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*Education on rational nutrition of elementary school children
in the city of Lublin*

The development of assumptions of the National Health Programme for 1996-2005 postulates the improvement of the nutrition principles of the population and the quality of healthy food as well as the creation of the healthy lifestyle and behaviour that determine the health of population. The first task in this field is the intensification of education of the society on nutrition principles, particularly at school within the programme of comprehensive health education (6).

There are proofs confirming that healthy diet is the basic condition for harmonious physical development, good mood, health, learning skills, physical fitness of the child; it prevents obesity, dietary deficiencies; it reduces the risk of early development of atherosclerosis and other diseases resulting from bad diet. Numerous studies indicate that undernourished children are apathetic; they are fatigued emotionally and physically very easily; they are unable to concentrate and they have poor results at school. Considering the dietary mistakes in families and poor knowledge of children and youth in this field, taking up corrective activities tending to change the dietary habits is worthwhile. With reference to the WHO motto for 1999 year that "Health begins at home", the family which is to realise the tasks connected with health promotion requires protection in each of its function. The school, apart from the family, should be prepared for playing an active role in health promotion. The programme of healthy education including nutrition instruction requires time and change of thinking, definite patterns of behaviour both among the teachers and in the family.

A school nurse should play a considerable role in the programme of creation of accurate healthy behaviours at school. A school nurse being the competent member of school society in health issues, can play a particularly significant role of the main promoter of health education and a health advisor, by communicating new concepts and ideas of health conceived as the individual and social potential to the school community, and particularly to the children and youth (5).

The programme of nurses' education has been based on the widely understood concept of health with paying special attention to the problems of education and counselling. Within the syllabus for nursing education in the Primary Health Care and practice-oriented classes on health promotion, the students learn the skills concerning formulation of the goals of health education, classifying the methods of instruction as evaluation of health condition of the individual and the family, and they run educational activities in the local community.

OBJECTIVE

The goal of the study is to present the stages of preparing the Nursing Faculty students from the Medical University of Lublin for pursuing education activities among children on the popularisation of information on healthy nutrition.

The stages of health education. Identification of health situation and selection of teams for educational tasks:

This stage consisted in identification of health situation of pupils for classifying them to the 4th s group, which is defined as the group with disorders in somatic development. Basing on the analysis of medical documents of the pupils from three elementary schools in Lublin, an adequate age group was selected for education on nutrition and the groups were numbered: school no.1, school no. 2 and school no. 3.

The analysis of documents included 57 class lists and health charts of the pupils qualified for 4th s group. Qualification for the 4th s group was mainly based on the results of examinations made by the school nurse, who accepted the centile charts as the criterion for evaluation of height to weight ratio according to the latest recommendations of the Institute of Mother and Child (3).

Considering the division of the schools and the total number of pupils, it was confirmed that the biggest school was the one with the percent of children qualified for the 4th s group equal to 3.3%, and the next in sequence was the school with the biggest percent of children qualified for the 4th s group (8.6%) as compared to the smallest (in the number of pupils) school with the percentage of children in the 4th s group (4.8%) – Table 1.

Table 1. Total number of children in the schools and the number of children in 4th s group

	NUMBER OF CHILDREN		
	TOTAL	IN GROUP 4 th s	% OF THE TOTAL IN 4 th s
School no.1	829	28	3.3%
School no.2	566	49	8.6%
School no. 3	247	12	4.8%
TOTAL	1642	89	5.42%

Generally the children qualified for the 4th s group in the three schools constituted 16.7%. However, the children in the age group 11-13 constituted the biggest percent of children in the 4th group s – 58.4% (Table 2).

Taking into account the criterion of overweight and underweight, the children with underweight in the age group 11-13 constituted 88.5%, and the children with overweight – 11.5%. The biggest percent in the studied group constituted the girls with under and overweight. Girls puberty was taken into consideration (Table 3).

Table 2. Number of children for 4th s group in age groups

Age groups	School no.1		School no.2		School no.3		Total	
	No. of children	%	No. of children	%	No. of children	%	No. of children	%
7-0 yrs	7	25	6	12.2	3	25	16	18
11-13 yrs	13	46.4	31	63.3	8	66.7	52	58.4
14-15 yrs	8	28.6	12	24.5	1	8.3	21	23.6
TOTAL	28	100%	49	100%	12	100%	86	100%

Table 3. Weight of qualified for 4th s group with consideration to the sex

	School no.1		School no.2		School no.3		Total		%
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	
Overweight	-	2	1	-	-	1	1	5	11.5%
Deficit	4	7	12	16	3	4	19	27	88.5%
TOTAL	4	9	12	16	3	5	20	32	100%

Discussions with the tutors and school nurses concerning the nutrition at school supplemented the data collected in the tables in the form of the following information: quite frequent fainting of children during lessons resulting from not eating the breakfast, lack of second breakfast, relatively smaller number of children having lunch at the school canteen, big number of children doing shopping in the small school shops offering mainly sweets and cakes.

Planning of educational tasks:

The collected data were the basis for preparing educational tasks concerning nutrition at school. The Nursing Faculty students improved and updated their knowledge on nutrition hygiene, public health and methodology of health education during their practice-oriented classes. The syllabus included preparation of an outline for the educational classes and establishing the main task – popularisation of the knowledge on healthy diet among children aged 11-13 as well as establishing the specific aims for every meeting and selection of the contents and the subject of the lesson.

Four meetings were planned for the educational process. These are their subjects: The role and function of individual dietary elements; Your posture speaks about your diet; We evaluate and modify your diet; Deficit and excess – the consequences for your health.

The didactic aids were diagrams, tables, charts, and descriptions of products. The main aim of the applied methods was to influence the awareness and stimulation of behaviours that are good for health. However, the preferred forms were speech, lecture, discussion, printed matter, visual forms, entertainment forms - crosswords, puzzles. For preparing the outlines the fragments of lessons scenarios from "Programme of health education: (2) and "Education of health" (1) were used.

Realisation of activities on nutrition education:

The lessons were carried out in 10 selected classes (V, Vi) of the three elementary schools in Lublin. The lessons included four meetings, the date was every time established with the teachers of biology and physical education, and the tutors and headmasters accepted them.

The students worked in teams composed of 2 persons and their work consisted in oriented observation considering: the rightness of the selection of aims and realisation methods; fitting the contents to the level of knowledge of the audience, their age and interests; the attractive form of presentation and the right argumentation; adequacy of the didactic aids for the subject and the pupils' cognition abilities; the ways of communicating with pupils and managing in difficult situations (difficult questions, unpredictable reactions of the children). During the last meeting the students together with the children summarised the lessons orally and in writing.

Evaluation and summary of educational tasks of the audience with the elements of self-evaluation:

After completion of the lessons the Nursing Faculty students evaluated their tasks and made self-evaluation. They evaluated their activities as good and very good. The planned course of the lessons made students learn the following skills: interpreting of the activities and tasks of the nurse resulting from the programme "health promoting school"; analysing of data considering the selection of the audience; formulating of the health tasks with reference to healthy diet; selection of adequate methods, forms and media for realisation; teaching children and evaluation of the effects; communicating with children.

Observation of the students' work with the pupils and analysis of the difficulties indicated that more time should be devoted to the mastering of skills in the following: communication and assertive behaviour – these skills should be mastered during psychology seminars; preparation of students for educational job with children on public health issues, psychology and health pedagogy.

RESULTS AND CONCLUSIONS

1. The lessons focused on popularisation of knowledge on healthy diet attracted more interest of the children than of the teachers.

2. The schools were open to realisation of educational activities; the encountered difficulties resulted from the changes of the schedule and the lack of classrooms.

3. Realisation of the educational tasks confirmed the following: poor knowledge about nutrition; poor knowledge about the selection of food elements and their influence on the health; small quantity of fruit, vegetables and dairy products in the diet; excessive amount of carbohydrates and animal fat; long breaks between the meals; frequent lack of second breakfast at school.

The following activities were undertaken to continue the realisation of the educational programme on nutrition: 1. a permanent date of meetings of school nurse with children was agreed with the headmaster; 2. the biology teachers and tutors were inspired for more fruitful co-operation; 3. it was agreed that educational tasks should involve more activating methods and in particular: presentation, exercises, mini-competitions, tasting; they should be organised together with the teachers of biology and the tutors; 4. the analysis of family situation of children

with weight deficiency with relation to the birth weight, the results of monitoring examinations of children aged 2, 4, 6 and 10 as well as material-living condition situation and the family dietary habits were analysed together with the school nurse; 5. the contact was made with the parents of the children included in the study via the tutors in order to organise two subsequent meetings on diet-related subjects during the school year.

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SUMMARY

The paper presents the stages of preparation of Nursing Faculty students of the Medical University in Lublin for realisation of lessons popularising the knowledge about rational nutrition. The analysis of school documents allowed for selecting a group of children aged 11-13. The subjects of the lessons were adapted to the age and demands of the audience. The realisation of the syllabus was made during four meetings in three schools in Lublin. The realisation of dietary education confirmed poor knowledge of nutrition, too little amount of fruit, vegetables and dairy products in everyday menu with big amounts of carbohydrates and animal fat, frequent lack of second breakfast at school. The school, besides the family, should realise the tasks connected with the popularisation of healthy diet and the deficit and excess of body weight). The evaluation of students' educational activities indicated that more time should be devoted to the methodology of health education with particular attention to activating methods within such subjects as public health, family medicine.

Edukacja w zakresie racjonalnego żywienia wśród dzieci szkół podstawowych

Praca przedstawia etapy przygotowania studentów Wydziału Pielęgniarskiego Akademii Medycznej w Lublinie do prowadzenia zajęć edukacyjnych popularyzujących wiedzę o racjonalnym żywieniu. Na podstawie analizy dokumentacji szkolnej wybrano grupę dzieci w wieku 11-13 lat. Tematykę zajęć dostosowano do wieku i potrzeb odbiorców. Realizacja programu edukacyjnego odbywała się cyklicznie w czasie czterech spotkań na terenie trzech szkół Lublina. Realizując edukację żywieniową, stwierdzono u dzieci m.in. niski poziom wiedzy o żywieniu, zbyt małą ilość w codziennym

jadłospisie owoców, warzyw, nabiału przy dużej ilości węglowodanów i tłuszczów zwierzęcych, często brak drugiego śniadania w szkole. Szkoła obok domu ma realizować zadania związane z popularyzacją zdrowego żywienia, dlatego edukacją należy także objąć rodziców (zwłaszcza dzieci z niedoborem, jak i nadmiarem masy ciała). Oceniając działania edukacyjne studentów, stwierdzono, że w ramach ćwiczeń z przedmiotów takich, jak: zdrowie publiczne, medycyna rodzinna, należy więcej czasu poświęcić metodyce nauczania zdrowia, ze szczególnym uwzględnieniem metod aktywizujących.