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Opinions of the students of the University of the Third Age on selected health behaviors and social support – A comparative analysis

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A Study Design
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abstract

Background: In the reflection on old age, the issue of activating the elderly and incorporating them into social life in order to counteract social exclusion and all forms of discrimination is clearly marked. The study aimed at getting to know the opinions of the students of the University of the Third Age on preferred health behaviors and social support.

Material/Methods: The study group involved 130 students of the University of the Third Age. The vast majority were women (90%, n = 117), and the mean age was 65.4 ±5.9 years. The study used a questionnaire containing questions about sociodemographic data, selected health behaviors and social support. The p level of < 0.05 was considered significant for the interpretation of hypotheses.

Results: The place of residence does not have a significant impact on the activities undertaken among the respondents. Walks and organized gymnastics were the most frequently chosen form of physical activity, which people aged 66-70 often did. Passive rest of a significant percentage of students was associated with watching television. The most frequently occurring condition was hypertension. Emotional support was received by the respondents from the family/relatives (40% of respondents); a similar percentage of people (about 37%) declared that they had no expectations in this regard. The percentage of people using institutional support in both subgroups was significantly different, with respondents in the town of Ketrzyn (northeastern Poland) using this form more often.

Conclusions: Surveyed students lead an inadequately active lifestyle. Factors such as age, place of residence and education did not affect physical activity.

Key words: elderly people, health behaviors, physical activity, social support.

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INTRODUCTION

In recent years, the issue of old age and prevention of premature aging and its consequences among older people is more often the subject of in-depth scientific reflections and empirical work [1, 2, 3, 4]. Also, the essence of interest in this group is more gerontological prophylaxis, understood as protection of health, rather than protection against old age. It is also emphasized that the health behaviors of a man in the lifestyle, as an element of life's activity and his health, remain in different, albeit mutual relations and the direct relationship usually affects the change of well-being [5]. The analysis of the social situation of this population indicates that its position in the living environment is quite significantly conditioned by other kinds of social efficiency (the ability to participate in social life, present their own views, formulate expectations and meet the needs of the elderly). The expression of this is relatively precise hedonic, practical and pro-health goals, including those assigned to physical activity. In the case of older people, the benefits gained from regularly undertaken activities may be of greatest importance for maintaining well-being, improving functional capacity, preventing, minimizing and/or reversing many health hazards, worsening their quality of life [6]. Older people, however, are most likely to have a sedentary lifestyle. The results of research conducted in the United States and Europe indicate that people over 60 years of age spend about 80% of their daytime on motor inactivity, which is 8 to 12 hours [7, 8]. The longer time spent in a sitting position correlated with an increased risk of mortality in the elderly population. Some studies have pointed to the relationship between sedentary behavior and the metabolic syndrome, increased waist circumference, and overweight or obesity. The results of studies assessing the mental health condition, the inclination to occurrence of kidney cancer and the reasons for falls among the elderly population seem insufficient to form unambiguous conclusions [9].

Gerontoprophylaxis treats the efficiency of the elderly as a social value, the aim of which is to maintain independence and good quality of life through physical culture [10]. The response to the needs of the older people's environment was the activity of Third Age Universities (UTA), which aims to include this population in a broad multidimensional process of education, integration and activity, giving life meaning at the background of current social, cultural and civilizational changes. Inspiring older people to participate in various forms of physical and mental activity, including pro-health and social activities, is to counteract social exclusion and all forms of discrimination [11]. Since factors that accelerate the aging process are the lack of activity and loneliness, the role of UTA as the most popular form of activation of older people is now irrefutable [12]. The research results showed that social support shown to the elderly population was significantly correlated with the place of residence, age, living conditions, marital status and self-evaluation of health, and that its lack may lead to deterioration of well-being and health [13]. Through the integration of the senior community and numerous proposals for active leisure time, they strive to maintain the highest possible quality of life and improve their participants' well-being [14].

In view of the above, the aim of this study is to investigate the opinions of students of the University of the Third Age on preferred health behaviors and social support.

MATERIAL AND METHODS

The study used the method of a diagnostic survey, and an originally designed questionnaire, consisting of two parts, was used to collect the data. The first part contained questions about basic sociodemographic data, such as age, sex, education, marital status and the type of material and financial situation. The second part contained statements describing selected behaviors related to health and social support. Health behaviors primarily took into account recreation and physical activity, the organization of free time and tobacco smoking. Statements describing preventive and medical behaviors concerned the occurrence of chronic diseases and actions undertaken by the respondents as well as social and health institutions. During the survey, respondents were asked to point out their preferred health behaviors and the form of social support and medical assistance most closely related to them. The study included 130 students who actively participated in activities organized by the University of the Third Age in the fourth quarter of 2015. Subgroup 1 consisted of students of the University of the Third Age in the town of Ketrzyn (71 people – 54.6%), while subgroup 2 consisted of students from the Association "University of the Third Age" in Szczytno (59 people – 45.4%). (Both towns are situated in northeastern Poland). Random sampling was applied. Respondents were informed about the purpose of testing and the right to confidentiality of data. The vast majority were women (90%, n = 117); men were only 10% (n = 13). The respondents' age ranged from 52 to 84 years, with a mean age of 65.4 ±5.9 years. The most numerous group were respondents aged 61–65 (n = 50, 38.5%). Over half of the respondents (59.2%, n = 77) indicated that they were married, but also 38 people (29.2%) reported that their life partner was dead. Among the respondents, 34.6% (n = 45) were people with primary education, approximately one-fourth of all respondents had secondary and higher education. Almost half of the respondents (47.7%, n = 62) described their own material and financial situation as good, and over 30% as sufficient or poor (Table 1).

Table 1. Socio-demographic characteristics of the respondents

Variable		N = 130	%
Sex	female	117	90.0
	male	13	10.0
Age	≤ 60 years old	24	18.5
	61–65	50	38.5
	66–70	37	28.5
	≥ 71 years old	19	14.6
Marital status	single	8	6.2
	married	77	59.2
	widowed	38	29.2
	divorced	7	5.4
Financial situation	very good	28	21.5
	good	62	47.7
	sufficient	31	23.9
	poor	9	6.9
Education	primary	45	34.6
	vocational	20	15.4
	secondary	32	24.6
	higher	33	25.4

Source: own research

The collected empirical material was subjected to statistical analysis using the STATISTICA 12 PL package. The chi-square test (χ^2) was used to check the equinumerosity of groups and to compare preferences of health behaviors. The $p < 0.05$ level was considered significant.

RESULTS

Practicing or stopping regular physical activity by adults may be influenced by age, place of residence, education, health status and many other factors. Therefore, the question was asked: "Have the respondents walked for at least 30 minutes in the last 7 days?" In the next question, respondents were asked to answer whether in the same period they practiced the chosen form of physical activity. The analysis shows that a large group of students of the University of the Third Age, both in Ketrzyn and Szczytno, took walks and practiced selected forms of physical activity, devoting at least 30 minutes to these activities (93.1%, n = 121 and 80.8%, n = 105 respectively). No differences were observed in this manner between subgroups 1 and 2 ($p = 0.35$, $\chi^2 = 2.05$). Almost every fifth respondent walked with the frequency of 1 or 3 times a week; a lower percentage declared taking walks twice a week – 13% of the respondents. On the other hand, almost ¼ of the respondents indicated daily walks – 24% of respondents. The most frequently chosen form of physical activity was organized gymnastics (60%, n = 63), swimming (38.1%, n = 40), Nordic walking (18.1%, n = 19) and cycling (14.3%, n = 15). Statistical analysis did not show differences between the studied subgroups ($p = 0.06$, $\chi^2 = 5.75$). A comparison of results obtained by two highlighted subgroups is presented in Table 2.

Table 2. Forms of physical activity preferred by students of the University of the Third Age

Forms of physical activity	UTA Ketrzyn – subgroup 1		UTA Szczytno – subgroup 2		Total	
	n = 52	%	n = 53	%	N = 105	%
	($\chi^2 = 5.75$, $p = 0.06$)					
Swimming	13	25.0	27	5.9	40	38.1
Cycling	6	11.5	9	17.0	15	14.3
Nordic walking	7	13.5	12	22.6	19	18.1
Jogging	6	11.5	7	13.2	13	12.4
Organized gymnastics	31	59.6	32	60.4	63	60.0
Other forms	4	7.7	6	11.3	10	9.5

*Source: own research; statistically significant: $p < 0.05$**

The analysis of our own research showed that respondents, regardless of their age, took walks ($p = 0.42$, $\chi^2 = 6.02$) and exercised physically ($p = 0.45$, $\chi^2 = 5.70$). The distribution of results for individual age groups is similar. Subsequently, the authors tried to analyze the answers to the question: "Does the respondents' age influence the choice of the form of physical activity?" Significant differences were noticed with the indicated organized gymnastics ($p = 0.01$, $\chi^2 = 17.92$), which is practiced by more people aged 66–70 and for jogging as a form of physical activity ($p = 0.04$, $\chi^2 = 8.31$). Jogging was significantly more often practiced by people aged 60 and below. The distribution of physical activity, i.e. swimming, cycling and Nordic walking, for individual age groups is similar (Table 3). At the end of this part of the analysis, it is hard not to notice that the students of the University of the Third Age in Ketrzyn and Szczytno lead an inadequately active lifestyle, and the place of residence has no significant impact on the undertaken activities.

Table 3. Preferred forms of physical activity depending on the respondents' age

Forms of physical activity	Respondents' age (in years)								χ^2	p
	≤60		61-65		66-70		≥71			
	n = 24	%	n = 41	%	n = 29	%	n = 14	%		
Swimming	11	45.8	16	39.0	9	31.0	4	28.6	4.15	0.24
Cycling	3	12.5	6	14.6	2	6.9	4	28.6	3.08	0.37
Nordic walking	5	20.8	9	22.0	3	10.3	2	14.3	8.33	0.21
Jogging	5	20.8	7	17.1	1	3.4	0	0.0	8.31	0.04*
Organized gymnastics	4	16.7	23	56.1	21	72.4	14	100.0	17.92	0.01**
Other forms	4	16.7	2	4.9	3	10.3	1	7.1	3.84	0.27

*Source: own research; statistically significant: $p < 0.05$**

Free time used by students of the University of the Third Age for passive rest was related to watching TV. The obtained data indicate that 60.8% (n = 79) of the students spent between 2 and 3 hours during the day on watching television, 12.3% (n = 16) devoted from 4 to 6 hours, and every fifth person – 1 hour daily. No differences were observed between subgroups 1 and 2 ($p = 0.38$, $\chi^2 = 4.19$). There were also no differences in the distribution of time spent in front of the television in the age groups ($p = 0.47$, $\chi^2 = 11.62$) and in groups differing in education ($p = 0.55$, $\chi^2=10.67$). Noteworthy is the fact that 91.5% (n = 119) of respondents reported that they do not smoke cigarettes. Among people declaring smoking, the average number of cigarettes smoked per day was 13. There were no differences between subgroups 1 and 2 ($p = 0.20$, $\chi^2 = 1.59$). In the study group, 3 people indicated that they had hearing problems and used a hearing aid, while 71.5% (n=93) wore glasses or contact lenses. Over the past three years, every fourth respondent stayed in hospital treatment due to various chronic conditions. As the basic disease, subjects were most often characterized by arterial hypertension (27.7%, n = 36) and hyperthyroidism (18.5%, n = 24), as well as gastric and duodenal ulcer disease (9.2%, n = 12) and cataract (9.2%, n = 12). A detailed list of indicated basic diseases is provided in Fig. 1.

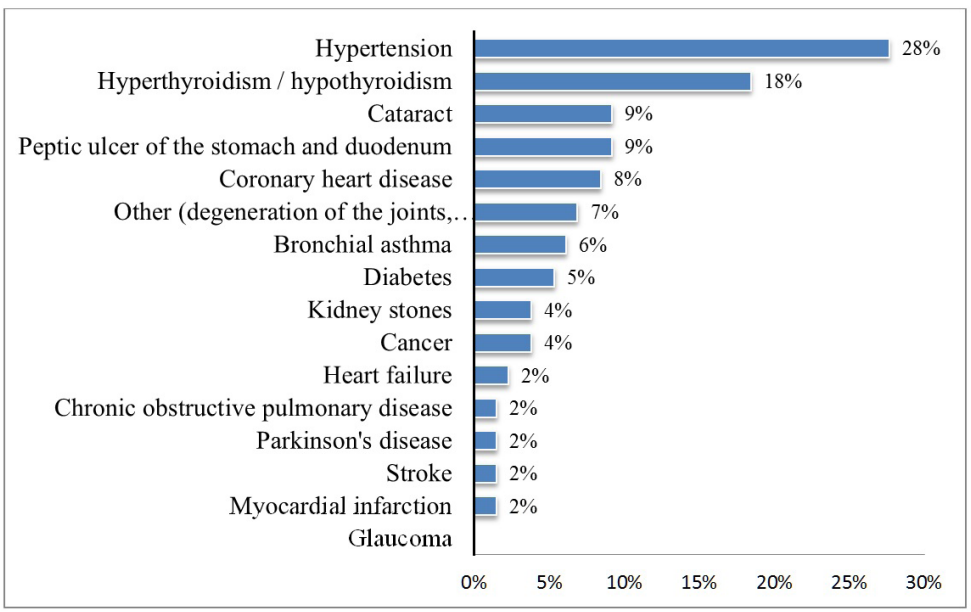

Fig. 1. A list of underlying diseases in the examined group

Source: own research

A person insured as part of the basic health care (BHC) is entitled to comprehensive medical and nursing care in the scope of care, diagnostic, treatment, rehabilitation and health promotion and disease prevention. Analyzing the collected data, it was found that 40% (n = 52) of respondents visited primary care physician once every 3 months, 22.3% (n = 29) once a month and slightly fewer respondents (19.2%, n = 25) occasionally visited a medical facility. Visits to the primary care doctor were preceded by nursing advice regarding compliance with health recommendations and obtaining information on health and illness. The vast majority of respondents claimed that there is no need to use the services of a family nurse in a residential environment.

Only every tenth person indicated that they rarely use this form of medical help. The distribution of responses in both subgroups was similar (p = 0.20, χ^2=5.88). The conducted research indicates that 40.8% (n = 53) of the respondents receive support from the family/relatives, but a significant part of respondents (36.9%, n = 48) think that there is no need for it. Of the total number of 130 students – 29 respondents (22.3%) unfortunately indicated that they did not receive support from the family/relatives (Table 4). The form of emotional support deserves special attention in the respondents' opinion. Most often, the source of emotional support as claimed by the respondents are members of the immediate family, friends and other people who are emotionally connected with them. The vast majority of respondents in both subgroups ranked this form of support in the first place. The distribution of responses in both subgroups was similar (p = 0.09, χ^2 = 4.77). The analysis showed no significant relationship between marital status and the support received from the family/relatives (p = 0.43, χ^2 = 5.87).

Table 4. Received support from family/loved ones in the respondents' opinion

Received support from family / loved ones	UTA Ketrzyn – subgroup 1		UTA Szczytno – subgroup 2		Total	
	n	%	n	%	N	%
	(χ^2 = 4.77, p = 0.09)					
Yes	26	36.6	27	45.8	53	40.8
No	21	29.6	8	13.6	29	22.3
No need	24	33.8	24	40.7	48	36.9
Total	71	100.0	59	100.0	130	100.0

*Statistically significant: p < 0.05**

Source: own research

The second important and extended form of assistance was institutional support, including a special way and type of assistance provided to respondents, mainly to mobilize their strengths, potential and resources to deal with their own difficulties and problems. The collected data indicate that 18.5% (n = 24) of respondents used the help of specialists from various medical, social or rehabilitation institutions (Fig. 2). The distribution was significantly different in both subgroups (p = 0.03, χ^2 = 4.93). People living in Ketrzyn significantly more often (25.4%) used this form of assistance than people from Szczytno (10.2%). The respondents' age and their financial situation did not affect the frequency of using institutional assistance.

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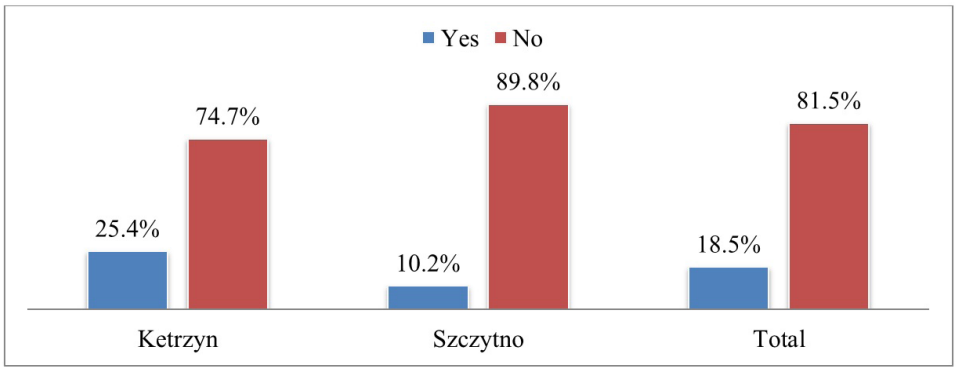

Fig. 2. Received institutional assistance in the study group

Source: own research

DISCUSSION

According to the recommendations of the World Health Organization (WHO), elderly people should spend at least 150 minutes per week on moderate intensity physical activity, which improves respiratory efficiency, or 75 minutes per week on energetic physical activity. This means practicing moderate physical activity for at least 30 minutes, 5 days a week or at least 20 minutes of intense activity at a frequency of 3 times a week [15]. It is also possible to combine moderate and higher intensity exercises. It should be done regularly, preferably every day. In the context of these recommendations, physical activity of the seniors in question should be assessed as insufficient. Only every fourth respondent, declaring daily 30-minute walks, followed this guideline. Physical activity is one of the factors that significantly influence the psychophysical health of a person. In spite of the fact that its increased level only slightly extends the genetically programmed duration of human life, it significantly improves its quality. The participation of older people in any physical activity clearly slows down the lowering of physical efficiency, resulting from the inevitable involutionary process. Guidelines for physical activity also for older people are one of the priorities of the World Health Organization activities. Therefore, it also makes the following recommendation: If older people cannot perform the recommended dose of physical exercise due to their health condition, they should remain physically active as much as their abilities and circumstances allow [16]. Another postulate in this recommendation is to draw attention to the fact that Any physical activity is better than none [17]. Most studies prove, just like our own, that seniors' physical activity is low. As a result of analyzes carried out within the framework of the PolSenior project, it was found, just as in our own research, that the most popular form of activity was walking, then organized gymnastics in our own research and cycling in the PolSenior project [15]. A significant percentage of people participating in gymnastics (60%) stems from the fact that the studied group were students of UTA, in which this type of activity is organized for the elderly. In studies conducted by Pyszczorska et al. among a similar number of older people from Poznan and the surrounding area, who were not students of UTA, the percentage of physically active people was only 33% [18]. As in our own research, this activity level can be assessed as unsatisfactory. The percentage of people with cardiovascular disease in the studies of Pyszczorska et al., most often with hypertension, was higher than in our studies – 46% [18]. According to data from the region of Wielkopolska, the percentage of people with diabetes was also higher (33%). In the groups of participants of classes in UTA in Ketrzyn and Szczytno, incidence of these two diseases (arterial hypertension and diabetes) was found respectively in 28% and

5% of the respondents. Differences in favor of the group of respondents from the Warmia-Mazury region probably result from the lower age of respondents in our research. Health complications accompanying the advanced age are not the only reason why these people visit family doctor and other specialists. These visits are often an opportunity to establish interpersonal contacts and a way to deal with a sense of loneliness. The percentage of people visiting GPs 4–6 times a year was 55% in the surveys of Pyszczorska et al., 25% of seniors from Poznan made an appointment with a general practitioner once or twice a month [18]. In our own research, slightly different data was obtained: approximately 4 times a year, 40% of people were referred to a general practitioner and 22.3% of respondents once a month. The literature indicates the importance of nursing care for a geriatric patient. Nurses are assigned an important role not only in the clinical but also social, educational or psychological aspects of taking care of the elderly [19]. Due to limited access to geriatric clinics in Poland, as part of the so-called home care, the activities of family nurses in the preparation of the patient for self-care, as well as in the education of the elderly caregivers in particular, should be appreciated [19]. The conducted research indicates a high percentage of people (approximately 85%) not using the care of a family nurse in a residential environment; however, it should be noted that these respondents did not report their needs in this area. In his work, Palka compares the care systems for elderly patients in primary care on the example of Sweden and Poland, pointing out that the competences of family doctors abroad are much greater than in our country – they are coordinators of the work of medical teams which include nurses, medical rehabilitation staff and social workers. The abovementioned specialists are assigned a very wide range of duties and have skills in the field of coordinated medical, nursing and social services for the elderly [20]. As in other studies, the percentage of people watching TV during passive rest was significant. Over 50% of respondents from Poznan spent time watching TV for 3–5 hours during the day, while 15% spent more than 6 hours a day during the day. In the studies of Szewczyczak et al., also conducted among seniors from Poznan, nearly 72% of people spent their free time in front of TV [21]. In our own research, the percentage of people watching TV daily was as follows: a total of 93% of the respondents watched TV from 1 to 6 hours per day, with the most (about 60%) of them from 2 to 3 hours a day. As in the Poznan studies, no age influence was found on the active use of free time. The basis for choosing such a form can be seen in the absence of traditions conducive to participation in physical culture, as well as habits and patterns of this activity among older generations.

Opportunities for improving this situation are seen in the orientation of social policy, to include various forms of health-enhancing activities, including those conducted by UTA, senior clubs and daily social welfare homes [21]. The increase in the percentage of older people in the Polish society is gaining momentum. Both now and in the future, it may be not only demographic, but also economic, health, social and cultural problem. At the same time, this indicates a potentially greater demand for various forms of assistance and support [22]. Aging often involves inability to function without an institutional support system. Because this type of support generates significant costs, the gerontological literature talks about the necessity of staying older in the family environment and strengthening its care functions [22]. The family then becomes a natural and closest support environment, especially mental and emotional, giving the elderly a sense of their own usefulness. The importance of such support from relatives was demonstrated by a relatively high percentage

(71%) of respondents from Ketrzyn and Szczytno. In our research, significant differences in the percentage of people using institutional support in the environments of both cities were found, with nearly one quarter of respondents from Ketrzyn claiming to be beneficiaries of this form of assistance, while in the case of UTA students from Szczytno, the percentage was only around 10%. It should be assumed that in Ketrzyn, a city larger than Szczytno, there is better access to institutions providing social support for the elderly or that such institutions in this city operate more dynamically.

CONCLUSIONS

1. From the material collected in the course of research and analysis, it can be concluded that the students of UTA from Szczytno and Ketrzyn lead an inadequately active lifestyle. There were no significant differences in preferences of health behaviors in the studied subgroups.

2. The most often chosen form of physical activity by UTA students was walking, organized gymnastics and swimming. Passive rest was connected with watching television.

3. Factors such as age, place of residence, education did not affect the respondents' health behavior. Senior citizens from Ketrzyn significantly more often used institutional support.

4. Most of the respondents, due to chronic diseases, systematically used comprehensive medical and nursing care at the level of primary health care, while a high percentage of respondents did not use the care of a family nurse in the residence environment.

5. Knowledge about preferred health behaviors and received social support in the group of UTA students can be used in planning systemic and local care for the elderly.

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