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Impact of selected sociodemographic factors on the location of health control in the elderly

Wpływ wybranych czynników socjodemograficznych na umiejscowienie kontroli zdrowia osób starszych

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Abstract

Introduction. *Determining the dimension of the location of health monitoring is important in terms of health-promoting behavior. It is also a priority stimulus for the development of health promotion and the effectiveness of prevention that affect the process and quality of people aging.* ***Aim.*** *The aim of the study was to assess the impact of selected sociodemographic factors on the location of health monitoring for the elderly.* ***Material and methods.*** *The study group consisted of 301 people included in the nursing care in the home environment and social welfare facilities in Lublin. Women constituted 56.8% (n = 171) of respondents and 43.2% (n = 130) men. The age of the respondents ranged from 65 to 95 years (average = 76.70 years; SD = 7.05). The study used a standardized research tool which is the Multidimensional Health Locus of Control Scale (MHLC).* ***Results.*** *The statistical analysis showed that women had a greater sense of internal control over health than men (M = 24.99; SD = 4.92). Respondents over the age of 80 obtained the lowest mean on this scale (M = 22.85; SD = 4.72). People living in the family home were most convinced that health depends on themselves (M = 26.36; SD = 4.57). In turn, the higher mean on the "influence of others" scale (M = 28.43; SD = 6.39) and "situational coincidence" (M = 21.37; SD = 4.78) were obtained by respondents living in the nursing home care.* ***Conclusions.*** *1. Not all sociodemographic variables differentiate the location of health control. 2. In the elderly group, internal health control characterized women. 3. The older man, the more his health begins to be the result of the influence of others, especially medical staff. 4. People covered by institutional care were characterized by external health control. (Gerontol Pol 2020; 28: 5-9)*

Keywords*: location of health control, Multidimensional Scale of Location of Health Control (MHLC), elderly people, sociodemographic factors*

Streszczenie

Wstęp. *Określenie wymiaru umiejscowienia kontroli zdrowia ma istotne znaczenie w kwestii zachowań sprzyjających zdrowiu. Jest również priorytetowym bodźcem rozwoju promocji zdrowia i skuteczności profilaktyki, które wpływają na proces i jakość starzenia się człowieka.* ***Cel.*** *Celem badań była ocena wpływu wybranych czynników socjodemograficznych na umiejscowienie kontroli zdrowia osób starszych.* ***Materiał i metody.*** *Grupę badaną stanowiło 301 osób objętych opieką pielęgniarską w środowisku domowym oraz instytucjach pomocy społecznej w Lublinie. Kobiety stanowiły 56,8% (n = 171) respondentów a 43,2% (n = 130) mężczyźni. Wiek badanych zawierał się w przedziale od 65 lat do 95 lat (średnia = 76,70 lat; SD = 7,05). W badaniu wykorzystano standaryzowane narzędzie badawcze, jakim jest Wielowymiarowa Skala Umiejscowienia Kontroli Zdrowia (MHLC).* ***Wyniki.*** *Z przeprowadzonej analizy statystycznej wynika, że kobiety w większym stopniu miały wewnętrzne poczucie kontroli nad zdrowiem aniżeli mężczyźni (M = 24,99; SD = 4,92). Badani w wieku powyżej 80 lat uzyskali najniższą średnią w tej skali (M = 22,85; SD = 4,72). Osoby zamieszkujące dom rodzinny w największym stopniu były przekonane, iż zdrowie zależy od nich samych (M = 26,36; SD = 4,57). Z kolei wyższą średnią w skali „wpływ innych" (M = 28,43; SD = 6,39) i „przypadek" (M = 21,37; SD = 4,78) uzyskali badani zamieszkujący DPS.* ***Wnioski.*** *1. Nie wszystkie zmienne socjodemograficzne różnicują umiejscowienie kontroli zdrowia. 2. W grupie osób starszych wewnętrzna kontrola zdrowia charakteryzowała kobiety. 3. Im człowiek starszy, tym jego zdrowie zaczyna być wynikiem oddziaływania innych, zwłaszcza personelu medycznego. 4. Osoby objęte opieką instytucjonalną charakteryzowały się zewnętrzną kontrolą zdrowia. (Gerontol Pol 2020; 28: 5-9)*

Słowa kluczowe: *umiejscowienie kontroli zdrowia, Wielowymiarowa Skala Umiejscowienia Kontroli Zdrowia (MHLC), osoby starsze, czynniki socjodemograficzne*

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Introduction

Reports from the world of medicine clearly indicate that human life is systematically and consistently longer. Seniors who do not cope with the changes resulting from the restrictions imposed by old age are forced to use the assistance of other people or institutions, such as social welfare homes. The basis for the preparation of good care programs for the elderly should be the research conducted in the area of personal resources. Therefore, it seems to be reasonable to include the development of appropriate direction of self health control in the work with the elderly [1–4].

Placing of health control can be interpreted in three dimensions: internal - "control over own health depends on me", the impact of others - "own health is the result of the influence of others, especially medical personnel", fortune - "health is determined by chance/fortune or other external factors". External control will mean more frequent involvement in such preventive behavior as systematic reporting for medical examinations and compliance with medical recommendations, while internal control - better compliance with daily health practices and eating habits. In general, it is believed that the internal placing of health control is more beneficial, since people with a dominance of internal control are more autonomous in making decisions, more often engage in pro-health activity and have a sense of greater responsibility for their health. In adults, together with age, the sense of the importance of internal control decreases, while the importance of influencing the health of other people and fortune/fate, increases [5-9].

Aim of the study

The aim of the study was to assess the impact of selected sociodemographic factors on placing health monitoring of the elderly.

Material and methods

The research was carried out in the Lublin Province in 2017. The research was approved by the Bioethics Committee at the Medical University of Lublin (KE-0254/91/2017). The study group consisted of 301 elderly people covered by nursing care in the home environment and social assistance institutions in Lublin, where 56.8% (n = 171) were women and 43.2% (n = 130) men. The age of the respondents ranged from 65 to 95 years (average = 76.70 years; SD = 7.05). The detailed characteristics of the studied group are presented in Table I.

Table I. Characteristics of the examined group

SOCIODEMOGRAPHIC VARIABLES	N	%
GENDER		
Female	171	56.8
Male	130	43.2
AGE		
To 70 y.old	72	23.9
71 – 75 y.old	62	20.6
76 – 80 y.old	83	27.6
Over 80	84	27.9
MERITAL STATUS		
Bachelor/maiden	31	10.3
Married	82	27.2
Divorced	39	13.0
Widow/widower	149	49.5
PLACE OF STAY		
Family home	156	51.8
Nursing home care	145	48.2
CHARACTERISTICS OF THE PLACE OF STAY		
Alone	123	41.0
With family	178	59.0

The study used the diagnostic survey method and standardized research tool which is the Multidimensional Health Locus of Control Scale (MHLC). The Polish version contains 18 statements and includes beliefs about generalized expectations in three dimensions of the location of health control: internal (I), influence of others (I), situational coincidence (C). The scale is a self-description tool. The respondent presents his/her attitude to the presented statements on a six-point scale: from I strongly disagree (1 point) to I strongly agree (6 points). The scale results cannot be represented as a single indicator. The higher the score, the greater the certainty that a given factor has an impact on health [5].

The collected research material was developed with the use of IBM statistical package SPSS Statistics (version 21). Quantitative variables are described using the mean and standard deviation. In the case of qualitative variables, the number and percentage of individual categories were indicated. To determine the relationship between variables, the Kruskal Wallis test and the Mann-Whitney test were used. The analysis results obtained were considered statistically significant at the significance level $p < 0.05$.

Results

The statistical analysis showed that women had a greater sense of internal control over health than men

(M = 24.99; SD = 4.92). The influence of age on the belief that health depends to the greatest extent on the respondents themselves (H = 8.970; p = 0.030) was also demonstrated. Respondents over the age of 80 obtained the lowest mean on this scale (M = 22.85; SD = 4.72). Marital status differentiates the belief that health depends on the situational coincidence to the greatest extent (H = 15.266; p = 0.002). The unmarried respondents - bachelors / maidens (M = 23.35; SD = 6.67) were most in agreement with this. In addition, it was shown that the respondents describing the material situation as good to the greatest extent were convinced that health depends on the respondents themselves (M = 24.47; SD = 4.35). Also, the place of stay correlates with the location of the health control of the elderly in each of the dimensions: "internal" (Z = -7,373; p <0.001), "impact of others" (Z = -7.606; p <0.001) and "situational coincidence" (Z = -2.843; p <0.001). The respondents living in the family home were most convinced that health depends on the subjects themselves (M = 26.36; SD = 4.57). In turn, the higher mean on the "influence of others" scale (M = 28.43; SD = 6.39) and "situational coincidence" (M = 21.37; SD = 4.78) were obtained by respondents living in the nursing home care. The sense of support received affects the location of health control in two dimensions: "internal" (Z = –3.016; p = 0.003) and "situational coincidence" (Z = -2.155; p = 0.031). Respondents receiving high family support received higher scores on the "internal control" scale (M = 25.17; SD = 5.50), while on the "situational coincidence" scale higher scores were found for people receiving low family support (M = 21.28: SD = 5.33). Detailed data is included in Table II.

Discussion

The issues raised in the research and the results included fit into the context of such research areas as: personal resources, quality of life, and sense of well-being of the elderly [10,11]. In addition, medicine has repeatedly pointed to the varying severity of sociodemographic factors in the context of health at various stages of the human life cycle [12].

The analysis of own results showed the influence of gender on the belief that health to the greatest extent depends on the respondents themselves. Women had a

Table II. Location of health monitoring and sociodemographic variables of the elderly

DEMOGRAPHIC VARIABLES		LOCATION FOR HEALTH MONITORING					
		Internal		*Influence of others*		*Situational Coincidence*	
		M	SD	M	SD	M	SD
GENDER	female	**24.99**	**4.92**	25.13	7.23	21.11	5.75
	make	23.07	5.73	24.83	7.91	20.42	5.69
Mann-Whitney Test		**Z = –3.140**	**p = 0.002**	Z = –0.334	p = 0.738	Z = –1.343	p = 0.179
AGE	to 70 y.old	24.24	5.93	24.78	7.74	21.10	6.00
	71 – 75 y.old	24.19	4.74	23.31	7.63	19.34	5.11
	76 – 80 y.old	25.41	5.67	26.08	7.13	21.46	5.53
	above 80 y.old	**22.85**	**4.72**	25.37	7.51	21.01	6.00
Kruskal –Wallis test		**H = 8.970**	**p = 0.030**	H = 4.957	p = 0.175	H = 4.958	p = 0.175
MERITAL STATUS	bachelor/ maiden	**23.35**	**6.67**	**26.16**	**8.54**	23.71	5.59
	married	25.21	4.61	23.65	7.28	19.33	5.63
	divorced	23.64	6.03	24.67	7.02	21.72	5.87
	widow/widower	23.89	5.24	25.59	7.51	20.79	5.54
Kruskal-Wallis test		H = 4.767	p = 0.190	H = 5.298	p = 0.151	**H = 15.266**	**p = 0.002**
PLACE OF STAY	family home	**26.36**	**4.57**	21.81	7.09	20.29	6.45
	nursing home care	21.80	5.16	**28.43**	**6.39**	**21.37**	**4.78**
Mann– Whitney Test		**Z = –7.373**	**p <0.001**	**Z = –7.606**	**p <0.001**	**Z = –2.843**	**p <0.001**
FEELING OF FAMILY SUPPORT	high	25.17	5.50	24.49	7.23	20.20	6.16
	low	23.37	5.13	25.40	7.73	21.28	5.33
Mann– Whitney Test		**Z = – 3.016**	**p = 0.003**	Z = – 1.120	p = 0.223	**Z = – 2.155**	**p = 0.031**

greater sense of internal control over health than men (Z = –3.140; p = 0.002). This may be due to singularisation in old age, which is reflected in the high percentage of older people in single-person households, and women are increasingly taking care of their households alone. This is also related to aspects of income policy. In the face of this situation, women can count primarily on themselves and they themselves have the impact on their health [12].

The significant influence of age on the belief that health depends to the greatest extent on the respondents was confirmed, the lowest score was obtained by people over 80 years of age. For comparison, in the Kurowska and Siekierska studies, the lowest results were obtained in people over 70 years (35.7%), while more results of the high dimension of influence of others in the age group over 70 years (85.7%). This is related to the decline in the independence of older people, which increases with age. Seniors' health begins to be the result of the effect of others, especially medical staff [13].

Marital status affects the belief that health depends on the chance, situational coincidence. The respondents who were single agreed the most. Comparative results in this area have not been found in the literature, but the analysis of own research may suggest that for single persons health in life was not and is not a priority. It can be assumed that in their youth, the respondents implemented other plans related to previously set goals, such as traveling, hobbies or professional development. They left their health influenced by chance, fate or other factors [14,15].

The place of stay and the sense of support received from the family also correlates with the location of the health control of the elderly. The respondents living in the family home were most convinced that health depends on the respondents themselves (H = -7,373; p <0.001). Whereas, the higher mean on the scale of the "influence of others" (H = -7.606; p <0.001) and "situational coincidence" (H = -2.843; p <0.001) were obtained by the respondents living in the nursing home care. Respondents receiving high family support obtained higher scores on the "internal control" scale (Z = –3.016; p = 0.003), while on the "situational coincidence" scale higher scores were found for people receiving low family support (Z = -2.155; p = 0.031). It can be assumed that this situation results from the diametrical differences between staying in a family home, where an elderly person, if it is possible for him or her, can decide about their own health and the use of institutional medical care. Nursing home care residents, just as the patients at hospitals, take medicines according to medical orders, they are under the care of a nurse, physiotherapist and physical therapist. The entire medical staff somehow orientate the health care of the elderly from the outside [16,17].

The results obtained in the study, in addition to the informative function and cognitive value, may constitute the basis for the preparation of programs in the field of old age psycho-prevention.

Conclusions

1. Not all sociodemographic variables differentiate the location of health control.
2. In the elderly group, internal health control characterized women mainly
3. The older the person, the more his or her health begins to be the result of the influence of others, especially medical staff.
4. Persons covered by institutional care were characterized by external health control.

Conflict of interest
None

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