

HOW LIFESTYLE AFFECTS HEALTH

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Abstract: *In this study we are appraisal the life style of respondents, with bearing on their nutrition habits, smoking, consummation alcohol, moving activity, effect of stress, as well as their family anamnesis. Respondents were 100 patients, cardholder of health hard-hit on base of chronic disease of internal character, oncology disease, sclerosis multiplex, cerebral event or cardiac infarction. We found out, that negative health state of respondents affect particularly nutrition habits, frequent wield of alcoholic drinks and smoking. Important part on this negative influence gets also antecedent employment od respondents, because of stress situation or detrimental effect of air.*

Keywords: *nutrition, smoking, alcohol, stress, movements*

Theoretical bases

Modern day brings bustling lifestyle, which is not involved in the rate of change in lifestyle, which may negatively impact on the incidence of diseases of civilization. Medical science, with all means, warns against consequences of such a lifestyle, but nevertheless flourished in a sedentary way of life, little movement, poor dietary habits, smoking, alcohol, stress. Direct negative impact of such a lifestyle on the health of the man show several scientific studies (Johansson, Sundquist, 1999; Kanehisa, 2000; Ventegodt, Merrick, 2003; Contoyannis, Jones, 2004; Jousilahti et al., 2006, De Backer, Bacquer, 2004).

Hypothesis

Based on the findings of other authors, we have set the following assumptions.

1. Assuming that the wrong diet will affect the overall morbidity and duration of disease.
2. Assuming that the respondent's smoking will affect the overall morbidity and duration of disease.
3. Assuming that the consumption of alcohol respondent will affect their overall impact on morbidity and duration of disease.
4. Assuming that the previous respondent's job will have an impact on overall morbidity and duration of disease.
5. Assuming that the movement activity of the respondent will have an impact on overall morbidity and duration of disease.

Methods

To obtain knowledge for the verification of our hypotheses we used a questionnaire designed in conjunction with the interview. The questionnaire was based on the best international studies, we focused on information based on the work of Kanehisa (2000) and Ventegodta and Merrick (2003).

The questionnaire consisted of 31 questions together. The research was focused on the overall lifestyle of the respondents - disabled card holders in the period before their illness. The questionnaire included the following:

- 1) general information about the respondent (sex, age, residence, length and type of disease)
- 2) questions relating to diet (diet regularity, frequency of consumption of vegetables and fruits, and whole white bread, flour products, sweets, sausages, meat and meat products, the method of preparing a meal, use vegetable or animal fats)
- 3) issues relating to the consumption of tobacco products (number of smoked cigarettes per day, number of years during which respondents smoked and the age at which started smoking)
- 4) questions relating to the consumption of alcoholic beverages (here we distinguish the consumption of beer and wine from the "hard" alcohol and we have examined the frequency of consumption),
- 5) issues relating to the movement and sporting activities (sport, movement, use of means of transport)
- 6) questions relating to the burden of stress in personal and professional lives.

We've also led to an open interview respondents in order to identify possible causes of stress and disease while we are called to answer the following questions: What do you think is the main cause of your illness (or ill-health)? What factors can accelerate (worsen) the course of your illness?

Research sample

Respondents of the study were eligible disabled holders granted by the letter h) item No. 2 of Annex 2 of Decree 182 / 1991 Coll., Implementing the Law on the Social Security Act and the CNR of the authorities in Social Security, as applicable laws of the administrative district Valasske Klobouky.

There were respondents who suffer from various types of tumor illness, respondents in Central strokes - the heavier form, suffering from kidney disease, requiring regular dialysis, respondents with chronic lung disease, the heavier form of heart attacks and suffering from multiple sclerosis.

Age structure of respondents ranged from 27 to 65 years, of which 56 % were women and 44 % men.

The average age for men was 44.5 years, of whom the youngest was 27 years old and the oldest 60 years. The average duration of disease among men was 5.7 years.

The shortest duration of disease response was 5 months, the longest duration of disease among men was 11 years. The frequency of occurrence of various diseases are in Table No. 1.

Table 1: Frequency of disease in men and women

	Men	Women
Heart disease	2	3
Central brain episode	14	10
Chronic digestive diseases	2	0
Kidney diseases	4	5
Oncological diseases	19	31
Multiple sclerosis	2	7
Lung diseases	1	0
Total	44	56

Research we have given the health status of the respondents made in their homes, and we distributed a questionnaire to them and we have talked to them. Total length of the implementation of research, with one respondent lasted about 1 hour, while some respondents, we had to assist in completing the questionnaire. We complete the questionnaire together with interview. The results obtained, we have undergone positive scoring, while we assign values to each question from 0 to 3 and we have evaluated using ANOVA analysis of variance in the statistical program Statistica.

Results and discussion

The results obtained on the basis of analysis of the impact of the various monitored parameters on a patient's illness in the table. 2. Table. 3 presents the impact of monitored parameters of the duration of the disease. We found that disease in a selected sample of men longer than women with the same disability. In men, the disease also showed an earlier age than women with the same disabilities.

Women in the research sample, suffered from health problems, almost half of shorter duration in comparison with men, and disease are not apparent in a later age than men ($p = 0.04137$).

Table 2 : Effect of parameters on the pursued disease patients

	SS	MS	F	P
Nutrition	30,927	30,9273	1,44387	0,232702
Alcohol	113,477	113,4774	5,29780	0,127008
Workplace	12,937	12,9374	0,60400	0,023687
Movement	95,829	95,8286	4,47385	0,261917
Smoking	183,772	61,2573	2,85986	0,037212
Gender	94,444	94,444	4,0641	0,041373

Table 3: Effect of monitored parameters of the duration of the disease

	Wilks ^λ	Partial	F-remove	p-level	Toler.	1-Toler.
	Lambda	Lambda				(R-Sqr.)
Nutrition	0,607483	0,903711	2,344058	0,060865	0,734839	0,265161
Smoking	0,601026	0,913419	2,085330	0,089452	0,426556	0,573444
Alcohol	0,619841	0,885693	2,839313	0,028889	0,760519	0,239481
Workplace	0,597265	0,919172	1,934590	0,111707	0,671960	0,328040
Movement	0,562116	0,976647	0,526063	0,716833	0,957586	0,042414

Based on these results, we verify these hypotheses.

The hypothesis No. 1 We assume that the wrong diet respondents will have an impact on overall morbidity and duration of disease. This hypothesis has not been confirmed, because the value demonstrativeness impact of diet on the duration of disease was 0.060865, which is on the border of demonstrativeness (diagram. 1). Probable cause that the impact of diet is not shown in full is the relatively small difference of the disease in the individual respondents or insufficiently large sample of respondents.

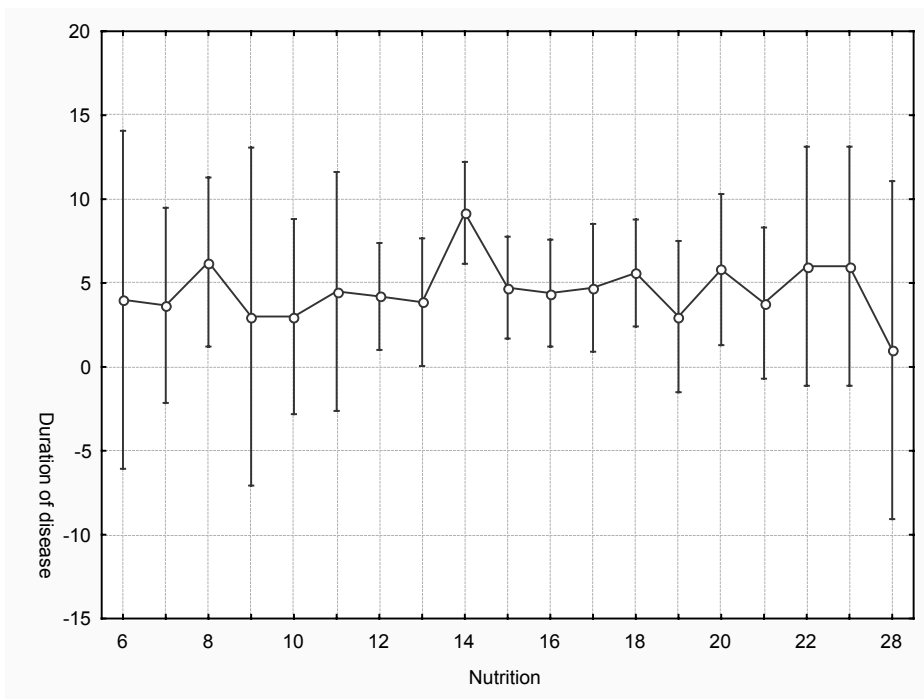


Figure. 1: Effect of diet on the response duration of illness

Studies from which we drew in the development of a questionnaire (Kanehisa, 2000 and Ventegodt and Merrick, 2003) show that the diet has a very significant impact

on the overall health of organism. Even in the work of Diamond (1994) states that a person during his life eats averaged about 50 to 90 tons of food. It is against this amount of diet plays a key role for long-term health and overall age people. This was also confirmed in Valešková (2006), which shows that in terms of food, people are naturally full of unique creatures. All animals receive food only if they are hungry. No wild animal „don't full up to rupture“ simply because it has food available. A man eats, although he is not hungry. Some studies indicate that not quite suitable diet may have on the human organism significant impact unless the individual is in equilibrium with movement activity. Such an individual has received all spare energy in the diet changes for heat and energy they consumed in movement activity. The second hypothesis we assume that the smoking of respondents will have an impact on overall morbidity, as well as the duration of the disease. When monitoring the impact of smoking on morbidity, our hypothesis is confirmed, they had demonstrativeness value 0.037212 (Table. 2). It was confirmed that smoking had an impact on the overall morbidity of respondents - smokers. When monitoring the impact of smoking on the duration of disease, it was a significant factor in smokers, the duration during which a quantity of smoked cigarettes per day. Less important factor was the period in which respondents started smoking. The overall impact of the disease according to smoking went to the border of demonstrativeness, which corresponds to the value of 0.089452 (Figure. 2).

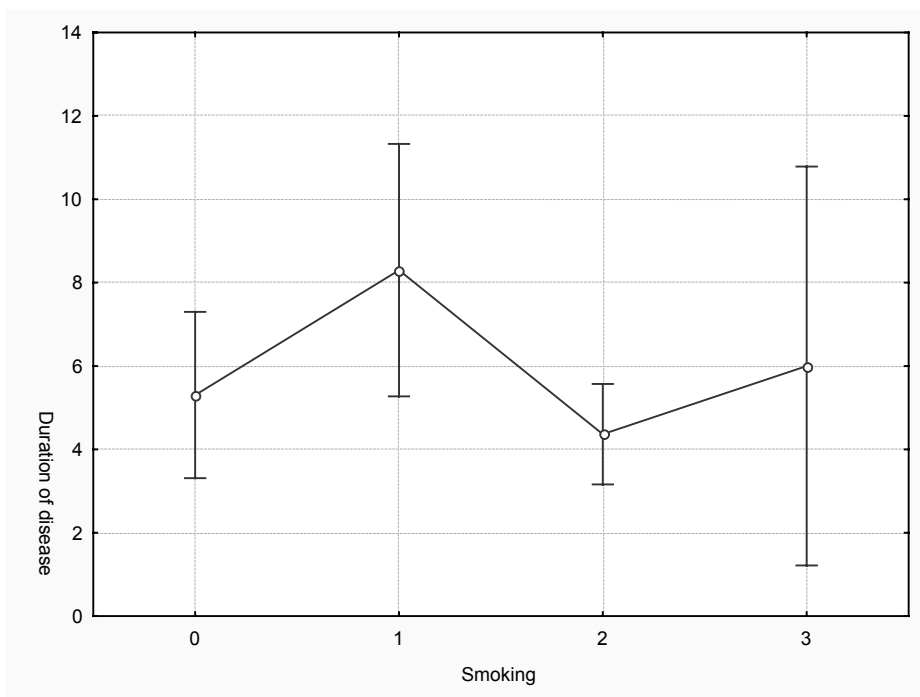


Figure. 2: Effect of smoking on the response duration of illness

Smoking cigarettes is the whole, a very undesirable effect on the human organism. While nicotine itself has a encourage properties, tar, carbon monoxide and other residues have on organism very negative impact. Residues are gradually deposited in the body of the smoker causing various diseases especially in the areas of bowel, stomach, liver and lungs. In combination with the overall lifestyle, it is unsuitable then one more move to different civilization diseases such as cancer, myocardial infarction or stroke central. The third hypothesis we attempted to demonstrate that alcohol consumption respondent will have an impact on overall morbidity and duration of disease. Part of hypotheses about the impact of alcohol consumption on overall morbidity has not been confirmed, because the value demonstrativeness the impact of alcohol on morbidity was 0.127008 (Table. 2). In the next section of this hypothesis, we assume that the consumption of alcoholic beverages will have an impact on the overall duration of disease response. This part hypothesis was confirmed, reached demonstrativeness was 0.028889 (Table. 3). Ther can be seen graphically link the duration of the disease and consumption of alcoholic beverages in the diagram. 3.

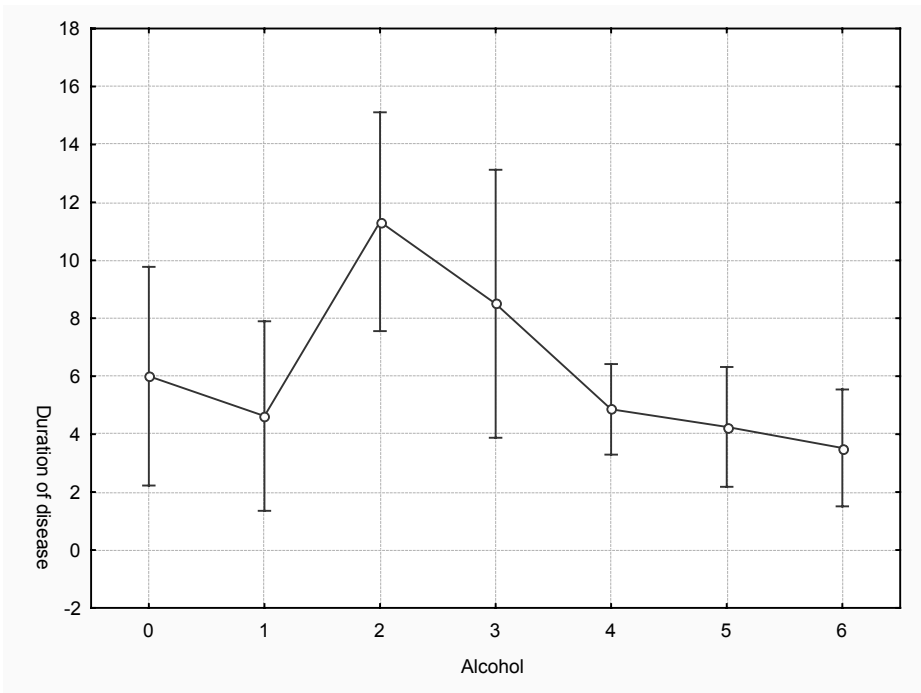


Figure. 3: Effect of alcohol consumption of respondents in the duration of the disease

Consumption of alcoholic beverages to a greater extent, and especially in the short space of time, means for human organism several adverse consequences. Frequent consumption of alcoholic beverages to a greater extent - particularly „hard“ alcohol may ultimately cause the failure of liver function, kidney or significantly contribute to myocardial infarction or stroke central. The fourth hypothesis, we assume that the previous respondent’s department will have an impact on overall morbidity and duration of

disease. This hypothesis was confirmed only partially. Figure. 4 showing the effect of length of employment for the duration of the disease, while suggesting some dependency, but under demonstrativeness value of 0.111707 (Table 3) it is seen that this effect is in our research sample not confirmed. In contrast, the hypothesis was confirmed in the pursuit of the overall impact of workplace illness, demonstrativeness value is 0.023687 (Table C.4).

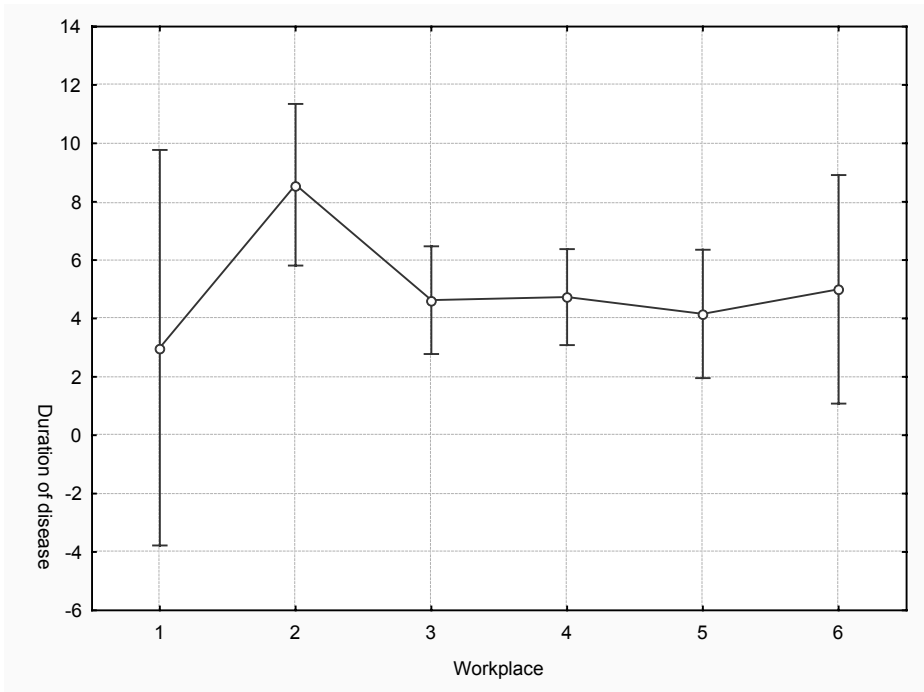


Figure. 4: Effect of initial respondents work for the duration of the disease

People in the workplace typically spend the largest part of the day and week and in fact largest part of life. Environment that surrounds man is reflected in some way also to its overall health. In our research, we focused mainly on the quality of the laid work, where we distinguish between the environment with clean air environment from pollution, environment of rubber factory, paint shop and other environmental nuisance. Another factor has been observed and possible stressful situations in the workplace, which could contribute significantly to the overall state of health. While completing the questionnaire, we asked respondents two supplementary questions. At first we wanted to find out what respondents as a major cause of his illness and other factors which prompted them most of their course of disease. From the responses of individual respondents showed that up to 86 % respondents as the main cause of the emergence and outbreak of the disease, as well as aggravation or acceleration of the course, considered an excessive amount of stress situations in the course of life. This finding, we also linked to the previous place of work of respondents, which could also be a source of stress situations, as many respondents answer in the debate with them suggested.

The last hypothesis we assume that the movement activity of the respondents will have an impact on overall morbidity and duration of disease. This hypothesis has not been confirmed. In assessing the impact of motion activities of respondents on their overall morbidity, the value of demonstrativeness matches the number 0.261917 (Table 2). In assessing the impact of motion activities of respondents in total duration of the disease have also failed to demonstrate a link, because the value of demonstrativeness matches the number 0.716833 (Table 3). Curve No. 5 in the chart, while suggesting a link with a total duration of illness movement activity, but the evaluation of the questionnaire shows that most respondents to our research sample was given to the movement very rarely, which may also be a cause of inconclusive impact of this factor. Many studies demonstrate the positive impact of motion activities to healthy subjects, and it is positively affected in particular the incidence of cardiovascular disease, diabetes, obesity and so forth. (Barengo et al., 2004, Matthews et al., 2007, Hu et al., 2005, 2006, De Backer and Bacquer, 2004).

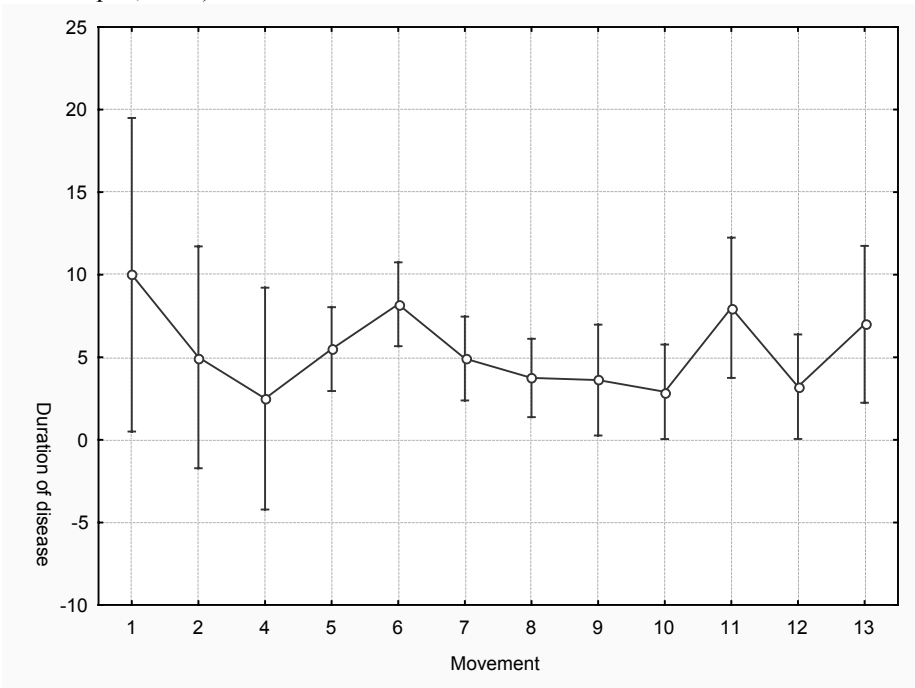


Figure. 5: Effect of movement of the respondents for the duration of the disease

Conclusion

In the present study, we focused on assessing the impact of lifestyle on the health of individuals, we focused on the impact of respondents eating, smoking, alcohol consumption, previous work and movement activities for the duration of the disease and overall morbidity of respondents. Respondents of this study were disabled license holders of the administrative district Valasske Klobouky. On the basis of these results can

be stated that for the ill health of our respondents the survey factors mainly their diet, smoking, consumption of alcoholic beverages. Important role played by their previous place of employment, both directly, through air pollution (rubber factory, paint shop), as well as in conjunction with the stressors in the workplace situations, what the respondents reported themselves as one of the main causes.

AKO OVPLYVŇUJE ŽIVOTNÝ ŠTÝL ZDRAVIE ĽUDÍ

Abstrakt: V uvedenej štúdii sme posudzovali životný štýl respondentov so zameraním na ich stravovacie návyky, fajčenie, konzumáciu alkoholu, pohybovú aktivitu, pôsobenie stresu, ako aj ich rodinnú anamnézu. Respondentov tvorila skupina 100 pacientov, ktorí sú držiteľmi preukazu Zdravotne ťažko postihnutý (ZŤP), ktorým bol tento preukaz pridelený na základe chronických ochorení interného charakteru, onkologických ochorení, sklerózy multiplex, centrálnej mozgovej príhody alebo infarktu myokardu. Z výsledkov nášho výskumu vyplýva, že nepriaznivý zdravotný stav respondentov ovplyvňuje najmä spôsob stravovania, časté požívanie alkoholických nápojov a fajčenie. Významnú rolu v nepriaznivom zdravotnom stave zohralo aj predchádzajúce zamestnanie respondentov, či už z hľadiska výskytu stresových situácií alebo vplyvu nezdravého ovzdušia.

Kľúčové slová: stravovanie, fajčenie, alkohol, stres