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Health behaviors of people over the age of 65 residing in the home environment

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Summary

Admission. Lifestyle elements favorably affect health in old age include proper diet and eating habits, the optimal level of physical activity, adequate sleep, satisfying social relationships, skillful use of free time and knowledge of health prevention.

Aim of the study. Assessment of health-related behaviors in a group of people over the age of 65 living in the home environment in selected socio-demographic conditions.

Material and methods. The study was conducted in February and March 2014. The material consisted of 110 people over 65 years of age. The research method was used in the job diagnostic survey. It was used as a research tool original questionnaire assessing the behavior of seniors in the area: diet, physical activity, sleep and rest, the use of stimulants and sources of stress and ways of coping with stress.

Results. The study results, that the majority of respondents eat 4-5 meals a day (50.9%; n = 43). Daily activity declares 29.1% (n = 32) tested. The most popular form of physical activity among respondents over 65 years of age are walking (75.4%; n = 83). Smoke 28.2% (n = 32) tested. In most of the subjects they consume alcohol occasionally (83.6%, n = 92) or several

times per week (16.4%, n = 18). Sources of stress in the population of seniors are primarily conflicts in the family (24.5%; n = 27), loneliness (21.8%; n = 24) and financial problems (20%; n = 22).

Conclusions. Studies have shown that socio-demographic factors significantly influence health-related behaviors presented by seniors. Assessment of the level and quality of health behavior allows you to make educational activities, care and treatment for people in aging and old age.

Keywords: health behaviors, people over 65 years of age, lifestyle

Zachowania zdrowotne osób powyżej 65 roku życia zamieszkałych w środowisku domowym

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Wstęp. Elementami stylu życia korzystnie wpływającymi na zdrowie w starości są m.in. prawidłowa dieta i nawyki żywieniowe, optymalny poziom aktywności fizycznej, odpowiednia ilość snu, satysfakcjonujące relacje społeczne, umiejętne wykorzystanie wolnego czasu oraz wiedza z zakresu prewencji zdrowotnej.

Cel pracy. Ocena zachowań związanych ze zdrowiem w grupie osób powyżej 65 roku życia zamieszkałych w środowisku domowym w wybranych uwarunkowaniach socjo-demograficznych.

Materiał i metoda. Badania przeprowadzono w lutym i marcu 2014 roku. Materiał obejmował 110 osób powyżej 65 roku życia. Metodą badawczą wykorzystaną w pracy był sondaż diagnostyczny. Jako narzędzie badawcze posłużył autorski kwestionariusz ankiety oceniający zachowania seniorów w zakresie: sposobu żywienia, aktywności fizycznej, snu i odpoczynku, stosowania używek oraz źródeł stresu i sposobów radzenia sobie ze stresem.

Wyniki. Z przeprowadzonych badań wynika, że w większości ankietowani jedzą 4-5 posiłków dziennie (50,9%; n=43). Codzienną aktywność fizyczną deklaruje 29,1% (n=32) badanych. Najbardziej popularną formą aktywności fizycznej wśród badanych osób powyżej 65 roku życia są spacer (75,4%; n=83). Papierosy pali 28,2% (n=32) badanych. W większości badane osoby alkohol spożywają sporadycznie (83,6%; n=92) lub kilka razy w tygodniu (16,4%; n=18). Źródłami stresu w badanej populacji seniorów są przede wszystkim konflikty w rodzinie (24,5%; n=27), samotność (21,8%; n=24) oraz kłopoty finansowe (20%; n=22).

Wnioski. Badania wykazały, że czynniki socjo-demograficzne istotnie statystycznie wpływają na zachowania związane ze zdrowiem prezentowane przez seniorów. Ocena poziomu i jakości zachowań zdrowotnych pozwala na podejmowanie działań edukacyjnych, opiekuńczych i leczniczych wobec osób w okresie starzenia się i starości.

Słowa kluczowe: zachowania zdrowotne, osoby powyżej 65 roku życia, styl życia

Admission

The aging process of the Polish society has been observed for a long time now, which results in an increase in the number of people aged 65 and over. and lengthening the life expectancy of women and men [1]. The aging process can take as long as 20-30 years, so it is important to take steps that will help maintain health and well-being.

Successful aging is defined as aging with a low risk of developing chronic diseases and subsequent ineffectiveness, with high mental and physical well-being and life-sustaining [2], but also depends on lifestyle behaviors such as proper diet and eating habits, physical activity, adequate sleep and rest, satisfactory social relationships or skillful use of free [3]. Strengthening positive behaviors or modifying adverse events affecting seniors' health has a significant impact on the quality of life, despite the difficult physical retention of elderly people [4]. The growth of healthy septic populations will no longer be perceived as a threat, but as an opportunity, potential, and new opportunity: in the home environment, in the workplace, in the local community, as people over the age of 60 still have a lot to offer to society [5].

Aim

Rating behaviors related to health in a group of people over the age of 65 living in the home environment in selected socio-demographic conditions.

Material and methods

The research material consisted of a group of 110 people over the age of 65 living in the Lublin province. The study was conducted between February and early March 2014. The criteria for selection of respondents to the study was completed 65 years of age, psychophysical state allows testing (vote Short Scale Mental State Examination - MMSE), seniors consent to participate in the study, and living in the home environment. It was assumed that stay in the care facility closed test could impose a specific type of behavior, eg. In terms of the type of food intake and the frequency which in turn could distort the results.

The material collected using the diagnostic survey method. The research tool was the original questionnaire, which contained only closed questions. The subjects were asked to answer questions, which aim was to assess health behaviors in terms of:

- diet (18 questions), questions related to matters of meals during the day, the person who prepares a test meals, now eating dinner, frequency of consumption of the following products: bread light and dark, pasta, groats and other cereal products, milk and dairy products, butter and cream, vegetable fats, fruits and vegetables, white meat, red meat and fish. There were also questions about preferences in choosing a product spreads, fluid intake per day, most commonly chosen drink, snacking between meals and snacks type used;

- physical activity (5 questions), respondents were asked about the frequency of physical activity, undertaken form of physical activity, the motives for physical activity, time spent on homework in the last week and asked about the subjective evaluation, or in comparison with other people consider themselves more or less as active;
- sleep and rest (2 questions), people over the age of 65 were asked about time spent per day on sleep and the most frequently chosen form of recreation;
- the use of stimulants (4 questions), the scope of questions included: Are you / and smoke cigarettes, the number of cigarettes smoked per day, the incidence of alcohol and the reasons for which the respondents turn to alcohol;
- sources of stress and ways of coping with stress (2 questions), this part of the survey asked about the sources of stress and ways of coping with stress.

Imprint tool was completed, to assess the socio-demographic data of respondents, ie. Sex, age, place of residence, marital status and education. Respondents were due to age, divided into two groups - those between 65-74 years, and respondents aged 75 years and above. This division was adopted on the basis of the 75 years of age, which clearly defines the time the end of the domination of health problems in seniors and care of a problem, along with other geriatric problems.

The results were coded prepared for the study based Microsoft Office Excel 2007, and the statistical analysis was carried out using Statistica PL 9.1. Unmeasurable values of the analysed parameter being represented by the frequencies and percentage. In order to compare the dependent variables with independent variables Chi2 test was used. The level of significance of $p < 0.05$ was indicative of the existence of significant differences or relationships.

Ethical requirements

The research was voluntary and anonymous. Each respondent was informed about the study and how to fill in questionnaires, then gained consent to participate in the study. The test procedure was carried out in line with the Declaration of Helsinki. Research carried out within the framework of own research.

Results

Characteristics of the study group

A group of 110 people over the age of 65, of which women accounted for 50.9% (n = 56). Persons aged 65 - 74 years accounted for 49.1% (n = 54) of respondents, while respondents aged 75 years and over - 50.9% (n = 56). A larger proportion of respondents surveyed are coming from cities (51.8%; n = 57) and those remaining in relationships (67.3%; n = 74). For the majority of respondents, 65% of the respondents had secondary education (50%, n = 55), followed by primary and vocational education (30.9%, n = 34). The smallest group consisted of subjects with higher - 19.1% (n = 20).

Health behaviors associated with feeding methods

The results indicate that the majority of respondents eat 4-5 meals a day (50.9%; n = 43) and prepare meals alone (65.4%; n = 72) or prepares them for their spouse or other family respecting preferences nutritional respondent (25.5%, n = 28). Half of the eat dinner before 18.00 (50%; n = 55) or between 18.00 and 20.00 (42.7%, n = 47). The diet of the respondents

aged 65 and over dark bread occurs most often several times a month (29.1%; n = 32), and white bread - every day (80%; n = 88). Grain products such as pasta or cereal in most of the surveyed host on the table several times a week (56.4%; n = 62), as well as milk and dairy products (68.2%; n = 75). Butter and sour cream seniors consume daily (38.2%, n = 42), while the vegetable fats - a few times a month (44.5%, n = 49). Only 29, 1% (n = 32) of the respondents reported that daily consume fruits and vegetables, and 59.1% (n = 65) a few times a month consumed white (lean) meat, as 32.7% (n = 36) tested. which also eats red meat several times a month. The daily diet of respondents over the age of 65, often appears daily red meat (15.5%; n = 17) than whites (4.5%; n = 5). Most people declared that eats fish occasionally or not at all (47.3%; n = 52), but not every day one eats them. 44.5% (n = 49) of respondents spreads tend to choose the oil, while 24.5% (n = 27) of bread did not lubricate. In most seniors drink the 1 501 - 2 000 ml of fluid per day, and often preferred, water (32.7%, n = 36). Snacking between meals daily 26.4% (= 29) tested, 3 - 5 times a week - 30.9% (n = 34) while 1-2 times a week - 42.7% (n = 47). The most preferred snack between meals are the fruits or vegetables (33.6%, n = 37) and the second included sandwich or bun (31.8%, n = 35). The detailed distribution of answers are presented in Table.I.

Table I. Health behavior related to the way of nutrition.

Question	Category	n	%	Question	Category	n	%
The number of meals eaten in a day:	1 - 3	43	39.1	The frequency of consumption of white meat:	Daily	5	4.5
	4 - 5	56	50.9		A few times a week	28	25.5
	> 5	11	10.0		Several times a month	65	59.1
I prepare meals:	Independently	72	65.4		Occasionally or not at all	9	8.2
	Spouse or other family member	28	25.5	The frequency of consumption of red meat:	Daily	17	15.5
	Spouse or other family member	8	7.3		A few times a week	49	44.5
	Order by phone or restaurant outings	2	1.8		Several times a month	36	32.7
Time to eat dinner:	Before 18.00	55	50.0		Occasionally or not at all	8	7.3
	Between 18.00 and 20.00	47	42.7	The frequency of fish consumption:	Daily	0	0
	After 20.00	8	7.3		A few times a week	12	10.9
The frequency of consuming dark bread:	Daily	12	10.9		Several times a month	46	41.8
	A few times a week	15	13.6		Occasionally or not at all	52	47.3
	Several times a month	32	29.1	Products selected for spreads:	Butter	49	44.5
	Occasionally or not at all	51	46.4		Margarine	13	11.8
The frequency of eating bread clear:	Daily	88	80.0		Butter or margarine	21	19.2
	A few times a week	19	17.3		I do not smear	27	24.5
	Several times a month	0	0	Fluid intake per day (ml):	<750	4	3.6
	Occasionally or not at all	3	2.7		750 - 1 500	38	34.5
The frequency of eating pasta, groats and other cereal products:	Daily	9	8.2		1 501 - 2 000	61	55.5
	A few times a week	62	56.4		More than 2 000	7	6.4
	Several times a month	39	35.5	Most drinks:	100% Juice	28	25.5
	Occasionally or not at all	0	0		Carbonated drinks	12	10.9
The frequency of consumption of milk and dairy products:	Daily	27	24.5		Tea	thirt y	27.3
	A few times a week	75	68.2		Coffee	4	3.6
	Several times a month	7	6.4	Water	36	32.7	
	Occasionally or not at all	1	0.9	Snacking between meals:	Daily	29	26.4
The frequency of consumption of butter and cream	Daily	42	38.2		3 - 5 times a week	34	30.9
	A few times a week	38	34.5		1 - 2 times a week	47	42.7
	Several times a month	26	23.6		Never	0	0
	Occasionally or not at all	4	3.6	Preferred Foods:	Sweets	33	30.0
The frequency of consumption of vegetable fats:	Daily	23	20.9		Fruit or vegetables	37	33.6
	A few times a week	33	30.0		salty snacks	4	3.6
	Several times a month	49	44.5		Nuts, dried fruits	1	0.9
	Occasionally or not at all	5	4.5	Sandwiches, pastries	35	31.8	
The frequency of consumption of fruits and vegetables:	Daily	32	29.1	-	-	-	
	A few times a week	58	52.7	-	-	-	
	Several times a month	20	18.2	-	-	-	
	Occasionally or not at all	0	0	-	-	-	

In further analysis, it was decided to see if there is a statistical relationship between the number of meals, and the data socio-demographic. Respondents were divided into two groups: those who consume 4 or more meals, and respondents who eat 1-3 meals a day. Statistical analysis showed no relationship between the socio-demographic data (sex, age, education, marital status, residence), and the amount of food consumed during the day ($p > 0.05$). Detailed data are presented in Table. II.

Table II. Number of meals per day and socio-demographic variables.

Variables		Daily food intake [n (%)]		statistical Analysis
		4 and more	1 - 3	
Sex	Women	36 (64.3)	20 (35.7)	$\chi^2 = 0.295$; $p = 0.587$;
	Men	31 (57.4)	23 (42.6)	
Age	65-74 years	36 (66.7)	18 (33.3)	$\chi^2 = 1,040$; $p = 0.308$;
	75 and more	31 (55.4)	25 (44.6)	
Education	Basic Professional	18 (52.9)	16 (47.1)	$\chi^2 = 2.985$; $p = 0.225$;
	Average	33 (60.0)	22 (40.0)	
	Higher	16 (76.2)	5 (23.8)	
Marital status	Free / a	24 (66.7)	12 (33.3)	$\chi^2 = 0.429$; $p = 0.512$;
	In relation with	43 (58.1)	31 (41.9)	
Place of residence	City	36 (67.9)	17 (32.1)	$\chi^2 = 1,584$; $p = 0.208$;
	Village	31 (54.4)	26 (45.6)	

Health behaviors related to physical activity

Daily physical activity is declared by 29.1% (n = 32). So many respondents declare that they take physical activity three to five times a week. The most popular form of physical activity among respondents over 65 years of age are walking (75.4%; n = 83), followed by cycling (9.1%; n = 10) and aerobics (6.4%; n = 7). At the same time, most respondents spend less than an hour on homework during the week (38.2%; n = 42). The majority of respondents take the physical activity because they want to improve or maintain good health (59.1%; n = 65). And as many as 51.8% (n = 57) of seniors is of the opinion that their physical activity is the same as other people in their age, and 32.7% (n = 36) is considered to be more physically active (Tab. III).

Table III. Health behaviors in physical activity.

Lp.	Question	Categories	n	%
1.	The frequency of physical activity:	Daily	32	29.1
		3 - 5 times a week	32	29.1
		Several times a month	thirty	27.3
		Occasionally or not at all	16	14.5
2.	Forms of physical activity undertaken by people over 65 years of age:	Swimming	4	3.6
		Aerobics	7	6.4
		Cycling	10	9.1
		walking	83	75.4
		Running	6	5.5
		Dance	0	0
3.	Themes physical exertion:	The desire to improve or maintain good health	65	59.1
		The attention to attractive appearance	21	19.1
		Pleasure, relaxation	24	21.8
4.	Time spent on homework during the last week	Less than an hour	42	38.2
		2 - 3 hours	32	29.1
		Over 3 hours	36	32.7
5.	In comparison with other people of a similar age I consider myself a person:	More physically active	36	32.7
		Likewise physically active	57	51.8
		Less physically active	17	15.5

Based on the frequency of physical exertion of the respondents were divided on the person physically active and inactive. The first group included those who practice every day or several times a week (58.2%; n = 62). For inactive people were considered those who make an effort several times a month or only occasionally (41.8%; n = 46). Statistical analysis showed a significant correlation between education and physical activity declared. Individuals with higher education significantly more were counted as active seniors than physically inactive. The same people with secondary education. In contrast, subjects who legitimized the primary or vocational education were more likely to be classified into a group of people physically inactive ($p = 0.014$). Other variables were not statistically significant (Tab. IV).

Table IV. Physical activity and socio-demographic variables.

Variables		Physical activity [n (%)]		statistical Analysis
		active	inactive	
Sex	Women	35 (62.5)	21 (37.5)	$\chi^2= 0.550$; p = 0.458;
	Men	29 (53.7)	25 (46.3)	
Age	65-74 years	32 (59.3)	22 (40.7)	$\chi^2= 0.001$; p = 0.975;
	75 and more	32 (57.1)	24 (42.9)	
Education	basic Vocational	16 (47.1)	18 (52.9)	$\chi^2= 8.570$; * p = 0.014;
	Average	30 (54.5)	25 (45.5)	
	Higher	18 (85.7)	3 (14.3)	
Marital status	Free / a	19 (52.8)	17 (47.2)	$\chi^2= 0,354$; p = 0.551;
	In relation with	45 (60.8)	29 (39.2)	
Place of residence	City	30 (56.6)	23 (43.4)	$\chi^2= 0.017$; p = 0.896;
	Village	34 (59.7)	23 (40.3)	

Sleep and rest

Most respondent is given sleep 6 to 8 hours (56.4%, n = 62). In contrast, 11.8% (n = 13) tested using less than five hours. People over 65 are most likely to be resting while watching television (46.3%; n = 51), working at home or in the garden (19.1%; n = 21) or reading a book (11.8%; n = 13). Detailed data are shown in Table V.

Table V. The behaviors in the field of sleep and rest.

Lp.	Question	Categories	n	%
1.	Taking the time to sleep during the day:	Less than 5 hours	13	11.8
		6 - 8 hours	62	56.4
		Over eight hours	35	31.8
2.	Most forms of rest:	Listening to music	7	6.4
		watching TV	51	46.3
		Reading books	13	11.8
		Needlework for example. Embroidery	8	7.3
		The practice of sport	3	2.7
		Nap	7	6.4
		Housework or plot	21	19.1

On the basis of the preferred forms rest of the respondents were divided on the person resting passively (listening to music, watching TV, reading a book or newspaper, sleeping) or active (performing needlework, working at home or in the garden and practicing sports). 70.9% (n =

78) of respondents are passive and therefore have negative behavior on this issue. Only 29.1% (n = 32) of the respondents were active. The statistical analysis showed no statistically significant relationship between active or passive mode of living and socio-demographic variables ($p > 0.05$). Detailed data are presented in Table VI.

Table VI. Behaviors associated with rest and socio-demographic variables.

Variables		Senior resting [n (%)]		statistical Analysis
		actively	passively	
Sex	Women	14 (25.0)	42 (75.0)	$\chi^2 = 0.350$; $p = 0.554$
	Men	10 (18.5)	44 (81.5)	
Age	65-74 years	11 (20.4)	43 (79.6)	$\chi^2 = 0.017$; $p = 0.896$;
	75 and more	13 (23.2)	43 (76.8)	
Education	Basic Professional	9 (26.5)	25 (73.5)	$\chi^2 = 0.907$; $p = 0.635$
	Average	10 (18.2)	45 (81.8)	
	Higher	5 (23.8)	16 (76.2)	
Marital status	Free / a	8 (22.2)	28 (77.8)	$\chi^2 = 0.030$; $p = 0.861$
	In relation with	16 (21.6)	58 (78.4)	
Place of residence	City	8 (15.1)	45 (84.9)	$\chi^2 = 2,003$; $p = 0.157$
	Village	16 (28.1)	41 (71.9)	

The use of stimulants

Smoke 28.2% (n = 32) patients, of which 11 to 20 units per day smoke 10.9% (n = 12) seniors, 10.1% (n = 11) piles of from 1 to 10 cigarettes per day and 8.2% (n = 9) - 21 and more. In most of the subjects they consume alcohol occasionally (83.6%, n = 92) or several times per week (16.4%, n = 18). Respondents most often seniors to alcohol dates back to the occasion socializing (69.1%, n = 76), or to improve the well-being (10.9%, n = 12). Detailed data on the behavior associated with the use of stimulants is shown in Table VII.

Table VII. Behaviors in the use of stimulants.

Lp.	Question	Categories	n	%
1.	Smoking tobacco:	I smoke	32	28.2
		I do not smoke	78	71.8
2.	Number of cigarettes smoked per day:	1 - 10	11	10.1
		11 - 20	12	10.9
		21 and more	9	8.2
		Not applicable	78	70.8
3.	Frequency of alcohol consumption:	Daily	0	0
		A few times a week	18	16.4
		Occasionally (occasionally)	92	83.6
		At all	0	0
4.	The reasons for drinking alcohol:	feel better	12	10.9
		Wont	9	8.2
		Loneliness	4	3.6
		stressful situations	9	8.2
		Friendly matches	76	69.1

The statistical analysis of the determinants of smoking factors socio-demographic it is shown that there is a significant association between smoking and sex, age and place of residence ($p < 0.05$). Significantly more likely to smoke cigarettes, men, people aged over 75 years and at the border of statistical significance, people living in rural areas.

Statistical analysis of the declared frequency of drinking alcohol showed significant correlation between alcohol consumption and the gender, education, marital status and place of residence ($p < 0.05$). Consumption of alcohol significantly more often declared by men, persons with a primary and vocational education, respondents who are not in relationships and those living in rural areas. Detailed data are shown in Table VIII.

Table VIII. Behaviors associated with the use of stimulants and socio-demographic variables.

Variables		Cigarette smoking [n (%)]		statistical Analysis	Alcohol [n (%)]		statistical Analysis
		Yes	No		Yes	No	
Sex	Women	5 (8.9)	51 (91.1)	$\chi^2= 18.999$; $p < 0.001$ *	2 (3.6)	54 (96.4)	$\chi^2= 11.802$; $p < 0.001$ *
	Men	26 (48.2)	28 (51.8)		16 (29.6)	38 (70.4)	
Age	65-74 years	10 (18.5)	44 (81.5)	$\chi^2= 4.001$; $p = 0.045$ *	8 (14.8)	46 (85.2)	$\chi^2= 0.030$; $p = 0.862$
	75 and more	21 (37.5)	35 (62.5)		10 (17.9)	46 (82.1)	
Education	Basic Professional	11 (32.4)	23 (67.6)	$\chi^2= 4.465711$ $p = 0.107$	13 (38.2)	21 (61.8)	$\chi^2= 17.271$; $p < 0.001$ *
	Average	18 (32.7)	37 (67.3)		4 (7.3)	51 (92.7)	
	Higher	2 (9.5)	19 (90.5)		1 (4.8)	20 (95.2)	
Marital status	Free / a	12 (33.3)	24 (66.7)	$\chi^2= 0.374$; $p = 0.540$	10 (27.8)	26 (72.2)	$\chi^2= 3.930$; $p = 0.048$ *
	In relation with	19 (25.7)	55 (74.3)		8 (10.8)	66 (89.2)	
Place of residence	City	10 (18.9)	43 (81.1)	$\chi^2= 3.541$; $p = 0.059$ *	4 (7.5)	49 (92.5)	$\chi^2= 4.632$; $p = 0.031$ *
	Village	21 (36.8)	36 (63.2)		14 (24.6)	43 (75.4)	

Stress and coping with stress

The study shows that the sources of stress in the population of seniors are primarily conflicts in the family (24.5%; n = 27), loneliness (21.8%; n = 24) and financial problems (20%; n = 22). Respondents stress most often cope by taking sedatives (36.4%; n = 40), talking with friends (28.2%; n = 31), and using religious practices (14.5%; n = 16). Detailed data are presented in Table IX.

Table IX. Behaviors associated with stress and how to cope with stress.

Lp.	Question	Categories	n	%
1.	Sources of stress:	Financial problems	22	20.0
		Loneliness	24	21.8
		death of a spouse	5	4.5
		Retirement	16	14.5
		The conflict in the family	27	24.5
		loss of friends	2	1.8
		Disease	14	12.7
2.	Ways to cope with stress:	Physical effort	11	10.0
		Talking with friends	31	28.2
		alcohol consumption	11	10.0
		Taking sedatives	40	36.4
		religious practices	16	14.5
		Dream	1	0.9

On the basis of the chosen forms of minimizing stress tested were divided into those which apply positive (52.7%, n = 58) and negative (47.3%, n = 52) behavior in this regard. Preferred forms of stress included levelling exercise, chatting with friends, engaging in religious practices. Improper ways to combat stress is a dream, the use of sedatives and alcohol.

Statistical analysis showed a significant correlation between sex, age, education and home and selectable surveyed methods of coping with stress ($p < 0.05$). Men, people aged over 75, having lower education and those living in rural areas significantly more often present negative ways of coping with stress (Tab. X).

Table X. Behaviors related to how to cope with stress and socio-demographic variables.

Variables		Methods of dealing with stress [n (%)]		statistical Analysis
		Positives	Negatives	
Sex	Women	36 (64.3)	20 (35.7)	$\chi^2= 5.206$; $p = 0.022 *$
	Men	22 (40.7)	32 (59.3)	
Age	65-74 years	37 (68.5)	17 (31.5)	$\chi^2= 9.404$; $p = 0.002 *$
	75 and more	21 (37.5)	35 (62.5)	
Education	Basic Professional	12 (35.3)	22 (64.7)	$\chi^2= 16.443$; $p <0.001 *$
	Average	27 (49.1)	28 (50.9)	
	Higher	19 (90.5)	2 (9.5)	
Marital status	Free / a	16 (44.4)	20 (55.6)	$\chi^2= 1,020$; $p = 0.312$
	In relation with	42 (56.8)	32 (43.2)	
Place of residence	City	40 (75.5)	13 (24.5)	$\chi^2= 9.503$; $p <0.001 *$
	Village	18 (31.6)	39 (68.4)	

Discussion

The aging process depends mainly presented by human beings over a lifetime of health behaviors. Therefore, the correct habits in terms of eating habits, physical exertion, forms of rest, avoid stimulants and the use of positive methods of coping with stress condition to maintain good health and quality of life of seniors.

The population covered by the survey according to the nutritional recommendations, which regularnie 4-5 meals a day [6], consumed 50.9% of seniors and this percentage was less than Suligi (slightly over 63% of men and nearly half of women) [7] and research Sadowska and Śliwiński - 83.3% [8], but higher than with relation bat (30.3% men and 41.2% women) [9]. Most studies on centenarians parsley et al. [10] consumed at least 4 meals a day. Kołajtis-Dołowy and Tyska [11] reported that 2/3 of respondents accept too little, because the 3 meals a day, but doing it at regular intervals, but this regularity applies only to eat breakfast, lunch and dinner with a lack of respect for the seasons taking second breakfast and afternoon tea, or to skip them completely.

The vast majority of respondents independently prepare their own meals, so you can conclude that they are personally responsible for their behavior presented by health nutrition. The surveyed for the most part do not include in their diet wholemeal bread replacing it with light that is consistent with studies Stelmach et al., In which only 21.7% of seniors prefer dark bread [12]. This is probably due to the high prices of whole grain products, and the fact that most of the seniors in the study came from the countryside, where the availability of such bread is less than in the city. Grain products, milk and dairy seniors choose several times

during the week, which is quite favorable and conditioned probably by the habits and habits of his youth are also foods simple processing even for single men, who predominate in the rural population and the consistency of these products is suitable even for people with functional disorders of the oral cavity. Vegetable fats for people in old age are consumed only a few times a month, which suggests that frying foods, respondents choose the most animal fats. The test results Kołajtis-Dołowy Tyska and [11] indicate that the larger the consumption of oil is more characteristic of people with higher education and status material and females. Fruits and vegetables consume most seniors several times a week, perhaps because the study was conducted during the winter, otherwise the availability of fruit and vegetables is lower in rural areas with high prices at the same time becoming a barrier for economic seniors. We have surveyed more interest in eating red meat, which often use during the week than white. Least likely of all groups of food products mentioned seniors choose fish. Both excessive consumption of fatty meats and minimal consumption of fish may be due to the limited financial resources of the respondents and a monotonous diet of older people with simultaneous reluctance to make changes. All respondents declare snacking between meals, usually 1-2 times a week. As a snack they treat both fruits and vegetables, sandwiches, as well as pastries and sweets. Despite the nutritional errors that sometimes appear in the lives of seniors we can say that they present positive health behavior in this matter regardless of the adopted variables. Both excessive consumption of fatty meats and minimal consumption of fish may be due to the limited financial resources of the respondents and a monotonous diet of older people with simultaneous reluctance to make changes. All respondents declare snacking between meals, usually 1-2 times a week. As a snack they treat both fruits and vegetables, sandwiches, as well as pastries and sweets. Despite the nutritional errors that sometimes appear in the lives of seniors we can say that they present positive health behavior in this matter regardless of the adopted variables. Both excessive consumption of fatty meats and minimal consumption of fish may be due to the limited financial resources of the respondents and a monotonous diet of older people with simultaneous reluctance to make changes. All respondents declare snacking between meals, usually 1-2 times a week. As a snack they treat both fruits and vegetables, sandwiches, as well as pastries and sweets. Despite the nutritional errors that sometimes appear in the lives of seniors we can say that they present positive health behavior in this matter regardless of the adopted variables.

Physical activity slows involution in the body and is the basis for autonomy behavior psychophysical seniors. The study group of seniors can be considered physically active. Most of the respondents take exercise every day or several times a week. In our study, up to 85.5% of the respondents take even minimal physical exertion, as in Gębska - Kuczerowskiej, where 87% undertakes any activity (even mild) and only 13% declare that they do not exercise at all [13]. In studies PolSenior regular, recreational physical activity takes about 40% of seniors of 10 respondents declares sporadic activity until half of the passive mobility. Disturbing is the fact that the third seniors not feel the need of physical activity [14].

According Karakiewicz et al., In the elderly population 69% are physically active, of which 87% are graduates of secondary schools at least [15]. In our study, with the increase in education increases the percentage of active people and is for primary education - 47.1%, average - 54.5% higher and 85.7% of respondents. Favorite form of active seniors are walking, also in the results of Duda [16] regardless of gender, this form of activity is the most popular among the elderly, it selects 40% of men and 56.5% women. The reasons for such a

small variation elected exercises with relation may be their own limited availability in rural areas, limited financial resources and ingrained habits of seniors and belief that above a certain senior age limit is not proper to make certain forms of activity, for example. teaching dance. Housework older people spend most less than an hour a week (38.2%), less than 3 hours (32.7%), with the lowest frequency in home working 2-3 hours per week (29.1%). However, among the Nawrocka et al. [17] seniors to household activities allocate three hours per week, but the above-mentioned. author of the study took the younger group aged 60-70 years, certainly healthier and with more motivation to undertake the activity. The vast majority of seniors spend the rest 6-8 hours a night. In studies Borowiak cubes and [18] the elderly within 7 days using 35 to 56 hours. Respondents rest passively watching television. Most often the preferred form of leisure studies Dmowski [19] is watching TV, reading books and sleep. Unfortunately, in the senior population as a form of recreation often still dominated watching TV because they believe that they should not take the form of a more dynamic bearing in mind your health and protection against injuries. According Kozdronia [20] determining factor too little interest in active form of rest is insufficient knowledge of older people on the benefits of physical activity.

Seniors in the majority declare alcohol occasionally or not at all (83.6%), others reach for alcoholic beverages several times a week on the occasion of social gatherings. Karakiewicz [21] highlighted that 25% of men over 65 years of age with heart disease, even to drink 4 glasses of vodka a day. Significantly more likely to use alcohol reach men, as well as in the results of Gerstenkorn et al. [22] where 74% of drinkers are men, which is probably due to cultural factors of alcohol among men and the fact that women are demonstrating greater attention to health shun this drugs. Alcohol abuse is more common among seniors in rural areas and people in the free state. Single people without psychological support from family, divorced people, widowed are more likely to seek solace in alcohol consumption. Smoking is not the most senior among the respondents, but 28.2% admit to having contact with him, it's definitely more than report the results Gerstenkorn et al.[22], according to which tobacco smoke 10.8% of the elderly. The authors cited his research took only senior citizens from the cities who smoke less than those from rural areas, which is consistent with the results of their own research. Greater frequency of smoking among rural residents may result from the tight-established habits and traditions of the family and the fact that the majority of seniors worked or is working physically, and this is one of the factors intensifying contacts with the stimulant. Also in consideration Solids et al. [23] physically working people are significantly more smokers than performing mental work. The largest percentage of elderly piles from 11 to 20 pcs. Cigarettes per day, which is consistent with studies Drygas et al. [24] and Jachimowicz and die [25] . Older people are less likely than seniors older than 75 years. The cause of this condition can be difficult to break the habit over the years, the multitude of failed previous attempts and the belief that no visible effects of smoking guarantees that they will not touch the senior. Many tobacco-related diseases is however insidiously and secretly developing for many years. People in early retirement burn less than seniors with more than 75 years. The cause of this condition can be difficult to break the habit over the years, the multitude of failed previous attempts and the belief that no visible effects of smoking guarantees that they will not touch the senior. Many tobacco-related diseases is however insidiously and secretly developing for many years. People in early retirement burn less than seniors with more than 75 years. The cause of this condition can be difficult to break the habit

over the years, the multitude of failed previous attempts and the belief that no visible effects of smoking guarantees that they will not touch the senior. Many tobacco-related diseases is however insidiously and secretly developing for many years.

The most common cause of stress among the respondents are conflicts in the family, loneliness and financial problems. Perhaps this is due to the high attachment of seniors to the tradition and the breakdown of multi-generational families that gave them a sense of security. As a result of migration, seniors lose their interpersonal contacts, which increases the feeling of isolation. Loneliness Łobożewicz studies [26], in patients 69 years declared to nearly 11% of those in the range of 70-74 - 14.3% 75-79 - 23% above 80 years of age - 25%.

Literature reports that the percentage of abandoned persons over 75 years of age exceeds 60% [27]. Over 10% of the elderly is not visited by the family in general, to 28% of the family arrives once a week or once a month [28]. It should be emphasized that the above-Factors often occur simultaneously and are part of the "vicious circle" in geriatrics and may contribute to cessation of treatment due to austerity, worsening of health and the need for hospitalization. In the face of so many difficult situations, seniors often take sedatives, which are the easiest and most accessible form of help in unpleasant situations. Positive methods to minimize stress are more characteristic of women than men, who are more concerned about health and are more motivated to seek information in this area. The right way to minimize stress is often chosen by younger seniors. After 75 years turning to alcohol as a way of dealing with stressful situations than the younger age group, which has been proven in studies of their own. Positive forms of coping with stress choose respondents with higher education and living in the city. With higher education of seniors is often a better financial situation, which for seniors in the city gives you a better chance than in the countryside, seeking professional help in stressful situations.

Conclusions

1. More than half of the respondents reflected the correct eating habits, but it does not follow the regularity of meals.
2. Physical activity declares 58.2% of the elderly. The main motive is making an effort for health care, while the most common form of walks. With the increase in education increases the number of physically active people.
3. The group of seniors covered in the study rests passively, most often watching television.
4. The majority of respondents declared positive behavior in the field of non-stimulants. People who drink alcohol are usually either male, unmarried, with primary education, living in rural areas. Among smokers dominated by men, people over 75 years of age, coming from rural areas.
5. The elderly represent the correct ways of coping with stress (52.7%). These methods often affect women, younger people with higher education. The main sources of stress are conflicts in the family, loneliness and financial problems.

Bibliography

1. Samoliński B, Raciborski F. (red.). *Zdrowe Starzenie się: Biała Księga*. Wydawnictwo Naukowe Scholar, Warszawa 2013.
2. Laskowska – Szcześniak M, Kozak – Szkopek E. Uwarunkowania pomyślnego starzenia. *Forum Medycyny Rodzinnej* 2013,7(6): 287–294.
3. Muszalik M, Zielińska-Więczkowska H, Kędziora-Kornatowska K, Kornatowski T. Ocena wybranych zachowań sprzyjających zdrowiu wśród osób starszych w oparciu o Inwentarz Zachowań Zdrowotnych Juczyńskiego w aspekcie czynników socjo-demograficznych. *Problemy Higieny i Epidemiologii* 2013,94(3):509-513.
4. Smoleń E, Gazdowicz L, Żyłka-Reut A. Zachowania zdrowotne osób starszych. *Pielęgniarstwo XXI wieku* 2011, 3(36):5-9.
5. Mazurek J, Szczygieł J, Blaszkowska A, Zgajewska K, Richter W, Opara J. Aktualne zalecenia dotyczące aktywności ruchowej osób w podeszłym wieku. *Gerontologia Polska* 2014, 2: 70-75.
6. Harris NG. Nutrition in aging. W: Krause's Food, Nutrition and Diet Therapy. Mahan KL, Escott-Stump E (ed). WB Saunders, Philadelphia 2003: 318-337.
7. Suliga E. Zachowania zdrowotne związane z żywieniem osób dorosłych i starszych, *Hygeia Public Health* 2010, 45(1): 44-48.
8. Sadowska J, Śliwińska U. Ocena sposobu żywienia i stanu odżywienia osób w wieku starszym, zamieszkałych na terenach wiejskich. *Żywnienie Człowieka i Metabolizm* 2005, 32(4):187-202.
9. Gacek M. Zachowania żywieniowe grupy osób starszych zamieszkałych w Polsce i Niemczech. *ProblHigEpidemiol* 2008, 3: 401-406.
10. Pietruszka B, Kałuża J, Pawlińska-Chmara R, Kołajtis-Dołowy A. Sposób żywienia i stan odżywienia. W: Broczek K., Mossakowska M., Witt M., Skazani na długowieczność. W poszukiwaniu czynników pomyślnego starzenia. Ośrodek Wydawnictw Naukowych, Poznań 2007, 97-102.
11. Kołajtis-Dołowy A, Tyska M. Świadomość żywieniowa ludzi starszych w relacji do ich postaw i zachowań żywieniowych. *Żywnienie Człowieka i Metabolizm* 2004,1:3-16.
12. Bielecki., Bryła M, Drygas W, Kaczmarczyk-Chałas K, Stelmach W. Wpływ czynników socjoekonomicznych, stylu życia i odczuwania stresu na występowanie otyłości u ludzi w wieku poprodukcyjnym. *Wiadomości Lekarskie* 2005, 9-10: 481-490.
13. Gębska-KuczerowskaA. Ocena zależności między aktywnością a stanem zdrowia ludzi w podeszłym wieku. *Przegląd Epidemiologiczny* 2002, 3:471-477.
14. Rowiński R., Dąbrowski A. Aktywność fizyczna Polaków w wieku podeszłym, [W:] Mossakowska M., Więcek A., Błędowski P. *Aspekty medyczne, psychologiczne, socjologiczne i ekonomiczne starzenia się ludzi w Polsce*, Wydawnictwo Medyczne Termedia, Poznań 2012, 531- 548.
15. Karakiewicz B, Mroczek B, Myszke A, Rotter I, Żułtak-Bączkowska K, Żyżniewska-Banaszak E. Aktywność psychofizyczna osób w wieku starszym. *Family Medicine&Primary Care Review* 2010, 3:741-743.

16. Duda B. Aktywność i sprawność fizyczna osób w wieku 60-69 lat. *Medycyna Sportowa* 2008, 6:379-384.
17. Nawrocka B, Waszkiewicz L, Zatońska K, Aktywność fizyczna dorosłych mieszkańców Wrocławia w wieku 60-70 lat. W: Kowaleski J, Szukalski P. *Pomyślne starzenie się w świetle nauk o zdrowiu*. Łódź 2008, 40-45.
18. Borowiak E, Kostka T. Aktywność ruchowa starszych mieszkańców Łodzi. *Medycyna Sportowa* 2003, 4:139-146.
19. Dmowska I, Kozak-Szkopek E, Znajomość roli aktywności fizycznej w etiologii chorób cywilizacyjnych u osób w starszym wieku. *Problemy Pielęgniarstwa* 2010,3:272-278.
20. Kozdroń E, Leś A. Physical activity and successful ageing. *Advances in Rehabilitation* 2010,24: 49–57.
21. Karakiewicz B, Kozielec T, Późniak J, Sałacka A. Wybrane zachowania zdrowotne pacjentów wieku starszym będących pod opieką lekarzy rodzinnych a choroby układu krążenia. *Polska Medycyna Rodzinna* 2000, 2:159-161.
22. Gerstenkorn A, Suwała M. Wykrywanie problemów alkoholowych u osób w starszym wieku. *Psychiatria Polska* 2007, 5:703-713.
23. Bryła M, Maniecka-Bryła I, Szymocha M. Palenie tytoniu a rodzaj wykonywanej pracy – badanie populacji osób pracujących na terenie województwa świętokrzyskiego. *Przegląd Lekarski* 2010,10: 1004-1007.
24. Drygas W, Gwizdała K, Suwała M. Palenie tytoniu w małych gminach województwa łódzkiego. *Przegląd Lekarski* 2009, 10:760-765.
25. Jachimowicz V, Kostka T. Stan funkcjonalny i zdrowotny osób palących tytoń w starszym wieku. *Przegląd Lekarski* 2009,10:584-589.
26. Łobożewicz T. Samopoczucie psychospołeczne ludzi starszych a ich aktywność ruchowa. *Gerontologia Polska* 1995, 1/2: 25-36.
27. Allen S.C, Brocklehurst J.C. *Zarys medycyny geriatrycznej*. PZWL, Warszawa 1991.
28. Makara-Studzińska M, Zaborska A. Samotność wśród osób starszych. Porównanie międzykulturowe. *Zdrowie Publiczne* 2006, 4: 619-622.