with physical disabilities;
2. people with sensory disability;
3. people with mental or intellectual disability (Rutkowska, 2002).

Another classification is proposed by WHO and it includes disabilities in:

- behaviour,
- communication,
- self-care,
- physical mobility,
- locomotion,
- skills,
- situations,
- selective abilities,
- other (Rutkowska, 2002).

PHYSICAL ACTIVITY OF DISABLED PEOPLE

Physical activity is one of many forms of rehabilitation for disabled. It ensures active physical and intellectual development as well as rest. Physical activity fulfils the needs of disabled in several fields, including sport, tourism and recreation. It is a mean to get into new relationships, to work in cooperation with others, to sympathize and to learn responsibility, to broaden knowledge and skills (Migasiewicz & Bolach, 2006 a). Physical activity ensures continuity of the rehabilitation process and confirms the effects of it (Patkiewicz, 1994).

The good influence that physical activity has on life quality of healthy and disabled is undeniable. Systematic physical exercise counteracts complications caused by dysfunctions of the body and prevents the expiration of compensation processes. Thanks

to physical activity efficiency and physical ability are improved, this might be especially important for people using wheelchairs who have to overcome architectural barriers and other obstacles (Migasiewicz & Bolach, 2006 b).

Sport and tourism

Participation in sport and tourism activities encourages disabled people to set new goals and to fulfil them. A disabled person practicing tourism improves his or her physical ability and cultural awareness - this may have good influence on the quality of life. When improving physical abilities disabled have more chances of earning possibilities and can ameliorate their economic and social status. Sport among disabled is nowadays an integral element of the physical culture system and the reflection of this can be seen in local and international competitions. The number of events prepared for disabled and the number of participants are increasing each year. A good example is the intense development of adapted sports and Paralympics movement all over the world (Kosmol, 2008).

CHARACTERISTICS OF THE SURVEYED GROUP

The survey was held in April and May 2010. A group of 99 patients (including 48 women and 51 man) of the Rehabilitation and Rest Centre and the Social Help Centre in Gdańsk was surveyed. Among the group of surveyed woman almost half were aged 46–55 years. Every fifth of the woman was aged 26–35 or 36–45 years. The smallest group was aged 18–25 years. In the group of man every third of the respondents was 36–45 years, the 26–35 years old consisted a smaller group and every fifth man was aged 46–55 years. Same as among the woman respondents, the smallest group was aged 18–25 years.

Figures 1 to 5 show the characteristics of the surveyed group, including the age, place of residence, type and degree of disability and the cause of the disability of the respondents.

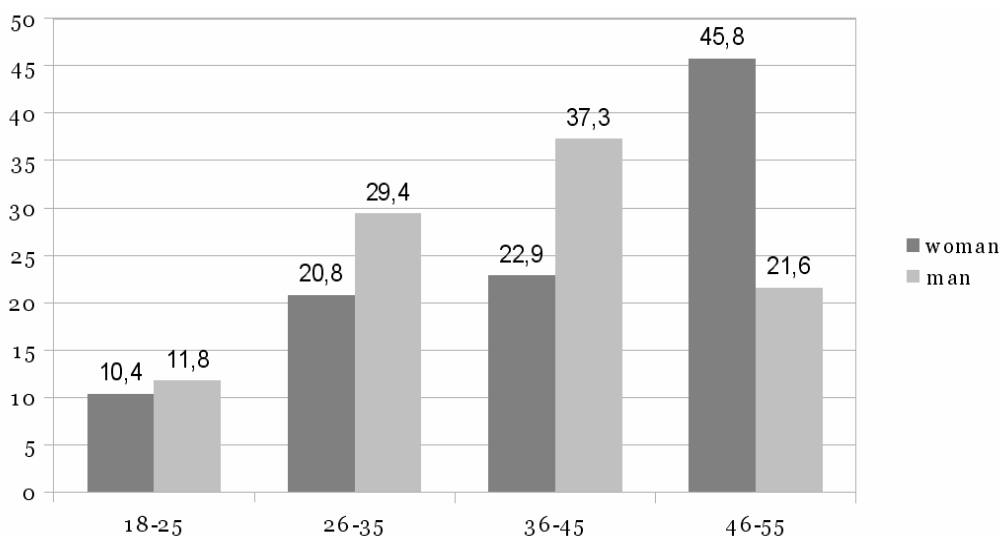


Figure 1. Age of the respondents distributed by sex
(Source: own research, 2010)

Almost 2/3 of respondents were from cities with over 100 000 inhabitants (marked “city II” on Figure 2). Every fourth man and almost every fifth woman were citizens of cities with 50 000 to 99 000 (marked “city I” on Figure 2) inhabitants. The smallest group consisted of country inhabitants.

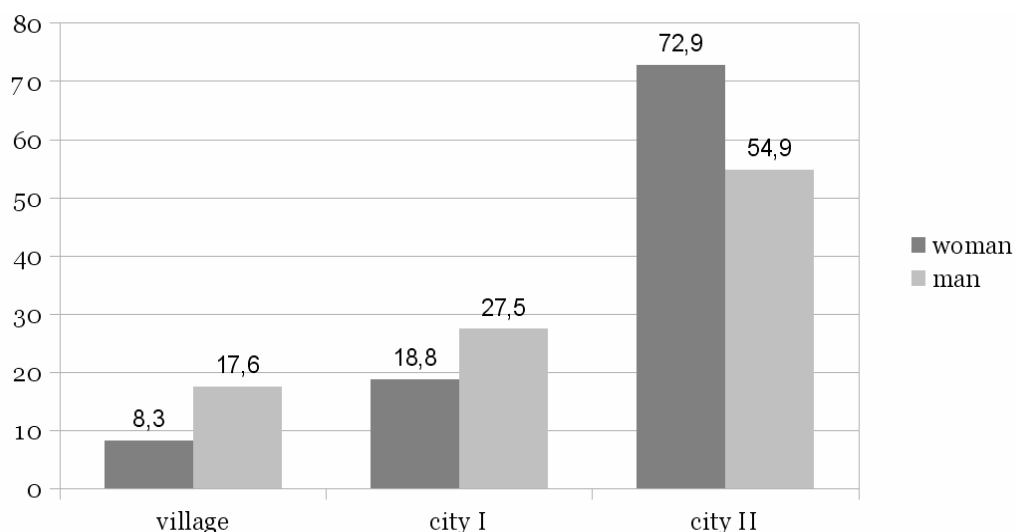


Figure 2. Place of residence distributed by sex
(Source: own research, 2010)

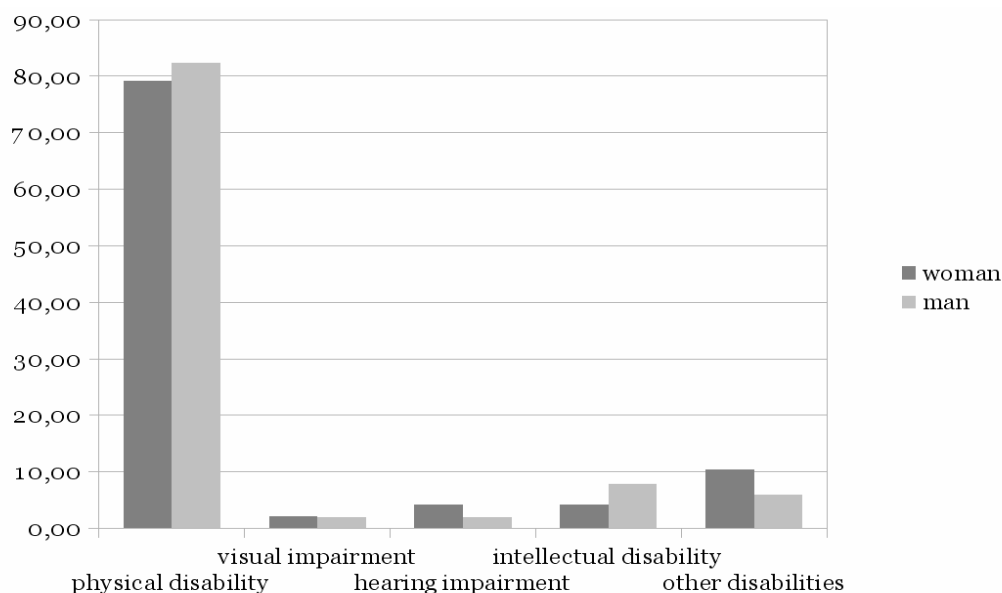


Figure 3. Types of disabilities distributed by sex
(Source: own research, 2010)

The main type of disability among the respondents was physical disability, 6% of the subjects were intellectually disabled. The remaining types of disabilities referred to less than 5% of the surveyed group.

One of the aims of the survey was to identify the degree and the cause of disability. More than half of the group had a moderate degree of disability, approximately 20% of the surveyed had a light degree of disability. The most common cause of disability indicated was consequence of accident or disease. Approximately 10% of the subjects were disabled from birth.

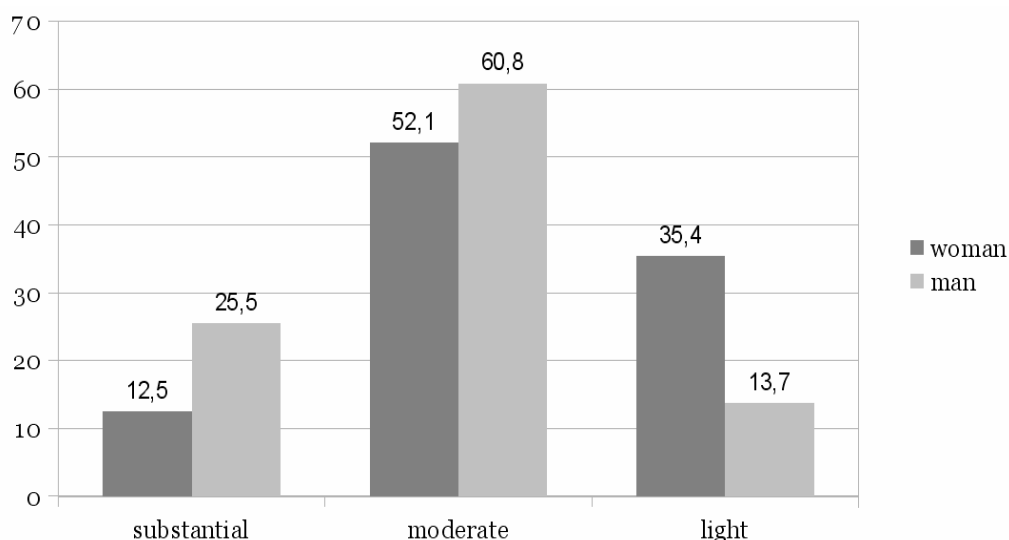


Figure 4. Degree of disability distributed by sex
(Source: own research, 2010)

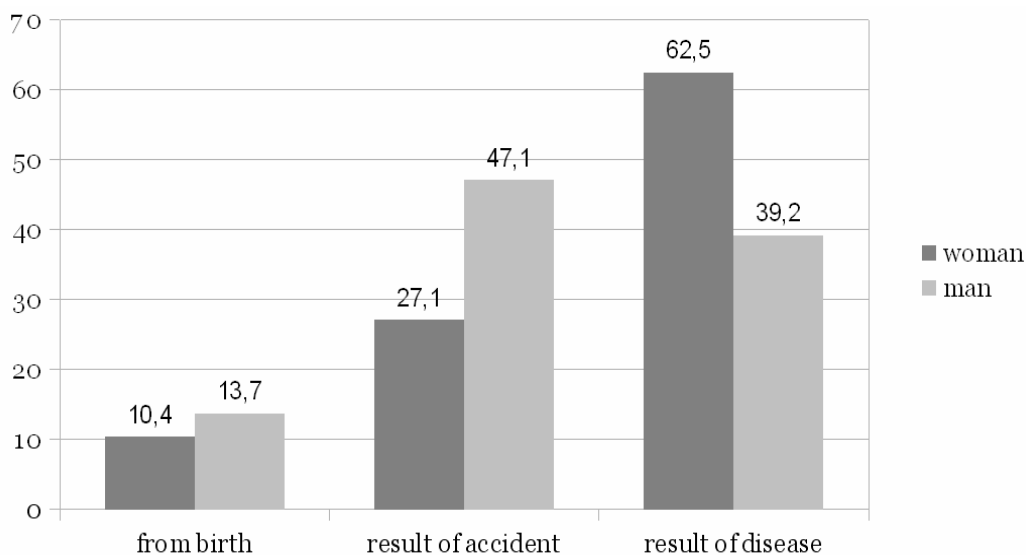


Figure 5. Cause of disability distributed by sex
(Source: own research, 2010)

PHYSICAL ACTIVITY OF THE SURVEYED GROUP

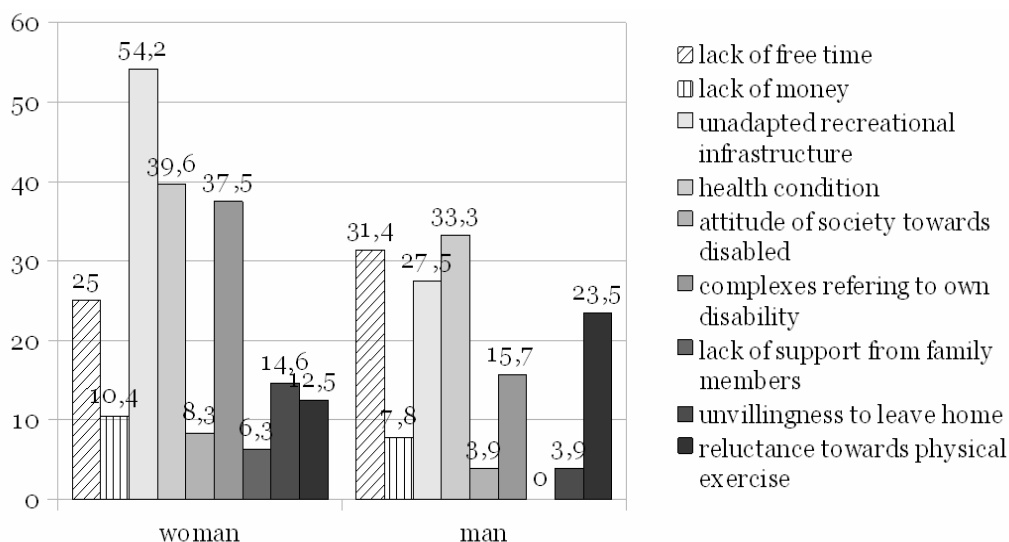
Disabled people rehabilitation would be inefficient without physical activity, this activity is the basic element when working on a disabled person health improvement. The question is, whether disabled people are able to participate in recreational physical activity. More than a half of the respondents say that their disability is only a medium impediment for recreational and sport activities participation. Unfortunately, every third respondent says that being disabled is the biggest obstacle and it makes physical activity almost impossible. Table 2 shows the frequency of participation in physical exercises within the surveyed group.

Table 2. Frequency of participation in physical exercises within the surveyed group
(data source: own research, 2010)

Frequency	Woman (n=48)		Man (n=51)		Overall (n=99)	
	n	%	n	%	n	%
At least 2 – 3 times per week	11	22,9	24	47,1	35	35,4
Once a week	13	27,1	10	19,6	23	23,2
2 – 3 times per month	8	16,7	8	15,7	16	16,2
Very occasionally	16	33,3	9	17,6	25	25,3

It has been noticed that man get more involved in any forms of physical activity than woman. It is a result which is inversely proportional to the physical activity and its frequency among woman. It is distressing that 1/3 of woman participated in physical activity very occasionally. Among man this percentage was 17,6. Data mentioned above show that physical activity within the surveyed group was very small. Only every third person was practicing exercises systematically.

Disabled people who want to participate in physical activity are constantly facing barriers that make this participation difficult (Figure 6). In the opinion of respondents these are mostly: lack of or an unsuited recreational infrastructure, as well as lack of time. A very important factor, identified mostly by woman, are complexes referring to own disability.

**Figure 6.** Main barriers preventing physical activity participation among surveyed disabled
(Source: own research, 2010)

For disabled people, participation in physical activities depends much of their consciousness about the positive effects it may have on many aspects of their lives. It was very interesting to get to know the opinion of disabled about the influence of physical activity on their health (Figure 7). All of the respondents agreed that there is such a dependency and that physical activity improves health condition. In the opinion of the respondents, physical activity keeps them fit and has influence on the quality of their lives and on their comfort.

Physical activity practice, by the disabled, takes place mostly in the open air, a large group indicates also swimming, training in a gym and resting at home as a way of spending their leisure time (Table 3).

Forms of Physical Activity Performed by Handicapped People in Their Free Time.
The Example of Gdansk Citizens

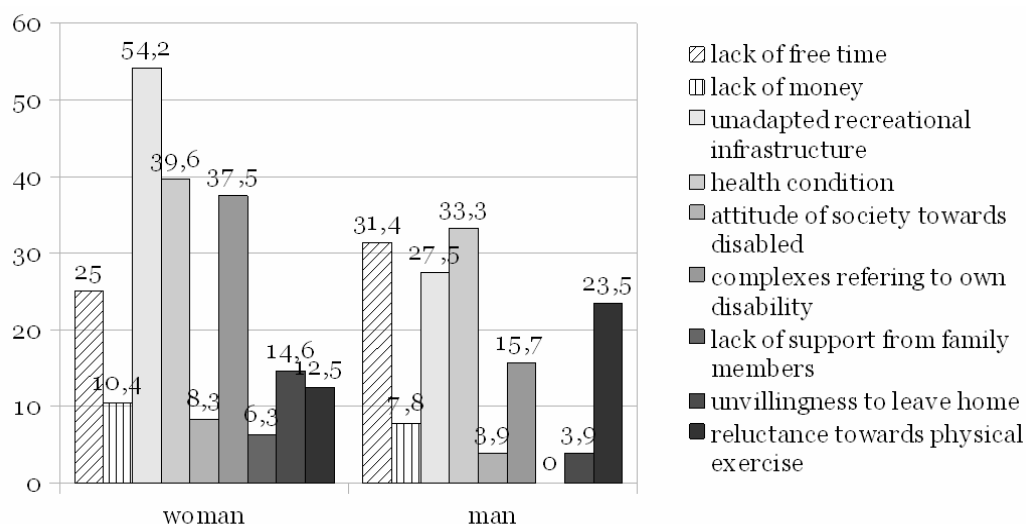


Figure 7. Influence of physical activity on health
(Source: own research, 2010)

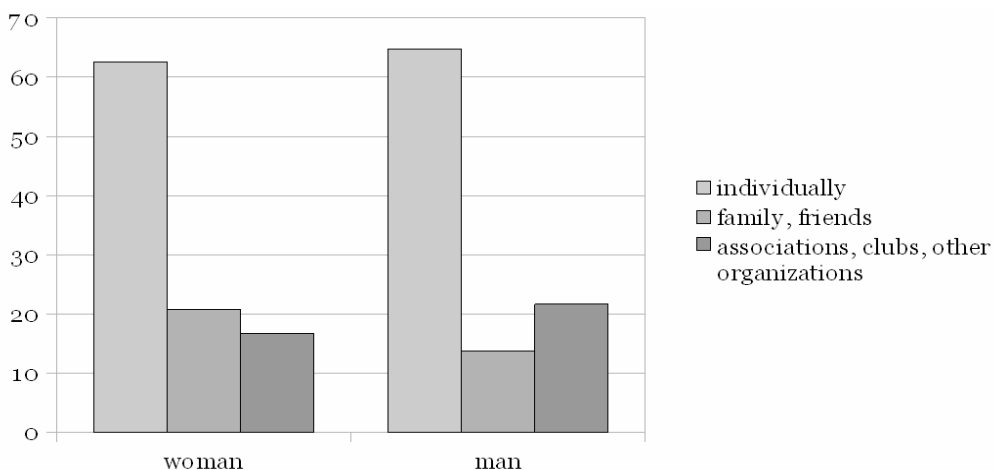


Figure 8. Organization of physical recreation activities
(Source: own research, 2010)

Table 3. Venues most commonly chosen for physical recreation activities
(data source: own research, 2010)

Venues	Woman (n=48)		Man (n=51)		Overall (n=99)	
	n	%	n	%	n	%
Gym	2	4,2	8	15,7	10	10,1
Fitness Club	8	16,7	0	0,0	8	8,1
Exercise hall	5	10,4	1	2,0	6	6,1
Athletic stadium	2	4,2	5	9,8	7	7,1
Swimming pool	6	12,5	11	21,6	17	17,2
Open air	11	22,9	14	27,5	25	25,3
Home	7	14,6	10	19,6	17	17,2
Other	7	14,6	2	3,9	9	9,1

Data from Table 4 indicates that the favourite forms of physical activity among disabled people are bicycle riding, swimming and walking. These forms of activity are widely accessible and they do not require any specialist infrastructure.

The fact that the disabled are aware of the influence of physical exercise on them and on their health is satisfying.

As shown in Figure 8 Disabled are initiating by themselves their free time physical activity. The need to participate in recreation is important for over 50% of the respondents.

Table 4. Preferred forms of physical activity (possibility of choosing multiple answers)
(data source: own research, 2010)

Forms of activity	Woman (n=48)		Man (n=51)		Overall (n=99)	
	n	%	n	%	n	%
Swimming	18	37,5	21	41,2	39	39,4
Aerobics/fitness	12	25,0	0	0,0	12	12,1
Joga	3	6,3	1	2,0	4	4,0
Gym	1	2,1	9	17,6	10	10,1
Roller skates	4	8,3	1	2,0	5	5,1
Skiing	2	4,2	3	5,9	5	5,1
Walking	19	39,6	15	29,4	34	34,3
Gardening	4	8,3	0	0,0	4	4,0
Bicycle riding	15	31,3	29	56,9	44	44,4
Angling	0	0,0	6	11,8	6	6,1
Running	4	8,3	11	21,6	15	15,2
Gymnastics	5	10,4	3	5,9	8	8,1
Ergometer	1	2,1	6	11,8	7	7,1
Sailing	1	2,1	3	5,9	4	4,0
Horse riding	3	6,3	0	0,0	3	3,0

CONCLUSIONS

Physical activity is one of the means to overcome numerous barriers encountered by disabled people. In relation to this group of people, physical activity is also known as adapted physical activity which describes an active way of managing free time. This domain includes theory and practice of rehabilitation of disabled through movement, as well as promotion of this activity among them (Kowalik, 2009).

A detailed analysis of disabled people physical activity shows that they are mostly active in recreation that does not involve special equipment and which is widely available – not restricted by financial or infrastructural barriers. Despite the fact that they are aware of the important influence it may have on their everyday life, the level of physical activity among the respondents is rather low. The attention given by disabled to physical activity is too small. Their physical activity is often limited to the one needed for prescribed rehabilitation.

An increase of physical activity among disabled people would create a natural stimulus to accelerate and support the renewal process. It would be helpful in recovery and in compensation of the damaged functions of the organism. Physical activity has good influence on the overall health condition and on the immunity of an organism confronted to pathogenic factors (Łobożewicz, 2000). Results of the survey show that there is still a small participation of disabled in active recreation. A growing awareness of the important influence that physical activity has on the health of the disabled is a positive information, encouraging to continue further research in this field.

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