Health-related behaviour self-assessment of children living in a children’s home; study based on own research realised in the Podlaskie Province

Van Damme-Ostapowicz K1*, Krajewska-Kulak E1, Wrońska F, Szczepański M3, Kulak W4, Łukaszuk C1, Jankowiak B1, Rolka H1, Baranowska A1

1 Department of General Nursing, Medical University of Białystok, Poland
2 Sub-Faculty of Nursing Science Development, Medical University of Lublin, Poland
3 Department of Neonatology, Medical University of Białystok, Poland
4 Department of Pediatric Neurology and Rehabilitation, Medical University of Białystok, Poland

Abstract

Purpose: The purpose of the study was to diagnose the health-related behaviour of children brought up in children’s homes, to compare the obtained results with those obtained from a group of peers brought up in their own families.

Material and methods: The study group included 180 children living in children’s homes in the Podlaskie Province and in a control group composed of children brought up in their own families and living in the same places where the children’s homes are located. A questionnaire of the Health Behaviour Scale, composed of 40 statements determining health-related issues was used.

Results: Self-assessment of health-related behaviour in the studied youth depended on age, for which a statistical significance was shown for: health self-assessment (p=0.011), categories of stressful situations (p=0.047), physical activity (p=0.028) and social support (p=0.001); gender, for which a statistical significance was shown for the categories of usage of stimulants (p=0.000) and place of living, in which the factor “place” was significant (p=0.000) for all categories; and education, where p=0.000 for the following categories: stressful situations, using stimulants, physical activity, social support and health self-assessment. Relationships between the categories of health-related behaviour were much stronger in the assessments of the children brought up in children’s homes as compared to controls.

Conclusions: The self-assessment of health-related behaviour of the studied youth depended on age, gender, place of living and education. Relationships between the categories of health-related behaviour were much stronger in assessments of the children brought up in children’s homes as compared to controls.

Key words: health-related behaviour, children’s home, children.

Introduction

Studying health-related behaviour is an important method for measuring the health status of a population, as how an individual lives largely determines his/her health. Childhood and youth are periods in which intellectual and physical development takes place. Those are the periods in which health-related behaviours are acquired for the rest of one’s life. It was proven that young people’s ability to make decisions regarding health-related behaviour is the highest when those people have an influence on their social, physical and educational environment [1].

A broad view on family and its key importance in shaping health and health-related behaviour takes on a special value today. Also noted is the equal importance of biological, mental and social factors that influence health. Social customs, way of life (the way of eating, resting and spending free time, smoking, alcohol abuse), cultural and intellectual life and beliefs can support health or cause its loss [2]. Children living in children’s homes long for their families, do not know parental love, are frequently humiliated and laughed at, and they do not acquire the formulas of conduct necessary for adult life [3].

The aim of the study was to diagnose the health-related behaviour of children brought up in children’s homes, to compare results with a group of peers living in normal families, to determine theoretical relationships in this area, and to develop practical postulates that constitute a basis for planning actions aimed at optimising and promoting health among the selected group of children.
Material and methods

The study was conducted after R-I-00.23/2006 consent was obtained from the Bioethical Commission of the Medical Academy in Białystok and from managers of children’s homes, parents or legal guardians of a child, in a group of 180 children brought up in children’s homes located in the Podlaskie Province: in Białystok, Krasne, Supraśl, Łomża, Nowa Pawłówka; and 180 children in a control group composed of children brought up in full families living in the same places where the children’s homes are located. A diagnostic survey method, with the Health Behaviour Scale questionnaire, composed of 40 questions defining various behaviours connected with health in the study and control groups: health valuation, health self-assessment, stressful situation, usage of stimulants, eating behaviour, prophylactics, physical activity, and social support was used. The Health Behaviour Scale was provided by the author: Dr M. Banaszkiewicz from the Medical Academy in Bydgoszcz.

Results

Results obtained with the Health Behaviour Scale showed that the self-assessment of health-related behaviour of the studied youth depended on their age, for which a statistical significance was achieved for health self-assessment, for which p=0.011, in the categories of stressful situations (p=0.047), physical activity (p=0.028) and social support (p=0.001); gender, for which statistical significance was shown in the categories of using stimulants (p=0.000) (Tab. 1) and place of living, for which it was shown that the bigger the town, the larger the difference in favour of children belonging to the control group; the only exception is a children’s home in Krasne, where surprisingly high results were obtained, higher than for the control group living in the same town, and in some cases also higher than for all control groups (Tab. 2).

<table>
<thead>
<tr>
<th>Place</th>
<th>Group</th>
<th>Health valuation (1)</th>
<th>Health self-assessment (2)</th>
<th>Stressful situations (3)</th>
<th>Stimulant usage (4)</th>
<th>Eating habits (5)</th>
<th>Physical activity (6)</th>
<th>Prophylactics (7)</th>
<th>Social support (8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Białystok</td>
<td>Control (35)</td>
<td>63.0</td>
<td>74.8</td>
<td>60.1</td>
<td>99.0</td>
<td>62.7</td>
<td>75.0</td>
<td>45.9</td>
<td>78.0</td>
</tr>
<tr>
<td></td>
<td>Study (40)</td>
<td>57.7</td>
<td>54.4</td>
<td>49.0</td>
<td>72.4</td>
<td>50.1</td>
<td>55.1</td>
<td>43.6</td>
<td>56.3</td>
</tr>
<tr>
<td>Łomża</td>
<td>Control (30)</td>
<td>66.5</td>
<td>75.8</td>
<td>60.9</td>
<td>95.8</td>
<td>64.3</td>
<td>70.1</td>
<td>48.8</td>
<td>69.9</td>
</tr>
<tr>
<td></td>
<td>Study (35)</td>
<td>58.9</td>
<td>54.2</td>
<td>51.4</td>
<td>76.4</td>
<td>52.9</td>
<td>58.1</td>
<td>46.9</td>
<td>52.9</td>
</tr>
<tr>
<td>Supraśl</td>
<td>Control (35)</td>
<td>63.2</td>
<td>71.9</td>
<td>64.3</td>
<td>99.0</td>
<td>64.6</td>
<td>79.0</td>
<td>45.6</td>
<td>79.1</td>
</tr>
<tr>
<td></td>
<td>Study (30)</td>
<td>64.3</td>
<td>57.7</td>
<td>54.0</td>
<td>70.7</td>
<td>52.9</td>
<td>58.5</td>
<td>42.8</td>
<td>61.0</td>
</tr>
<tr>
<td>Pawłówka</td>
<td>Control (50)</td>
<td>70.4</td>
<td>74.8</td>
<td>67.4</td>
<td>99.0</td>
<td>65.3</td>
<td>84.7</td>
<td>43.4</td>
<td>83.3</td>
</tr>
<tr>
<td></td>
<td>Study (25)</td>
<td>60.7</td>
<td>65.5</td>
<td>60.4</td>
<td>88.3</td>
<td>55.6</td>
<td>65.7</td>
<td>46.9</td>
<td>53.7</td>
</tr>
<tr>
<td>Krasne</td>
<td>Control (30)</td>
<td>65.0</td>
<td>69.9</td>
<td>58.8</td>
<td>97.0</td>
<td>67.6</td>
<td>77.0</td>
<td>47.4</td>
<td>74.8</td>
</tr>
<tr>
<td></td>
<td>Study (50)</td>
<td>77.9</td>
<td>83.6</td>
<td>66.9</td>
<td>98.3</td>
<td>86.5</td>
<td>92.7</td>
<td>51.3</td>
<td>79.8</td>
</tr>
</tbody>
</table>

Table 1. Comparison of mean values in separate subgroups, along with a presentation of the average values of assessments for the category of “stimulant usage” with values of 95% confidence intervals

<table>
<thead>
<tr>
<th>Age</th>
<th>Group</th>
<th>s</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>92.9</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>99.2</td>
</tr>
<tr>
<td></td>
<td>Study</td>
<td>87.2</td>
</tr>
<tr>
<td>Boys</td>
<td>Total</td>
<td>88.2</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>97.4</td>
</tr>
<tr>
<td></td>
<td>Study</td>
<td>78.5</td>
</tr>
</tbody>
</table>

Results of significance tests for individual factors

<table>
<thead>
<tr>
<th>Factor</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study group</td>
<td>106.2</td>
<td>0.000***</td>
</tr>
<tr>
<td>Gender</td>
<td>13.7</td>
<td>0.000***</td>
</tr>
<tr>
<td>Interaction</td>
<td>6.3</td>
<td>0.013*</td>
</tr>
</tbody>
</table>

Table 2. Comparison of assessments of the Health Behaviour Scale in both groups of children

Van Damme-Ostapowicz K, et al.
and in this group health self-assessment showed strong correlations, and prophylactics was the weakest correlated with the other measurements (Tab. 5).

### Discussion

Based on analysis of our study, the presence of significant differences for the following: stressful situations, use of stimulants, physical activity, social support and health self-assessment in both groups were found. In each case, the difference was unfavourable for the children brought up in children’s homes, which is partially consistent with data from the literature. It has to be noted that the biggest differences were found for the categories of stimulant usage and social support. The statistical significance presented for the category of stressful situations in both groups of respondents has been confirmed by other authors.

Głomski [4] believes that every child that lives at a care and upbringing institution has frequent adaptive stress, and the stress has significant psychological and social consequences. Children long for home, are laughed at, feel lonely, they can not adapt to regulations and requirements, they have difficulties with learning, and they encounter a lack of understanding [5].

Parting from the family or a sudden change of environment are factors that cause a feeling of threat and anxiety [6]. It should be noted that children’s homes are places where neglected children stay. Children are separated from social contacts and treat placement in a children’s home as an unjust punishment or misfortune. They feel aggrieved [7].

Tatarowicz observed that at the source of demoralisation and criminality of children and youth, there is often improper family structure and function and lack of family ties [8].

Socha-Kołodziej states that disturbance in behaviour of charges of care and upbringing institutions are caused by the following reasons: lack of natural family and positive models of coexistence and personality features, living in a children’s home, and school environment through improper attitude of teachers and failures at school [9]. Raczkowska [10] and Lis [11] suggest that charges of children’s homes cause troubles in
a school setting because they are arrogant and vulgar towards their peers and teachers, frequently run away from school, drink beer and wine, and force younger children to sniff “various filth”. Similar results were obtained by Telka [12] and Nzi-makwe [13]. It is worth noting that numerous studies showed that cigarette smoking by primary school children is a very frequent phenomenon [14,15] and that children start smoking before they turn 8. Marihuana, however, is more popular among secondary school students [16], and “hard” drugs are most popular among students of secondary vocational schools and general secondary schools [17]. Physical activity should not become a duty for health, but should be an integral element of everyday life, taking into account work time, household duties and free time [18]. It opens a broad area for development of personality, and provides an opportunity for self-realization, and – most importantly – shapes a new quality of life, and improves an individual through its health, prophylactic and entertainment functions [19].

In this study, a significant difference was found for the physical activity category of health-related behaviour, in both groups of children surveyed, to the disadvantage of those children brought up in children’s homes. Data from the literature also suggests that the phenomenon of the low level of physical activity is present both in the group of charges in children’s homes and children brought up in their own families [20,21]. Przygoda [22] showed that only some charges of children’s homes are interested in sport and music, adding that this is equal to watching to a sports broadcasts, playing football, volleyball or basketball with friends, and listening to cassettes of popular music. Other authors also stress that the interests of the studied charges were very monotonous and scarce, and are characterised by large variability and lack of stability [21,23]. Bielecka suggests, however, that children’s homes prepare their charges to spend free time properly [21]. Krajewska et al. have proven, that youth from post-primary schools present deficiencies in health behaviour and only a half of the studied subjects assesses the level of their physical activity as very good [24]. Kubik, in a study conducted among children in post-primary schools, showed that the physical activity of the studied group is low and does not correspond to the principles of a healthy lifestyle [25].

Social support and health self-assessment are factors that are more and more frequently taken into account in the context of health-related behaviour. A question concerning health self-assessment is encountered in almost every social survey regarding matters connected with health.

The results obtained with the Health Behaviour Scale are consistent with reports from literature, suggesting that only few charges of the children’s homes can count on support from their families, and they have to rely on themselves even if they have friends. This is probably due to their specific life experience, which proves that even those closest to you can let you down [5]. Studies by Formicki et al. [26] prove that 61.9% of the studied charges of children’s homes believe that they cannot always rely on support and aid from their caregivers, or from anyone else. Those children frequently adopt a repulsive and protective attitude towards any kind gesture. This opinion is shared by Gajewska [27]. Studies by Supranowicz [28] revealed among students of post-primary schools suggest that a lack of a mother’s and father’s support has an influence on starting regular usage of addictive drugs, drinking alcohol, smoking cigarettes and acquiring a more favourable attitude towards all health-damaging behaviours. This is confirmed by other authors [29,30]. In our own study, we demonstrate a statistically significance difference for the category of health self-assessment in both studied groups. The difference is unfavourable for the charges of children’s homes.

HBSC (Health Behaviour in Schoolaged Children) studies by Woynarowska et al. carried out in a group of schoolaged children (11-15 years) have proven that the majority of youth in Poland assess their health as good and very good [20]. Moreover, Pilawska et al. have shown that in a group of primary school students, over half of them assess their health as good, and revealed the following regularity: students who exercise intensively usually feel better [31].

Our own studies showed the existence of an interaction between the place of living and the group, which means that children belonging to the control group “react” to their place of living in a different way than the children in the study group. It was shown that the difference in health-related behaviour self-assessment between children in both groups is statistically significant for the following categories: health self-assessment, stressful situations, use of stimulants, physical activity, social support and eating habits, and in each case the difference is unfavourable for charges of children’s homes. The present study proved that place of living influenced self-assessment of health-related behaviours in all categories, as they were usually lower in cities as compared to villages, and especially pronounced among children brought up in children’s homes. Woynarowska et al. proved that 11-15 years old children assess their health much higher than village children [20]. The authors suggest that physical activity is lower for village children compared to city children [20]. Varene [32] and Moalice [33] state that cavi ties are more frequent among city children than in the village. Salaga-Pylak et al. proved that behaviours of primary-school children connected with smoking tobacco, drinking alcohol and using drugs were more frequent among city children [34]. It is worth adding that Borzęcki’s studies, carried out in a group of primary-school children, showed that city children spend their free time on school days mostly at home: watching TV, reading, listening to music, practicing their hobbies; and village children spend more time doing active sport activities outdoors [35]. In our own studies, it was observed that in Białystok, Łomża, Supraśl and Pawłówka children brought up in children’s homes usually had lower values and no significant differences were found for any of the categories of the Health Behaviour Scale between the mean values in the control group in relation to the place of living.

For most of the categories of the Health Behaviour Scale, the difference between the control and study group was higher in the cities than in Pawłówka and Krasne, and the difference in this last category was highly surprising. The reasons for those results can be found in the exceptionally good conditions in the children’s home located there. Analysis of the obtained results showed a negative influence of being brought up in a children’s home on the assessment of the category of health
self-assessment. Moreover, the influence of age was statistically significant. The influence consisted in the fact that during adolescence (13-16 years) children assessed their health better. Woynarowska et al. [20] and Gacek [36] suggest, however, that youth health self-assessment decreases with time. It was also found that the category of stressful situations was assessed lower by the children from children’s homes, and the interaction of this factor and children’s age was revealed. Age has a positive influence on the assessment of the category, but only in case of the children’s homes charges. Analysis of the stimulants usage category showed that this category of health-related behaviour is completely independent from age. However, it is worth noting studies of the authors [20,36,37] that suggest that the coffee drinking habit in children aged 11-15 years, in Poland, the number of cigarettes smoked, the experience of being drunk, and drinking a beer at least once a month increase with age. No significant relations in the category of eating habits were obtained. Woynarowska et al. suggest that children aged 11-15 years in Poland eat sweets more frequently in cities than in the country, and that eating “fast-food” is more frequent for city children [20]. Our own studies proved that the item of “physical activity” on the Health Behaviour Scale depends to some extent on age, and that this phenomenon is present independently for the children brought up in children’s homes and for children living with their own families. It was found that older children are slightly more physically active. Different results were obtained by Pilawska et al. for children from primary schools [31]. Authors have proven that younger children exercise more than older ones. They have also suggested that older students spend more of their free time watching TV [31]. Different results have been obtained by other authors who claim that the frequency of watching TV and physical activity drop with age [20,36,38,39]. The physical activity assessment of youth decreases with age [36,20]. In neither the areas of prophylactics nor age does membership in a group influence the assessments. Bhowate et al., conducting studies among Indian youth, suggest that the presence of cavities and gum infections increases with age [40].

The category of social support is significantly related to the factor of age, positively influencing the obtained assessments, and to the factor of being brought up in a children’s home, which has a negative influence. Woynarowska et al., in studies carried out in Poland, have proven that difficulties in relations with parents intensify with age [20]. It was shown that there is a relation between children’s health-related behaviour assessment and gender. In our own results, statistically significant results have been obtained only for the category of usage of stimulants. This is confirmed by Kuźma’s studies [17,41], carried out in selected primary schools, which state that cigarette smoking is more frequent among boys than among girls. Other authors also state that more boys than girls drink alcohol [30,42,43]. Similar results have been also obtained by Moździerz [44], who showed that symptoms of negative behaviour (smoking, drinking alcohol, using drugs, stress) are more frequent among boys, and less frequent among girls [20,45-48]. Researchers also believe that as for oral hygiene, girls clean their teeth more frequently than boys do and the frequency is “more often than once a day” [20,48,49].

Rational nourishment is a condition for proper development and preservation of health and a good overall feeling. Providing the body with a proper quality and quantity of nourishing agents not only prevents numerous diseases, but also constitutes an important element in prophylactics and treatment of various diseases [50]. Studies performed by Cimoszuk et al. [51] showed that among students aged 13-15 years, there is a deficiency of body weight in 42% of girls and 26% of boys, and the risk of obesity is serious for 2% of children in the group of boys.

Studies performed by Supranowicz et al. [53] and by Gacek et al. [54] in a group of primary-school children showed that girls tend to assess their health much lower than boys do, and almost half of the studied boys perceive their health as very good. Consistent results have been obtained by Woynarowska et al. for 11-15 years children in Poland [20,48].

As for the next category of health-related behaviour, “social support”, studies by Płotka et al. performed in a group of primary school children showed that parents are the most frequent source of support for girls, with peers and siblings playing an important role as well; and the boys willingly manage themselves [55].

Conclusions

The self-assessment of health-related behaviour depends largely on age, gender, the place of living and education. Relationships between the categories of health-related behaviour were much stronger in the assessments of children brought up in children’s homes, as compared to the control group. There is a need to employ a nurse-educator in children’s homes and schools. It would be recommended to introduce health education not only among children, but also among parents and caregivers. Interdisciplinary teams should be formed to deal with the problem of health education for children and youth.

References

6. Gajewska G, Kulpiński F. Kształtowanie właściwych stosun-...


