

THE HEALTH BEHAVIOUR AND THE HEALTH STATUS OF PATIENTS WITH CHRONIC KIDNEY DISEASE TREATED BY THE OUTPATIENTS DEPARTMENT- IN THE LIGHT OF RESEARCH USING THE QUESTIONNAIRES “INVENTORY OF THE HEALTH BEHAVIOUR (IHB/IZZ)” AND “GENERAL HEALTH QUESTIONNAIRE GHQ-28 (GHQ-28)”

ZACHOWANIA ZDROWOTNE A STAN ZDROWIA PACJENTÓW Z PRZEWLEKŁĄ CHOROBAŁ NEREK LECZONYCH AMBULATORYJNIE – W ŚWIEŹLE BADANIA Z UŻYCIEM KWESTIONARIUSZY INWENTARZ ZACHOWAŃ ZDROWOTNYCH (IZZ) I KWESTIONARIUSZ OGÓLNEGO STANU ZDROWIA (GHQ-28)

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ABSTRACT

Introduction. An important aspect of the operation of a chronically ill person is his or her lifestyle. By changing the health behaviour can affect the course of the disease, including delaying its progression.

The aim of the study was to determine the relationship between the health behaviour and health status within a recorded group of patients with chronic kidney disease, treated by the Outpatients Department.

Material. In total 36 people were tested, consisting of 27 women and 9 men who were being treated for chronic kidney disease (CKD) in the nephrology clinic. The average duration of treatment in the clinic was 7.17 years (SD = 5.85). The average age of the respondents was 46.67 years (SD = 14.70).

Methods. We used the following research tools: 1) The structured interview was used to collect socio-demographic data; 2) Inventory of The Health Behaviour (IHB)(IZZ – Author, Juczyński; 3) Questionnaire of the General State of Health – GHQ-28, Author, D. Goldberg, Polish adaptation Makowska and Merecz.

Results. The examined patients are characterised by the average severity of complaints about their health. They presented their average severity of their health behaviour. They mostly cared about preventive behaviour, declared in the systematic execution of examinations (n = 29; 80%). The respondents admit to smoking (n = 8; 22%). A half of the respondents (n = 18; 50%) declared that they occasionally drank alcohol. The majority of respondents (n = 26; 72%) tried to do some physical activity in spite of the disease.

STRESZCZENIE

Wstęp. Ważnym aspektem funkcjonowania osoby chorej przewlekłe jest styl życia, który można określić jako decyzje i zachowania dotyczące zdrowia. Dzięki zmianie zachowań zdrowotnych można wpłynąć na przebieg choroby, m.in. opóźnić jej postęp.

Celem badań było określenie związku między zachowaniami zdrowotnymi a stanem zdrowia w grupie chorych z przewlekłą chorobą nerek leczonych ambulatoryjnie.

Material. Przebadano 36 osób, w tym kobiet 27 i mężczyzn 9, leczonych w poradni nefrologicznej z powodu przewlekłej choroby nerek (PChN). Średni czas leczenia w poradni nefrologicznej wynosił 7,17 lat (SD = 5,85). Średnia wieku badanych wynosiła 46,67 lata (SD = 14,70).

Metody. Zastosowano następujące narzędzia badawcze: 1) wywiad strukturalizowany służący do opisanego grupy pacjentów ze względu na właściwości społeczno-demograficzne, 2) Inwentarz Zachowań Zdrowotnych IZZ – autor Juczyński. IZZ przeznaczony jest do badania osób dorosłych, zarówno zdrowych jak i chorych. 3) Kwestionariusz Ogólnego Stanu Zdrowia – GHQ-28 D. Goldberga, w polskiej adaptacji Makowskiej i Merecz.

Wyniki. Badanych chorych cechuje przeciętne nasilenie skarg na stan zdrowia. Prezentują przeciętne nasilenie zachowań zdrowotnych. Najbardziej dbają o zachowania profilaktyczne, deklarują systematyczne wykonywanie badań kontrolnych (n = 29; 80%). Badani przyznają się do palenia tytoniu (n = 8; 22%). Połowa badanych (n = 18; 50%) deklarowała sporadyczne picie alkoholu, a druga połowa całkowitą abstynencję. Większość badanych (n = 26; 72%) starała się podejmować aktywność fizyczną pomimo choroby.

Conclusions. Most of the respondents revealed the average severity of their health behaviour. Patients require regular, purposeful health education, with periodic evaluation of their current health behaviour.

KEYWORDS: health behaviour, health status, chronic kidney disease, education.

Wnioski. Badani w większości przejawiają przeciętne nasilenie zachowań zdrowotnych. Pacjenci wymagają systematycznej, celowej edukacji zdrowotnej, z okresową oceną aktualnych zachowań zdrowotnych.

SŁOWA KLUCZOWE: zachowania zdrowotne, stan zdrowia, przewlekła choroba nerek, edukacja.

Introduction

Chronic diseases are a major problem for modern medicine in today's society. Statistics show that 60% of deaths worldwide are caused by chronic diseases; they have also affected a growing number of people of working age [1].

Chronic kidney disease (CKD) is a common disease in the populations of developed countries. This chronic disease develops gradually, often sub-clinically; hence it is difficult to diagnose, because the actual frequency of its occurrence is very difficult to determine.

In Poland, the number of patients with CKD in the adult population was evaluated in a study PolNef 2004–2007 at 18.4% [2]. This is a result lower than in studies of the Japanese population, 28.8% [3], and significantly higher than the Dutch population of 7% [4], and the US 11% [5]. It is believed that in a population having a high risk of developing CKD consisting of people with diabetes, hypertension or who are relatives of patients with CKD, the incidence of CKD can represent up to 50% [2]. This is confirmed by the results of the multi-study research PolSenior 2007–2010, where it has been shown that the characteristics of CKD manifested themselves in 25% of respondents in the age group of 65–69 years, 60% of people in the group of 85–89 years, but awareness of the disease had only been tested in one in every 20 people [6, 7].

An important aspect of the functioning of a chronically ill person, beyond adherence to medical recommendations, is presented by his or her lifestyle, which can be defined as the decisions and behaviour of health. Lifestyle plays an important role in chronic diseases, so it is important to help patients understand and make appropriate changes in their lives. By changing health behavior, they can not only reduce the risk of disease, but also affect the course of any disease [8].

Health behaviour can be defined as any form of human activity which is focused on health goals [9]. These objectives can have a positive or negative impact on health, respectively, so you can distinguish healthy behaviour (avoidance of disease, improving health) and behaviour that is 'unhealthy' (harmful to health). Different types of health behaviour improve the quality of life and

the functioning of the disease, while unhealthy activities are directed against their own health. Their harmfulness to health is often aggravated by the fact that they generally occur together with others, e.g. Smoking reveals a strong relationship with alcohol abuse and physical inactivity [10, 11].

Regardless of the classification of any health behaviour, the results of many recent studies indicate relationships or relationships of cause and effect between the behaviour and health of the individual. Studies show that 7 of the 10 most common causes of death given are related to human health behaviour [12].

Making healthy behaviour conducive to a realistic picture of the disease – the more accurately human beings can assess the status of their health, the less likely they would be in making his or her activity unfavourable from the point of view of health [13].

In the case of chronic illnesses, the adoption of better health behavior seems to be a sensible and beneficial idea, but within medical practice it is known that it makes a lot of trouble for patients. Some people have a lack of specific knowledge, skills and any other positive attitudes, and yet another people are already making full use of their knowledge and skills in the treatment process [14].

People's health behaviour in the situation of chronic kidney disease (CKD) comes down to making informed patient action to protect and preserve health. Study results show that the faster the progression of CKD, expressed in the rate of decline in kidney function (glomerular filtration rate), observed in patients presenting adverse health behaviour, and not using treatment recommendations, regardless of age [2, 11].

The aim of this study was to determine the relationship between the health behaviour and health status in patients with CKD, who are being treated whilst outpatients.

The following hypotheses erected:

1. There is a relationship between the health behaviour in a group of patients with CKD and their health.
2. The relationship between the health behaviour in a group of patients and health, differentiates according to:

- a) socio-demographic variables: age, sex, national origin, living with family or alone;
- b) somatic state variables: duration of treatment, family obligations.

The study was conducted after obtaining the consent of the Bio-Ethics Committee of Collegium Medicum in Bydgoszcz.

Material and methods

In order to verify the hypotheses and data collection, the following research tools were used:

1. A structured interview was used to describe a group of patients because of their socio-demographic characteristics.
2. Inventory Behavioural Health (IBH) (IZZ – Juczyński's), which contains 24 statements describing health-related behaviour: healthy eating habits, taking into account the type of food they eat, preventive behaviour regarding compliance with health recommendations, health practices including daily sleep habits, recreation and physical activity and positive, mental attitude expressed in avoiding too strong emotions, stresses and tensions or situations that affect depression. The inventory was intended to examine adults, both healthy and sick. The questionnaire IBH (IZZ) has good statistical parameters (Cronbach's alpha value of the index is 0,85 for the whole Inventory, and for its four subscales / categories are in the range from 0,60 to 0,65) [12].
3. General State of Health Questionnaire GHQ-28 (General Health Questionnaires GHQ – 28), D. Goldberg, using Makowska and Merecz's Polish adaptation. This questionnaire allows the identification of people whose health has been temporarily or long-term weakened as a result of experiencing various difficulties in life. GHQ-28 measures the general state of mental health and its four dimensions, i.e.: the severity of somatic symptoms (scale A), the level of anxiety and insomnia (scale B), disorders of functioning (scale C) and depressive symptoms (scale D). Each of the four scales contains seven questions. The examined patient marked the answers that the most accurately reflect his or her feelings. These responses were scored from 0 (I feel better than normal) to 3 (I feel much worse than usual). The Global Health Indicator is calculated by adding the sum of points obtained in the four analysed scales. The higher the score, the worse the patient's health. The Polish version of this tool is characterised by high reliability and good accuracy [15].

The level of nicotine addiction was investigated by the questionnaire HSI (Indicator Intensity Smoking HSI), a shortened version of Fagerström's Test.

In total, 36 people were tested together, which consisted of women $n = 27$ (75%) and men $n = 9$ (25%) were being treated in the nephrology clinic because of CKD. The average duration of treatment in the clinic was 7,17 years ($SD = 5,85$). Almost half of the respondents ($n = 15$; 42%) was charged with familial renal disease, and other persons ($n = 21$) had no such burdens. The average age for all was 46,67 years ($SD = 14,70$), and men and women were of a similar age. Most of the respondents had received secondary education ($n = 16$; 44,4%), others primary ($n = 4$; 11,1%), vocational education ($n = 8$; 22,2%) and higher ($n = 4$; 11,1%). The respondents lived in the city ($n = 19$; 52,8%) and in the country ($n = 17$; 47,2%). The majority of respondents ($n = 31$; 86%) lived with a family, a few ($n = 5$; 14%) lived alone. The respondents evaluated the material and housing conditions on a 4-point scale, where 1 – meant poor, 2 – sufficient, 3 – good, 4 – very good. None of the respondents did not think he or she had a bad housing conditions ($M = 2.83$; $SD = 0.65$); similarly, respondents positively rated their material conditions ($M = 2.50$; $SD = 0.65$).

Statistical analysis

The following statistical tests were used:

1. For a description of variables in the groups mean (M) and standard deviation (SD), and the numerical amount (n) and the percentage (%);
2. To determine the direction and strength of the association between variables test of linear correlation r-Pearson (occurred linear relationship between the variables and variables were quantitative) test or non-parametric R-Spearman (when the variables were qualitative and there was no linear relationship between variables).
3. To determine the significance of differences between means parametric t-Student's test or Mann-Whitney U's non-parametric test.

Results

Health behaviour – the average results of the analysed variables.

The examined patients are characterised by the average severity of their health behaviour. It's calculated that the rate of health behaviour, of which the average raw score is 86.75, and the sten result is close to 6 (5.94). The average scores for each category of health behaviour were comparable to the standardised medium and did not show statistically significant differences (Table 1).

Table 1. Descriptive statistics for the health behaviour from questionnaire IBH

Health behaviour	N	M	SD	min- max.
Health behaviour – raw overall result	36	86.75	15.63	48.00 -115.00
Health behaviour – stens	36	5.94	2.24	1.00 -10.00
Proper eating habits	36	3.46	0.86	1.33 – 5.00
Preventive behaviour	36	3.70	0.82	2.16 – 4.80
Positive mental attitude	36	3.54	0.77	2.16 -5.00
Health Practice	36	3.46	0.67	2.30 – 4.80

Source: authors' own analysis.

Preventive patients' types of behaviour manifest themselves in the following treatment recommendations. Respondents most frequently declare the systematic execution of examinations ($n = 29$; 80%), and the rest succumb to them rarely ($n = 7$; 20%). Within the scope of the recommendations of doctors, patients usually use them sometimes ($n = 24$; 67%), some ($n = 10$; 28%) apply to them, and few ($n = 2$; 5%) do not comply with the medical recommendations.

Health practices of patients were different: the respondents admit to smoking ($n = 8$; 22%), although the majority ($n = 28$; 78%) do not smoke. Further analysis revealed that two people have an average level and one high level of physical nicotine addiction. Among the respondents, there were not many people who often drank alcohol, half ($n = 18$; 50%) declared occasional drinking, and the second half – total abstinence. Only two people do not take physical activity, the majority of respondents ($n = 26$; 72%) tried to be active despite illness, and others ($n = 8$; 22%) take it regularly.

The health status of respondents – the average results of the questionnaire GHQ-28

The respondents assessed their health as average. In the study group the average raw GHQ-28 score was 27.67, and the rate converted in stens was close to 6, which was in the average range. The respondents most frequently reported problems with anxiety and insomnia, and somatic symptoms, rarely having functional disorders and the least symptoms of depression (**Table 2**).

Table 2. Descriptive statistics for dimensions of health test questionnaire GHQ-28

Dimensions of health	N	M	SD	min- max.
Somatic symptoms	36	8.31	4.01	2.00 – 17.00
Anxiety and insomnia	36	8.61	4.85	1.00 – 21.00
Dysfunctions	36	7.78	2.59	3.00 – 14.00
Symptoms of depression	36	2.89	3.15	0.00 – 11.00
Sum GHQ	36	27.67	12.59	11.00 – 62.00
Sum GHQ – stens	36	5.78	1.87	3.00 – 9.00

Source: authors' own analysis

Experiencing symptoms of CKD

The patients were examined in terms of the frequency about the feelings of the symptoms of CKD, and were asked about the feeling of nausea, swelling and bone pain. The incidence of reported symptoms in the group was varied. The majority of respondents reported at least, once a week, nausea (86.0%), edema (66%), and bone pain felt with great diversity, some every day (39%), and others less frequently than once a week (36%).

The relationship between their health behaviour and the health of the examined patients

Between the health behaviour and the analysed aspects of their health states, a statistically, significant, positive relationship occurred:

- Between the complaints of edema and normal eating habits,
- Between the sum of symptoms, and in particular the type of complaints, anxiety and insomnia (scale B) and health behaviour in general, and above all, preventive behaviour (**Tables 3 and 4**). The patients are more likely to have complaints of edema, restlessness and insomnia, although they care more about compliance with health behaviour, in particular preventive behaviour. In summary, it can be stated that the respondents feel, notice more symptoms and feel sicker, yet they show more positive health behavior attitudes.

Table 3. Statistically significant correlation r-Pearson between dimensions of health and health behavior in the group ($n = 36$)

Dimensions of health	Positive mental attitude	Health practice
Somatic symptoms	0.1040	-0.0079
	$p=0.546$	$p=0.963$
Anxiety and insomnia	0.1655	0.1770
	$p=0.335$	$p=0.302$
Dysfunctions	0.2003	0.1428
	$p=0.242$	$p=0.406$
Symptoms of depression	0.1596	0.0653
	$p=0.353$	$p=0.705$
Sum GHQ	0.1866	0.1199
	$p=0.276$	$p=0.486$

Source: authors' own analysis

Table 4. Statistically significant correlation R-Spearman between the dimensions of health and health behaviour in the group ($n = 36$)

A pair of variables	R – Spearman	P.
Health behaviour-raw score overall & anxiety and insomnia	0.389	0.019
Health behaviour-raw score overall & sum GHQ	0.370	0.026
Proper eating habits & swellings	0.445	0.007
Preventive behaviour & anxiety and insomnia	0.404	0.015
Preventive behaviour & sum of GHQ	0.402	0.015

Source: authors' own analysis

The relationship between health behaviour and state of health in the group of women and men was differential. There was a positive, statistically significant association between the presence of edema and observance of the principles of proper nutrition (R-Spearman = 0.538, $p = 0.004$), and a negative relationship – between edema and drinking alcohol (R-Spearman = -0.496, $p = 0.009$). Women who have swelling do not drink alcohol and take care in having proper nutrition.

The group of men revealed a statistically significant negative relationship between the complaints of somatic symptoms, anxiety and insomnia, disorders in functioning and depressive symptoms (all symptoms measured by the scale of GHQ-28) and alcohol (R-Spearman = -0.682, $p = 0.043$); whereas a positive statistically significant relationship occurred between the practices of health and somatic symptoms, particularly anxiety and insomnia (R-Spearman = 0.718, $p = 0.029$). The men feel stronger somatic disorders with different picture when they do not drink alcohol and begin to take care and use better health practices (R-Spearman = 0.644, $p = 0.061$).

Taking into account the place of residence, it turns out that there are differences in the types of relationships between health behaviour and the state of health of the patients. In the group of people living in the city there is a statistically significant positive relationship between health behaviour, mainly preventive behaviour and complaints about the general somatic state and anxiety and insomnia. In addition, there is a statistically significant association between the occurrence of edema and drinking alcohol (negative R-Spearman = -0.709, $p = 0.001$) and normal eating habits (positive R-Spearman = 0.603, $p = 0.006$). People living in a city care more about health behaviour when they experience more health problems.

In the group of people living in rural areas, it was noted that there is the existence of a positive statistical relationship between health behaviour expressed in the care of diet (R Spearman = 0.602, $p = 0.011$) and the practices of health (R-Spearman = 0.483, $p = 0.050$), when there are different types of symptoms and health problems.

The relationship between health behaviour and the state of health in a group of patients' unloaded disease was not statistically significant, while the group loaded with kidney disease showed statistically significant positive interdependencies between (Tables 5 and 6):

- Showing symptoms of depression and health behaviour, especially expressed in normal eating habits, a positive mental attitude and practices of health.
- Reporting complaints about health symptoms, particularly on somatic symptoms, anxiety, insomnia and health behaviour.

- Reporting complaints about health symptoms and the use of health practices and healthy eating habits.
- The occurrence of edema and general complaints about health and health behaviour especially expressed in normal eating habits.
- The occurrence of bone pain and taking care of preventive behaviour.

Table 5. R-Pearson's correlation between dimensions of health and health behaviour in the test group carrying familial disease of the kidneys (n = 15)

Dimensions of health	Positive mental attitude	Health practice
Somatic symptoms	0.3046 $p=0.270$	0.2895 $p=0.295$
Anxiety and insomnia	0.2804 $p=0.311$	0.4261 $p=0.113$
Dysfunctions	0.2788 $p=0.314$	0.4244 $p=0.115$
Symptoms of depression	0.6763 $p=0.006$	0.7322 $p=0.002$
Sum GHQ	0.4296 $p=0.110$	0.5223 $p=0.046$

Source: authors' own analysis

Table 6. Statistically significant correlations of R-Spearman between dimensions of health and health behaviour in the test group of people carrying familial disease of the kidneys (n = 15)

A pair of variables	R - Spearman	P.
Health behaviour-raw result & swellings	0.600	0.018
Health behaviour-result raw & somatic symptoms	0.515	0.049
Health behaviour- result raw & anxiety and insomnia	0.549	0.034
Health behaviour-result raw & symptoms of depression	0.705	0.003
Health behaviour-result raw & sum GHQ	0.660	0.007
Proper eating habits & swellings	0.687	0.005
Proper eating habits & symptoms of depression	0.613	0.015
Proper eating habits & sum of GHQ	0.550	0.034
Preventive behaviour & bone pain	0.562	0.029

Source: authors' own analysis

Those who are subject to familial kidney disease, who had been complaining of the symptoms of depression, tended to care more about the use of various types of health behaviour in their lives. When experiencing a variety of somatic symptoms and anxiety, they are

more likely to behave in a pro-health way. When they notice swellings they then take more care about proper nutrition and when they feel bone pains then they are more likely to take preventive behavior and measures. The research indicates that patients burdened with familial renal disease show greater care of their health.

The examined patients were classified into three groups, determined by the severity of the presented health behaviour. The patients in group 1 (n = 9) exhibited a low tendency, in group 2 (n = 19) – the average one, in group 3 (n = 8) increased tendency to make their health behavior better. Then, it was compared with each other extreme groups (groups 1 and 3) in terms of analysed health aspects (**Table 7**). People with a high intensity of health behaviour more often significantly complained about the state of their health.

Table 7. Significance test of differences between the U Mann-Whitney average for analyses of the dimensions of health due to stronger health behaviour for the entire group

Dimensions of health	Low severity of health behavior.		High severity of health behavior.		Z- U Mann-Whitney.	p.	Z- U Mann-Whitney.	p.
	M	SD	M	SD				
Duration of therapy (clinic nephrology)	9.3	5.7	9.2	6.5	0.23	0.820	0.23	0.819
Nausea	1.2	0.4	1.2	0.9	0.65	0.518	0.92	0.355
Bone pain	1.8	1.1	2.6	1.5	-1.29	0.197	-1.34	0.179
Swelling	1.2	0.4	2.0	1.4	-0.80	0.425	-0.99	0.324
Somatic symptoms	6.4	4.6	9.0	3.8	-1.41	0.160	-1.41	0.158
Anxiety and insomnia	7.4	5.4	1.1	3.8	-1.94	0.053	-1.96	0.050
Dysfunction	7.2	2.8	8.3	2.5	-1.25	0.210	-1.30	0.193
Symptoms of depression	1.8	3.2	3.1	2.6	-1.67	0.095	-1.72	0.086
Sum GHQ	22.9	14.9	30.7	9.0	-2.09	0.037	-2.09	0.036

Source: authors' own analysis

Discussion

Our own research confirmed the observed adverse cause associated with an increase in interest in their own health and improving their health behaviour only in the case of an occurrence of the disease or exacerbation of its symptoms. It was shown the relation between positive health behaviour and noticeable symptoms of the disease. The respondents often abandoned their negative behaviour (e.g. drinking alcohol) in the case of the appearance of symptoms such as swelling, pain and other somatic complaints. The highest level of health behaviour showed that these patients were the ones who reported the most complaints. This tendency is noticed in a group of chronically ill patients, as adherence to medical recommendations is difficult for the patient

because it requires a lot of limitations. Many patients in the period of silence symptoms departed from the recommendations and presented adverse health behaviour, or if the symptoms are not too bothersome, they do not introduce any changes in their functioning [11, 14].

In the developed countries it is estimated that only 50% of chronically ill patients apply or use medical recommendations, and with the passage of time the awareness of the disease is increasing among patients, and adherence to medical recommendations is being reduced [16].

In the research of people with cardiovascular disease led by Rząca's team *et al.*, it was demonstrated that the awareness of the health risk does not transfer into greater health awareness and making for more positive behaviour [17]. Similarly, in research carried out by Kara and Zasnarska, the research of people with hypertension and smoking tobacco (one of the main risk factors in circulatory diseases) showed that 100% of these people are aware of the dangers of addiction and despite of the declared need to give up smoking, even 2 / 3 of the respondents do not implement it in everyday life [18]. Also, among people with peripheral vascular disease, it has been shown that men are generally less careful about their health. In general, they use similar health practices as healthy people and have less care than patients after myocardial infarction (84.00), diabetes (92.44) and dialysis (83.45) [12, 19]. Similar overall results were obtained in this study (86.75).

The desired pro-health behaviour in CKD is the systematic taking advantage of medical advice and monitoring of the state through laboratory tests. The respondents frequently exhibited preventive behaviour (a visit to the doctor [nephrologist]) in the case of disclosure of the symptoms rather than systematic, planned visits to the doctor. This may be due to a lack of full awareness of the importance of visits than rather than with any objective obstacles to access to a doctor (nephrologist) [11]. Similar observations about the lack of systematic checks at the doctor put forward by King *et al.*, shown in the results of their study PolNef 2007 [2]. Thus, it can be concluded, that in the group of chronic patients there is the lack of awareness about the role of their active participation in the therapeutic process. Often, patients recognise that the lack of symptoms is the result of an improvement in their health and exempt them from complying with the recommendations and follow-up visits. Smolen's *et al.* research, consisting in the analysis of the health behaviour of the elderly, showed a general result (88.89), which as compared with the result of this study (86.67) is significantly higher [20]. So, the higher the general score of health behaviour (92.92) was evinced in patients with type 2 diabetes examined by Kurowska [21].

In the treatment of patients with CKD it leads to five main aims: 1 – suppression of the activity of any disease that causes kidney damage; 2 – suppression of progression of renal impaired function (a reduction of the adverse effects of reduced kidney weight compound and other factors of the risk of progression); 3 – prevention of the occurrence and treatment of disorders resulting from loss of active mass of the kidneys, especially the prevention and treatment of diseases of the cardiovascular system; 4 – diagnosis and treatment of comorbidities; 5 – an optimal preparation and selection of the best methods of renal replacement therapy [22]. In order for the realisation of these goals to be possible, the co-operation of each patient is required by the patient's therapeutic team. You need to prepare the patient for a life with CKD, raise his or her health awareness and ability to self-care through the active educational programme. For each patient with CKD, an individual plan therapeutic is required, depending on the stage of the disease, taking into account patient education, current cognitive abilities and the motivation for active participation in the treatment process [22, 23, 24, 25, 26].

Conclusions

In spite of the overall high health-consciousness of subjects, patients were presented with an average of selected ailments, including unhealthy behaviour, and the incidence of healthy behaviour was increasing, mainly in the situation of the exacerbation of symptoms. People with a hereditary taint, frequently showed better health behaviour. Patients with CKD require systematic, purposeful health education, with periodic evaluation of current health behaviour.

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