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Fatigue and Health Behaviour of Ill Youth from Rural and Urban Areas

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Abstract

The issue of chronic diseases in the population of children and youth should be constantly monitored due to the dynamically changing conditions of life. The risk of health deterioration and the process of convalescence are related to negative health behaviours, the feeling of fatigue and lowering quality of life. These phenomena are determined by the type of disease, individual decisions and many other factors of social nature: support, place of residence or income. The aim of this paper is to analyse the feeling of fatigue and health behaviours declared by youth in the period of late adolescence.

Keywords: a sense of fatigue, health behaviors, health, chronic illness, youth

Introduction

It seems that in the case of studies of chronically ill youth considering social determinants of health is much needed. At present it is a simple truism to say that the financial situation or social background are related to man's health (Cockerham, 2017; Mikkonen, Raphael, 2010). Social factors determine also health behaviours contributing to health improvement or deterioration. Fatigue is a constant element accompanying chronic diseases. It is also related to life environment. Unfavourable environmental conditions (e.g. noise, congestion, etc.) can intensify the feeling of fatigue and modify health behaviours the shortcomings of which can contribute to aggravation of the disease and fatigue. The overview of research into health behaviours of youth carried out by Fleary, Joseph and Pappagianopoulos (2018) showed a shortage of analyses of the moderating role of social and demographic factors in the studies of youth health behaviours.

However, the works by other authors (Petrovic et al., 2018; Jordan et al., 1998) indicate that both the research into health behaviours and the feeling of fatigue are sensitive to social conditioning due to their high mutual correlation. In view of the above information, in this paper we focused on the preliminary assessment of differences between the researched groups as regards the selected demographic factor. Thus, the aim of this paper is to present differences in the experienced feeling of fatigue and declared health-related behaviours between chronically ill youth from urban and rural areas.

The Feeling of Fatigue and Health Behaviours

At present fatigue is one of the commonest phenomena accompanying a modern human being. It is defined as a subjective feeling of a lack of energy which does not resolve with proper rest and is not related to depression or a weakness of muscles (Nijhof et al., 2011). Chronic fatigue is diagnosed on the basis of the occurrence of at least four or more symptoms within 6 months, such as: memory and attention impairment, sore throat, tenderness of lymph nodes, muscular and joint pains, headaches, sleeping disorders which are not relieved and feeling unwell (Fukuda et al., 1994). It is estimated that chronic (prolonged) fatigue affects ca. 3% of adult population (Hotopf, as cited in: Kulik, Szewczyk, 2004) and shows an upward trend. In the population of children and youth, the frequency of fatigue occurrence fluctuates and is between 0.1% to 1% (Nijhof et al., 2011). This entails many negative effects, such as a high indicator of school absence (Crawley, Sterne, 2009) or long-term psycho-social consequences (Missen, Hollingworth, Eaton, Crawley, 2012; Kennedy, Underwood, Belch, 2010) including lower quality of life (Winger et al., 2015). Social and economic conditions, among others the place of residence, can become risk factors for developing the full picture of chronic fatigue (Nijhof et al., 2011).

Health behaviour is "any activity intentionally undertaken by an individual for the purpose of maintaining, promoting or protecting health, whether or not such behaviour is objectively effective towards that end" (Ostrowska, 1999, p. 28). Due to a wide range of problems, research takes into account selected, most representative and not indifferent for health behaviours. "The problem with precise defining of health behaviours results from the fact that the relationship between behaviour and health is ambiguous, it undergoes changes as our knowledge about health and illnesses develops and must be more specific" (Heszen, Sęk, 2007, p. 93). In the period of adolescence these behaviours change and evolve revealing an unfavourable tendency for risky undertakings and contempt for principles of a healthy lifestyle (Krawczyk, 2012). The studies by Oftedal et al. (2019) draw attention to the risk of health deterioration as unhealthy behaviours intensify.

Materials and Methods

The research problem: Are there any differences in the feeling of fatigue and declared health behaviours between youth living in rural and urban areas and, if yes, what are they? The general hypothesis is contained in the statement that there are differences between the groups surveyed in respect of their place of residence. To answer the above research problem we used a diagnostic poll method with the use of a survey technique, a Cumulated Fatigue Questionnaire (CFIQ) by Kosugo (1991) and Health Behaviour Inventory (IZZ by Juczyński, 2001). The Student's t-test was used to verify the hypothesis.

The study involved 403 students of secondary schools representing the ages between 16 and 19 years. They were the persons suffering from chronic health problems. The group of boys contained 192 individuals, whereas girls accounted for 52.3% of the group. All persons had chronic diseases, but in the case of 18.9% of the survey participants these were congenital diseases. Others (81.1%) suffered from them from several weeks to several years. Majority of the researched people lived in rural areas (233 persons). The town dwellers were represented by 170 persons.

Analysis and Discussion of Results

The fatigue level revealed by ill students within all components of the analysed variable indicates the lack of significant differences between the groups surveyed. Moreover, the data presented referring to both rural and urban youth are close to each other. In the case of results concerning the feeling of fatigue in youth with health problems, a high result regarding general fatigue of youth living both in the countryside and in towns is worth mentioning. It may indicate general overburden of youth by responsibilities and their problems with both physical and mental well-being.

Table 1. Comparison of mean outcomes for the feeling of fatigue among youth with health problems by place of residence obtained with the use of the Cumulated Fatigue Questionnaire (CFIQ), *p < 0.05

Fatigue	Town (N = 170)		Village (N = 233)		t-test		
	M	SD	M	SD	t	df	р
General fatigue	19,48	3,73	19,15	4,17	-0,800	401	0,424
Decreased vitality	8,99	4,11	9,22	4,42	0,533	401	0,594
Mental overload	7,99	4,12	7,73	4,10	-0,627	400	0,531
Physiological symptoms	8,91	3,84	8,85	4,48	-0,132	401	0,895
Anxiety	6,11	3,36	5,74	3,67	-1,034	401	0,302
Decreased willingness to study and school	8,78	3,86	8,52	4,06	-0,667	401	0,505

Statistical analysis revealed that the place of residence does not differentiate the intensity of declared health behaviours in all researched dimensions within the examined group of youth.

Table 2. Comparison of mean outcomes regarding health behaviours of youth with health problems by place of residence obtained with the use of the Health Behaviour Inventory (IZZ); *p < 0.05

Grupa	Town $(N = 170)$		Village $(N = 233)$		Istotność różnic		
Wymiary IZZ	M	SD	M	SD	t	df	р
Appropriate eating habits	18,35	4,88	17,88	4,17	-1,024	401	0,306
Prophylactic behaviours	18,35	4,90	18,33	4,32	-0,036	401	0,971
Positive mental attitude	20,38	3,73	20,16	4,05	-0,554	401	0,580
Health practices	19,48	3,73	19,15	4,17	-0,800	401	0,424

Analysis of eating habits reveals certain tendencies in the researched group pointing to better eating habits among people from urban areas which was confirmed by the studies carried out by Stępień and co-workers (2015). Considering prophylactic behaviours or a positive mental attitude, higher results were obtained by town dwellers, although the differences were neither big nor statistically significant. In the case of studies dealing with the models of daily eating habits among youth aged 12 to 17, the differences related to the place of residence were statistically significant and concerned packed lunches and dinners (to the disadvantage of children from rural areas) or a place of having lunch (children from urban areas less often have lunch at home) (Sygit, 2015). The frequency of antihealth behaviours was also significantly correlated with the place of residence (Sygit et al., 2011).

Conclusions

The results presented in this paper show the lack of significant differences of declared health behaviours and fatigue between the researched groups of young people with health problems. Perhaps the only significant variable which has not been examined in this study is the financial situation which is also a component of the concept of social determinants of health (Zięba-Kołodziej, 2012, p. 331). Hence, there is a need for research in this area.

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