Health Promotion in an Ukrainian Preschool Experienced by Caregivers and Parents

Maryna Artemenko

Bachelor’s thesis
May 2009
# Health Promotion in an Ukrainian Preschool Experienced by Caregivers and Parents

**Degree Programme**
International Nursing

**Tutor(s)**
Irmeli KATAINEN, Teija HÄYRYNEN

## Abstract
The aim of my thesis was to evaluate parents’ and caregivers’ opinions on health promotion for preschoolers in Ukrainian kindergartens with the purpose of raising awareness concerning the physical, nutritional, and hygienic aspects in health promotion in the kindergarten and get an idea about collaboration between the staff and the parents. The thesis describes the Ukrainian system of preschool education (kindergartens) focusing on the health promotional aspect of the system. The research is performed in the Guravushka kindergarten in Kherson city in Ukraine. Scope of the research was defined to include physical education, nutrition, and hygiene as well as the role of nursing in health promotion in the kindergarten. In order to perform an in-depth research of the domain area the qualitative research method was utilized. Data for the research was collected via the interviews and open-ended discussions. The inductive content analysis method was then used for processing the results of the study. The results showed a strong focus of the Ukrainian preschool education system on health promotion using means of physical education, nutrition, and hygiene. Special focus is given for conditioning of the child to the cold. Captured and analyzed are opinions about the health promotion of both caregivers and parents. Analysis of opinions has indicated a good attitude towards strengthening of child health by means of health promotion. Discovered is a great role of a nurse in Ukrainian kindergarten. The results also showed lack of collaboration in the subject of health promotion between these two main players of the educational process. One possible cause of this problem is lack of time because of overloading of nurse with daily duties. The preschool education systems of Ukraine and Finland are compared which indicated principal difference in defining focus of the preschool education. The aim and purpose of the thesis are reached and few further research ideas are described.

## Keywords
Health promotion, children, kindergarten, physical education, hygiene, nutrition, Ukraine, Finland, conditioning to the cold

## Miscellaneous
The bachelor’s thesis is available in the library of Jyväskylä Polytechnic’s School of Health and Social Care.
# Työn nimi
Terveyden edistäminen Ukrainan lastentarhan ja esikouluopetuksen järjestelmässä. Vanhempien ja päivähoidon työntekijöiden mielipiteiden analysointi.

## Kouluutusohjelma
Kansainvälinen sairaanhoito

## Työn ohjaajat(t)
Irmeli KATAINEN, Teija HÄYRYNEN

## Tietoja

### Tulos


### Nykyinen tilanne

Tutkimuksen aineisto koostui vanhempien ja päivähoidon työntekijöiden mielipiteistä. 

### Tulokset

Tulokset osoittivat, että Ukrainan lastentarhan ja esikouluopetuksen järjestelmä on suunniteltu samoihin terveyden edistämiseen. 

### Kaikkien tulokset

Tulokset on analysoitu ja puhdistettu

### Avainsanat

Terveyden edistäminen, lastentarha, esikoulu, liikunnallinen koulutus, ravitsemus, hygieneita, Ukraina, Suomi, totuttautuminen kylmään

---

**Muut tiedot**

Tämä opinnäytetyö on saatavilla Jyväskylän ammattikorkeakoulun sosiaali- ja terveysalan kirjastosta
1 LIST OF TERMS AND ABBREVIATIONS

ICD  International Classification of Diseases
WHO  World Health Organization
BMI  Body Mass Index
CHD  Coronary Heart Disease
CDC  Centers for Disease Control
2 INTRODUCTION

Health promotion education is rapidly changing internationally. Oliver et al. (2007) states that variety of approaches and models of health promotion for preschool children exist in different countries. The main root of my interest in health promotion for preschoolers is in exchange of international experience according the policy developments in the area of nutrition, physical activity and hygiene in the kindergarten as important area of public health. The partnership of Ukrainian kindergartens and nursing in providing the well-being of children is not well known in many foreign countries. Unlike many other countries, nurses play a key role in kindergarten health care in Ukraine. This study presents the way of health promotion for preschoolers in respect of physical education, nutrition and hygiene based on viewpoints of caregivers and parents. It also identifies the role of nursing in kindergarten health promotion in Ukraine.

The review of health promotion for preschoolers in Ukrainian kindergarten is based on data collected from interviews and information available from different national and international sources including books, researches, legislations, internet sources, publications and articles available in Ukrainian, Russian and English languages. Few concepts and methodologies for child physical activity, nutrition and hygiene in health promotion are considered and widely discussed in this study.

The aspect of preventing child diseases and promoting the general health of the preschoolers plays a large role in modern world. Strategic frameworks should include interdisciplinary and interagency cooperation as a fundamental principle and consider the most effective ways so that the children’s views be actively sought and implemented (Boginich, 2007, 8-9). “Professionals who work in close contact with children will be more likely to understand the dynamism of child development and the impact that social, emotional and physical maturation has upon the individual’s level of understanding and abilities in decision making according to different levels of ability. Professionals also need to be aware of the changing nature of childhood if health promotion is to be effective” (Kerr 2002, 115).
The aim of this study is to evaluate the parents’ and caregivers’ opinions on health promotion for preschoolers. The purpose is to raise awareness concerning the physical, nutritional and hygienic aspects in health promotion in the kindergarten and get an idea about collaboration between the staff and the parents. The larger context of the bachelor thesis is health education as a means of health promotion.

This study also briefly compares few interesting in the researcher’s point of view aspects of health promotion practices in kindergarten systems of Ukraine and Finland. Such comparison is out of scope of this work as such and it is done solely because of the researcher’s personal academic interest.
3 THEORETICAL BASIS

3.1 Definition of Health and Health Promotion

The World Health Organization (WHO) defines health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (WHO definition of health, 2003). However, the health means different things for different people (Edeman & Mandle, 1994, 3-4). The meaning of health might be understood in different ways. Many people have different views. Individuals define health on the basis of perceptions they make about the purpose and values of being healthy. “Health is necessary for the purposes of life and adds to the quality of life” (Kiger, 1997, 4). Kiger (1997) tells that the most important of these perceptions are:

- Health means more than absence of disease
- Health implies adaptability
- Optimum health varies.

Historically, the definition of children’s health has received little consideration. Nowadays, awareness of protecting the children’s health and care of children has increased. In 20th century researches provided by different individuals have created the conceptual basis for understanding the cognitive, emotional, and social importance of childhood and the roles played by both family and societal forces. Today, a new view of childhood is based on social institutions including schools and the health care system. This view plays an important role in preparation of children for life in a complex modern world. National policies for protection of the welfare of children, creation of the justice and child welfare systems become very important after social changes happened in the 19th and 20th centuries. The International Classification of Disease (ICD) was adopted by the WHO and it is used for systematic recording, analysis, interpretation, and comparison of both morbidity and mortality data across the World.

New models of health promotion and disease prevention began to account for the influence of dietary and exercise behaviors and a new definition of children’s health runs as follows:
According to the Institute of Medicine, fifteen member states of the European Union Health Monitoring Program came to a similar conclusion that children’s health has specific characteristics that reflect the dynamic nature of childhood, are conceptually sound and are based on the best scientific evidence, and provide a basis for both measuring and improving children’s health. “Children’s health is the extent to which individual children or groups of children are able or enabled to (a) develop and realize their potential, (b) satisfy their needs, and (c) develop the capacities that allow them to interact successfully with their biological, physical, and social environments”. (Institute of Medicine Staff, 1997, 28 - 34)

However, internationalization and new strategies in health promotion for children need to be integrated for success and supporting national policies (Branca, 2007, 47-50). Such, knowledge and experience exchange between e.g. Ukrainian and Finnish ways of promoting health in kindergartens could potentially bring new findings in this area.

The main objective in Finnish preschool care is to promote child’s healthy growth, development and learning skills. The social task of ECE includes the promotion of child’s social, intellectual and emotional development. Daycare should also offer a favorable context and activities which support and guide child’s development and learning (Day care Act 15.11.1983/117/1983).

The future of Finland and of Finns is strongly linked to knowledge and expertise as well as the ability to utilize this know-how and expertise and to create new innovations. The strategic development of the Finnish information also emphasizes co-operation on an international level. (Grierson, 2000, 7)

Finnish preschool staff includes kindergarten teachers, special kindergarten teachers, social educators or Bachelors of Social Sciences, Bachelors and Masters of Education, practical children’s nurses, kindergarten practical nurses and practical nurses including other staff mainly carrying out kitchen and cleaning tasks (Grierson, 2000, 42).
3.2 The Preschool Care Concept in Ukraine

Ukrainian pre-school education institutions are: nursery-kindergartens, kindergartens, and school-kindergartens. Pre-school institutions for general development of children mainly focus on intellectual, artistic-esthetical, physical profiles and operate in each region of Ukraine. The main official bodies responsible for supervision and coordination of kindergartens include Ministry of Education and Science, Ministry of Health, Ministry of Family, Youth and Sport and local state administrations (UNESCO/ECCE, 2006).

According to the Ukrainian Law on preschool education, the main attention in the concept of comprehensive school and preschool education is given to the physical education as a part of child health promotion (Act 01.01.2009/2638-III). Achievement of optimal physical status for children is the main criteria for efficiency of educational process in preschool agency. The best optimal choices in health promotion and education programs become fundamental bases in upbringing and education of children in order to support healthy generation. Therefore, the main goal of preschool institutions is to choose the most effective program which is appropriate to the profile of the institution (Boginich, 2007, 7). The aim of pre-school education is to support coherent development of both physical and mental health of children, promote their self-development, and create habits and skills necessary to study at school. Basic components of the Ukrainian preschool education issued by the state serve as a guideline to the work of all preschool education institutions, which can be different in their forms, contents and focus. The components are compiled in cooperation of scientists, methodologists, and other experts. (UNESCO/ECCE, 2007)

3.3 Health Promotion in Ukrainian Kindergarten

The medical care in the preschool care settings is commonly assigned to local polyclinics and nurses which are employed directly by the kindergartens. However, the key role in health control and promotion locally in a preschool care institution is assigned to its head manager. The head manager establishes close contact between the polyclinic responsible personnel and the kindergarten staff. He/she coordinates all
actions necessary to carry out regular medical examinations of children, analyze
results of the examinations and develop corresponding actions in case a problem was
found. Additionally, the manager leads consultations with parents and other involved
parties (Act 12.03.2003/305).

Generally, each kindergarten manager follows the life protection and health promotion
rules developed by the state authorities. He/she ensures that the kindergarten’s
personnel professional skills requirements are met since all members of a preschool
institution are considered as important players in the health promotion program in the
Ukrainian preschool education system (Act 12.03.2003/305).

A number of different aspects are included into the health promotion program within the
Ukrainian kindergartens. These include such main elements as:

- Pediatric care and hygiene
- Physical training
- Diet and nutritional regimen

3.3.1 Pediatric Care and Hygiene

The pediatric care and hygiene aspects of a preschool organization’s life are commonly
divided between the medical workers (such as doctors and nurses) and the
kindergarten’s personnel.

Prior to admission of the child to a preschool institution a mandatory medical
examination is performed by pediatrician, stomatologist, logopedist and other doctors if
so indicated. Few laboratory tests are performed including blood test, urine test and test
for helminthiasis. Also, children are required to have all required vaccinations done
before the admission. (Act 29.11.2009/434)

In the following, medical examinations are carried out in a regular manner in each
particular preschool organization. The staff is involved as much as possible while both
assessing obtained data as well as developing the action plan. Everyday activities are
mostly carried out by the preschool institution personnel, however, these take into
consideration medical prescriptions and information obtained from the parents (Tarasova, 1982, 21-23).

3.3.2 Hygienic Factors

One of the most important ways to reduce spread of infection is hand washing. Numerous studies have shown that washing hands is important. Unwashed or improperly washed hands are the primary carriers of infection. Poorly washed hands are cause numerous outbreaks of diarrhea among children and teachers in kindergartens (Hawks & Ascheim, 1110-1112). Proper hand washing shall be used after playing in sandboxes in order to help preventing ingesting parasites which could be found in contaminated sand and soil (Soto et al., 1996, 1030). Thorough hand washing with soap removes organisms from the skin and allows them to be washed away. That should be done for at least 10 seconds in warm, running water which is not less than 16 C° and not more than 50 C° (Roberts et al., 2000, 738-742).

While playing children touch the surfaces on which they play with their hands. After that kids put their hands in their mouths. Shoes can be carriers of infections when people walk on surfaces that are contaminated with disease-causing organisms, and then go to the children's play area. It is recommended that toys which cannot be washed and sanitized are not used in the kindergartens. Toys which children have placed in their mouths or that are otherwise contaminated by body secretion liquids shall be taken away from children. Finishing agents and surfaces in the rooms shall be suitable to the use of the rooms. They shall be maintained in a good condition. Carpets, porous fabrics, and other such surfaces that accumulate soil and potentially contaminated materials shall not be used in such places as toilet rooms, diaper change areas and dining rooms. (Handbook for child care providers, 2006, 45-47)

Odors in bathrooms, toilets, diaper changing and other areas of the kindergarten shall be well ventilated and sanitized. All places with extra moisture such as toilets and bathrooms, cleaning closets, and rooms with sinks or other places where wet mops and chemicals are stored shall be mechanically ventilated. Use of chemical air fresheners is not allowed because they may cause nausea or another allergic reaction for some
children. Also, mechanical ventilation and sanitation helps to control and prevent spread of disease and contamination in general. (Op. cit. p. 47-49)

3.3.3 Physical Education

The means of physical development include such instruments as hygiene, nature and physical exercises. Also, different type of exercises which are done while performing every day activities influence to the human physical development including modeling, drawing and dressing (Boginich, 2007, 9).

Balanced child physical development task requires involvement of different means simultaneously. Each of these used separately affects the organism differently. For example, dancing exercises, accompanied by music, contribute to development of correct posture, development of rhythmic, smoothness, ease, expressive behavior and many others. Nature factors such as sun, water and air amplify effect of other factors to the child’s organism. Thus performing the exercises outside while the sun is shining children receive more positive emotions, more oxygen is absorbed, metabolism rate is increased and ultimately functional state of all body systems is improved. Physical exercises represent special means of physical human development. This is used in many cases as health-improving, educational and development tasks. Therefore these are widely used throughout the human life.

Physical training is one of the best ways to prevent many health problems such as diabetes mellitus, cardiovascular diseases, and some cancer. Obesity among preschool age children is growing globally (WHO/Obesity and overweight, 2006). According to the research provided on Physical Activity among Children Attending Preschools, boys participate in significantly more moderate-to-vigorous physical activity (MVPA) and vigorous physical activity (VPA) than girls, and black children participate in more VPA than do white children. Age is not a significant predictor of MVPA or VPA. Children’s physical activity levels are highly variable, which suggests that preschool policies and practices have an important influence on the overall activity levels of preschoolers (Russel et al., 2004, 1258–1263). In spit of it, another research provided on Physical Education in Elementary School reports that one additional hour of physical education in kindergarten reduces body mass index (BMI) among overweight or at risk of
overweight girls but has no significant effect among overweight or at risk of overweight boys (Datar & Strum, 2004, 1-12).

Sääkslahti (2005) states that “Physical activity can be defined as energy expenditure through the reception of purposeful body movements” however, quality of physical activity and its amount is influenced by cultural context. Physical activity promotes motor skills of child which are learned through play and physical activity. Low physical activity may include risk factors like high BMI in childhood and coronary heart disease (CHD) in adulthood. Outdoor activity among boys and high-activity playing among girls reduce the risk of coronary heart disease. The current physical activity study it is possible to promote children health and development of motor skills of preschoolers by increasing physical activity (Sääkslahti, 2005).

There are many researches provided and many methods exist for measuring children physical activity but all of these are not ideally effective. Thus it is accepted that there is no ideal method for measuring of physical activity in preschoolers, nor a best practice approach for data analysis (Oliver et al., 2007).

3.3.4 Nutrition

“Access to a safe and healthy variety of food is a fundamental human right. An optimum supply of safe and nutritious food is a prerequisite for the protection and promotion of health” (Food and Health in Europe, 2002, 11).

Resolution of World Health Assembly 55.23 (2002) urged EU member states to develop national plans of action on nutrition and physical activity, with strategies on diet that involve all sectors, including civil society and the food industry, and committed WHO to developing a global strategy on diet, physical activity and health within its strategy for no communicable disease prevention and control. Nutrition strategy aims to promote health, prevent nutrition deficiencies and to ensure optimal health, especially in infancy, childhood, pregnancy and lactation, and older age. (Food and Health in Europe, 2003, 4)

If public health food policies are provided by the health ministries who participate in and possibly lead the necessary cross-sector collaboration. In the case of food safety,
ministries of health work with agencies responsible for policies on food production, trade and transport. In Ukraine the Ministry of Health, Ministry of Education, public administrations, sanitary and epidemiologic organizations work in collaboration and provide guidelines on nutrition for preschoolers.

Nutrition plays an important role in both child development and prevention of diseases. Eating habits developed in childhood can become lifelong dietary and affect the child’s long–term health. Parental knowledge and attitudes about food are factors that help to determinate child’s nutrition. Kindergarten teachers are in daily contact with parents providing for nutritional advice if asked so. Teachers have opportunity to influence the children’s eating patterns via education programs. Therefore the kindergartens are in charge for setting nutrition and health education (Hendric et al., 1989, 56-59).

Weight and height gives important information how children are growing in comparison with other children of same age and sex (Paige, 1988). Growth charts are built out of data from national probability samples representative of children in the general population. These charts are used by health care providers and help to determine high deviation of child characteristics from normal values, which may be a result of disease or poor nutrition. That may require changes in feeding practices in the kindergarten setting.

Adequate calorie intake is important for prevention of the childhood obesity which is rising rapidly all over the world (WHO/Obesity and overweight, 2006). Children need extra calories in order to support their development unlike old people where extra calories would lead to death so they need extra activities to burn the stored calories in their body. Diet is the major factor in avoiding childhood obesity. According to Childhood “Globesity”¹, “BMI, although useful for measuring adults, is a less effective measure for children since body composition changes dramatically with age. The growth charts from CDC (see Figure 1) can be a useful tool for health professionals,

¹ Globesity is a recent WHO term for the global obesity epidemic.
who can use them to track children’s progress over time and monitor movement among percentiles that may signal risk for weight issues” (Health calculators and charts, 2008).

Body Mass Index (BMI) is a relationship between weight and height (BMI; kg/m²) that is associated with body fat and health risk.

Excess body weight and obesity in children and young people are on the rise in Europe and are major risk factors for chronic disease. The prevalence of obesity has tripled in the last two decades leading to the alarming trend (see Appendix 1). If no action is taken...
and new strategies are not integrated than it is estimated that 150 million adults and 15 million children and adolescents in the Region will be obese by 2010 (WHO, 2007)

Strategies need to be integrated e.g. across food services, health education, physical education.

Involvement of parents in treatment programmes is necessary for successful weight loss among young children and, to a lesser extent, adolescents. International action is essential to support national policies. Obesity is becoming as dominant in developing countries and countries with economies in transition, particularly in the context of globalization. “Taking intersectional action remains a challenge, and no country has yet effectively managed to bring the epidemic under control. Establishing strong internationally coordinated action to counteract obesity is both a challenge and an opportunity, as many key measures are cross-border both in character and in their implications.” (Branca, 2007, 49-57)

3.4 Programs and Methodological Support of Preschool Education

During the Soviet Union era the number of kindergartens was growing rapidly and the number of programs, educational methodological publications for the staff and parents were published on the state and republic levels. The health promotion program is usually included into the methodological publications but some additional methodologies are used by the working staff. Yakumenko (2006) investigated and reported bibliography of these programs and educational methodological publication in Education for All Global Monitoring Report 2007.

3.4.1 The “Malyatko”² Program

Operation of preschool children’s institutions in Ukraine is based on a program of education and training. The kindergarten “Guravushka” works according to the

² “Malyatko” can be translated from Ukrainian as “Small Baby”
“Malyatko” program, which is a public document that identifies goals, objectives and content of work with children, taking into account their age and individual characteristics. The scientifically and methodically substantiated program aims to make use of the historical heritage, new theories and practices to be used in the pre-school education. The program is built to satisfy current public demands and ensures well-balanced children development. (Malyatko, 1999).

The authors of the program are scientists of the Institute of Education, Institute of Psychology of the Academy of Educational Sciences, Pedagogical University in Ukraine. This program is approved by the Ministry of Education of Ukraine in 1991 (second edition was approved in 1999). It defines the objectives and content of education and training of children aged from two to seven years. That is the first program which implements the principles of the pedagogical process of democratization, humanization content and teaching methods and education of children in preschool institutions. It is focused on the expansion of children's comprehension of Ukrainian cultural traditions (Malyatko, 1999).

The educational material is organically classified by age groups in the following chapters: goal of raising a healthy child, game, child and the world, the nature, verbal communication, literature, interesting mathematics, visual arts, construction and design, world of music, work (Malyatko, 1999).

The program begins with section "Psychological characteristics of children". That chapter analyses psychological aspects of child development and provides caregivers with the knowledge how to use these in the pedagogical process. Thus the educators can reflect not only age but also level of development of each child when deciding the amount of given education material (Malyatko, 1999).

The last section, which is called “Together with the family”, includes areas of joint activities of teachers and parents required for balanced children development.
3.4.2 Staff Training Requirements

Working staff is the main element in preschool child care. Participants in the educational process in kindergartens age children, teaching staff, assistants, baby-sitters, health workers and parents or persons who substitute them (Act 12.03.2003/305).

The preschool teacher is a person who has higher pedagogical education namely master, specialist or bachelor degree in pedagogy and health status which allows that person to perform professional duties (Act 12.03.2003/305).
4 IMPLEMENTATION OF THE RESEARCH

4.1 Setting

The research is conducted in the kindergarten “Guravushka” which is located in Kherson city in Ukraine. This particular kindergarten has all the necessary facilities for physical activity like gym for physical education and music hall. Other facilities include premises for preschool children, isolation room, manipulation room and nursing office, kitchen and washing rooms, administration rooms.

The kindergarten consists of three babyhood premises, three premises for children age 3-4, three premises for children age 4-5 and four premises for children 5-6 years old. Total amount of children in kindergarten in 2008 was 244. According to the statistical report provided by the nurse of this kindergarten, the total amount of children involved in daycare changes slightly over the previous years. This statistical data is presented in Table 1.

<table>
<thead>
<tr>
<th>Age in years</th>
<th>Number of children 2006</th>
<th>Number of children 2007</th>
<th>Number of children 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
<td>4</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>2-3</td>
<td>39</td>
<td>39</td>
<td>39</td>
</tr>
<tr>
<td>3-4</td>
<td>48</td>
<td>50</td>
<td>58</td>
</tr>
<tr>
<td>4-5</td>
<td>48</td>
<td>51</td>
<td>57</td>
</tr>
<tr>
<td>5-6</td>
<td>63</td>
<td>51</td>
<td>62</td>
</tr>
<tr>
<td>6-7</td>
<td>26</td>
<td>60</td>
<td>27</td>
</tr>
<tr>
<td>Total</td>
<td>228</td>
<td>258</td>
<td>244</td>
</tr>
</tbody>
</table>

Guravushka kindergarten educates preschoolers and provides disease preventive work including provision of sanitation and hygiene, organization of medical control for
children’s health status and development, implementation all necessary prophylactic
examinations and health promotion procedures, prevention of epidemic of diseases,
community health with children, parents and working staff, preventive actions on
children’s traumatism, development of vocational competence.

All children in the kindergarten are subdivided in tree groups according their health
status. Children in first health group have no health problems, in second group those
who have common health problems and third group are those who have chronic
pathological diseases. Health status distribution is presented in Table 2.

TABLE 2. Health status distribution

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>Number of Children</td>
<td>Percentage (%)</td>
<td>Number of Children</td>
<td>Percentage</td>
<td>Number of Children</td>
<td>Percentage</td>
</tr>
<tr>
<td>I</td>
<td>25</td>
<td>10,9</td>
<td>40</td>
<td>15,5</td>
<td>45</td>
<td>18,4</td>
</tr>
<tr>
<td>II</td>
<td>200</td>
<td>87,7</td>
<td>216</td>
<td>83,7</td>
<td>197</td>
<td>80</td>
</tr>
<tr>
<td>III</td>
<td>3</td>
<td>1,3</td>
<td>2</td>
<td>0,8</td>
<td>2</td>
<td>0,8</td>
</tr>
<tr>
<td>Total</td>
<td>228</td>
<td></td>
<td>258</td>
<td></td>
<td>244</td>
<td></td>
</tr>
</tbody>
</table>

Comparing to years 2006 and 2008 the number of healthy children raised – 18,4% and
number of children with chronic pathological diseases reduced to 0,8 %. All children
with developmental or health problems and those who have chronic pathological
disease are taken to the medical exercises dispensary and being under constant
observation by the pediatrician. Every child has individual plan of health promotion
based on health examination form. An example of such plan is given in Appendix 2.

The general morbidity of children in Gyravushka Kindergarten, increase in acute
respiratory diseases, pneumonias and intestinal diseases are analyzed annually and
measured in nosologic units. The kindergarten nurse stated that most of the diseases are acute respiratory virus infections (80%), respiratory infections (6.4%) and pneumonia (2.6%).

Gyravushka kindergarten provides specific immunization for preschoolers. Immunization of children is helps to decrease infectious diseases. Prophylactic inoculations provided according to the nursing plan done every month. Before the child gets inoculation the doctor observes the child’s health status and measuring the temperature. The child parents are informed about inoculation and possible side effects of immunization before it is done to the child. Manipulation is done by disposable syringe and according to the aseptic norms.

4.1.1 Nutrition in Gyravushka Kindergarten

The balanced diet and nutrition regimen is considered to be very important for preschoolers of all ages. The goal of good regimen is strengthening of children’s health and physical activity. Head of the kindergarten stated that the regimen is established according to the physiological norms of a child group. General regimen also includes sufficient stay of children outdoors, performing common activities as well as health improving and preventive measures.

The organization of nutrition for kindergarten children is always under the medical control. Theoretical calculations of calories intake, content of proteins, fats and carbohydrates is performed monthly. Daily ration scale of a preschool child is split as following: breakfast 25%, lunch 50% and afternoon snack 25%. Daily intake of meal and calorie content is presented in Table 3. (Kartauceva, 2008, 6,9,10)

<table>
<thead>
<tr>
<th>TABLE 3. Division of meal and calorie content (grams)</th>
<th>Age 1,5 – 3 years</th>
<th>Age 3-6 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakfast</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proteins</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>Fats</td>
<td>11,5</td>
<td>14</td>
</tr>
<tr>
<td>Carbohydrates</td>
<td>53</td>
<td>68</td>
</tr>
<tr>
<td>Calories</td>
<td>375</td>
<td>445</td>
</tr>
</tbody>
</table>
Dependence of portion size on the age of child is shown in Table 4. The intake is calculated considering physiological differences of children different age (Kartauceva, 2008, 6,9,10).

TABLE 4. The volume of portion according to the age of child (gram)

<table>
<thead>
<tr>
<th></th>
<th>Age 1,5 – 3</th>
<th>Age 3-6</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Breakfast</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hot dish</td>
<td>90 -100</td>
<td>100 - 120</td>
</tr>
<tr>
<td>Bred and butter</td>
<td>20/7</td>
<td>30/10</td>
</tr>
<tr>
<td>Tee</td>
<td>150</td>
<td>200</td>
</tr>
<tr>
<td><strong>Lunch</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hot dish (soup, borsh)</td>
<td>150</td>
<td>200 - 250</td>
</tr>
<tr>
<td>Meet</td>
<td>60</td>
<td>80</td>
</tr>
<tr>
<td>Garnish</td>
<td>120</td>
<td>150</td>
</tr>
<tr>
<td>Salad</td>
<td>50</td>
<td>60</td>
</tr>
<tr>
<td>Bread</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>Compote</td>
<td>150</td>
<td>200</td>
</tr>
<tr>
<td><strong>Afternoon snack</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Porridge</td>
<td>200</td>
<td>250</td>
</tr>
<tr>
<td>Bread or</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>Bun</td>
<td>80</td>
<td>90</td>
</tr>
<tr>
<td>Tee</td>
<td>150</td>
<td>200</td>
</tr>
</tbody>
</table>
Food is delivered to the kindergarten from the public depots has quality certificate. Upon arrival it is inspected by the nurse, logistics manager and the cook as it is stated by the Ministry of Health act (Act 01.06.2005/242/329).

4.1.2 Physical Education

Physical education is carried out in accordance with the “Improvement of the physical education in the preschool institutions” guide (1995). The guide consolidates such aspects as the day regimen, balanced diet, hygiene and sanitary conditions, set of physical exercises and health hardening (see Appendix 3) measures which make use of seasonal factors and include such procedures as air bathing, cold shower of legs during warm season and ultraviolet irradiation in order to raise the human immunity. (Improvement of the physical education in the preschool institutions, 1995)

All the kids are split into medical groups for physical education as shown in Table 5.

**TABLE 5. Medical groups in the kindergarten for physical education**

<table>
<thead>
<tr>
<th></th>
<th>I – primary group</th>
<th>II – preparatory group</th>
<th>III – special group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of kids</td>
<td>Percentage</td>
<td>Number of kids</td>
<td>Percentage</td>
</tr>
<tr>
<td>2006</td>
<td>219</td>
<td>96,1</td>
<td>8</td>
</tr>
<tr>
<td>2007</td>
<td>230</td>
<td>89,1</td>
<td>25</td>
</tr>
<tr>
<td>2008</td>
<td>214</td>
<td>87,7</td>
<td>28</td>
</tr>
</tbody>
</table>

For the exercises each group, which consists of 25-35 children is classified for certain level of physical activity. These are determined based on physiological factors such as reddening of face, hyperhidrosis and respiratory rate. The procedure of checking of basic moving skills by children is done as following in Appendix 4 (Gorunova, 1997, 18-19).
A physical education lesson in the kindergarten consists of four parts: prologue, warm-up, main and the closing part. The prologue lasts 2-4 minutes. During that time the teacher attempts to organize the kids and activate their attention towards the lesson. That part usually contains different kinds of walking, running and formation exercises as well as attention games. During the warm-up phase children are prepared for more intensive physical activities. That phase involves work of all skeletal muscles and lasts approximately 4-8 minutes. The main phase continues for 10-25 minutes. That phase aims to build up children motor skills and develop children physical nature. During that phase the children organism is reasonably loaded by physical exercises as well as games. The closing part lasts for 3-4 minutes. During that time the cardiovascular and respiratory systems are calmed down to their normal values. The class is finished by walking doing respiratory exercises at the same time. (Gorunova, 1997, 21-23)

At the lesson different muscle groups are loaded in turn. The long-lasted static positions are also avoided as these tire people very quickly. Sample exercises used during physical training lessons are given in Appendix 5.

The individual approach is applied to children who are performing physical exercises. Such, impatient and excitable children are involved into exercises first. In a contrary, sluggish children are given more intensive load using additional motivation and extra help. Children with health defects are given less load.

Therefore the medical personnel, methodologist or head of the institution monitor pulse and respiratory rate when visiting such exercises. This is carried out using two children with normal physical and mental health. The pulse is counted during 10 seconds and multiplied by 6. The respiratory rate is counted during 30 seconds and multiplied by 2. Usually, such monitoring is done before the exercise, after warm-up, after main and closing phases. Important is to note down time which is needed to calm down the pulse and respiratory rates to normal values after the exercise. Blood pressure is measured after measuring of the pulse and respiratory rate. Acquired data is then placed into such format as it is shown in Table 6 (Gorunova, 1997, 22-23).
TABLE 6. Template for measuring anthropometric data

<table>
<thead>
<tr>
<th></th>
<th>Pulse (10 seconds)</th>
<th>Respiratory rate (30 seconds)</th>
<th>Blood pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before the exercises</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>After prologue phase</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>After warm-up phase</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>After main phase</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>After closing phase</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recovery</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The pulse rate before the exercise is considered to be 100%. When the exercise is built correctly, most of the children of preschool age have pulse rate increased by 10-15%, after warm-up phase by 20-25%, after main phase by 40%, after the closing phase pulse rate is near to original values and after 1-2 minutes it should return to original values. Children or preparation group have pulse rate increased by 50% after the main phase. (Gorunova, 1997, 24)

For example, there is pulse rate of 85 for a 6.5 year old boy. After the prologue phase it goes up to 95, after warm-up to 105, after main phase 125 and at the end of the exercise it is 90. After 2 minutes the pulse rate returns to original value of 85 beats per minute.

During the exercises children wear casual look garment. The hygiene and sanitary conditions are audited in the gym and the equipment and tools are selected to correspond to the age and motor skills of children. Upon the exercise completion the “motor density”\(^3\) is calculated which in average shall amount 68,1%. (Kartauceva, 2008, 7-8)

Collected during the physical exercises anthropometric data allows physical children conditions analysis to be carried out. Nursing annual report 2008 in the Guravushka kindergarten contains children physical development analysis as it is shown in Table 7.

\(^3\) The amount of time children had active physical activity during the lesson
TABLE 7. Children physical development analysis

<table>
<thead>
<tr>
<th>Level of physical development</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of kids</td>
<td>%</td>
<td>Number of kids</td>
</tr>
<tr>
<td>Average</td>
<td>195</td>
<td>85.5</td>
<td>190</td>
</tr>
<tr>
<td>Above average</td>
<td>24</td>
<td>10.5</td>
<td>61</td>
</tr>
<tr>
<td>Below average</td>
<td>9</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Total:</td>
<td>228</td>
<td></td>
<td>258</td>
</tr>
</tbody>
</table>

The nurse in a kindergarten regularly performs health promotion educational work with children, parents and staff of the kindergarten in a form of discussions, sanitary bulletin distribution on the subjects listed in Appendix 6. In addition to these responsibilities there are arranged a number of social activities: “Day of health”, sport contest “Sun, Air and Water are our best friends”, “Father, Mother and me is a sport family”, lessons-games which promote healthy life style (Kartauceva, 2008, 14-16).

4.2 Aims and Purpose of the Study

The aim of this study is to evaluate the parents’ and caregivers’ opinions on health promotion for preschoolers in Ukraine.

The purpose is to raise awareness concerning the physical, nutritional and hygienic aspects in health promotion in the kindergarten and get an idea about collaboration between the staff and the parents.
Research questions include:

- What are the means of health promotion in Ukrainian kindergarten?
- What kind of collaboration exists between caregivers and parents?
- What is role of nurse in health promotion in Ukrainian kindergarten?

4.3 Design of the Research

To achieve the aim of this study an in-depth data analysis has to be performed. Therefore a qualitative research has to be chosen as appropriate for this study. According to May (2002, 225) the qualitative interviewing is a core method of qualitative research and it is referred to as a “conversation with a purpose”.

Prior to the interviewing the domain area was studied via the literature overview. Based on the acquired knowledge the structure for the interview was prepared and piloted. The pilot study was performed with one of caregivers working in the Guravushka kindergarten. The pilot brought up new questions and also showed that some of the questions have to be made clearer. As the researcher herself is a parent – no pilot study was carried out with the parents. Such, until that point of the research work the deductive research method was used in order to identify topics and prepare questions for the interview.

After that the data was collected via the interviews. The inductive content analysis method was applied to analyze it. The process of applying the method and reasoning for its selection is discussed in more detail in chapter 4.4.

Obtained results from the research are systemized and described in chapter 5 outlining opinion and experience of both parents and caregivers.

The Discussion chapter summarizes the obtained results: states strengths and limitations of the study.
4.3.1 Ethical Considerations

Meeting the diversity of research participants may create a number of questions and conflicts about responsibilities and values. Actually, various participants in the research process might have different interests, and the various models of ethical practice. The participants are those who help in generating the research data. Researcher can decide all aspects of methodology same as participants have a role in shaping the research questions and data collection methods. However, there are no clear ‘rules’ for deciding how to deal with ethical dilemmas when doing research but researchers do have a duty to be informed about areas of ethical conflict. There are key issues of values, responsibilities and ethics raised by conducting qualitative research on health (Green, 2004, 52).

The Declaration of Helsinki (WMA, 2000) sets out ethical principles for medical research for the World Medical Association. Researchers have a duty to protect the life, health, privacy and dignity of the human subject and to seek ethical review for all research protocols. But social research in many countries has been less regulated, with fewer formal mechanisms to vet the ethics of proposed studies. As ethics committees are more familiar with medical research such as drug trials, the criteria they apply may work less well for qualitative social research on health. (WMA, 2000)

In public health the ethical debate often takes the ‘four principles’ of Tom Beauchamp and Jim Childress (1983) as a starting point, which are rooted in health care ethics (Green, 2004, 53):

- Autonomy – respecting the rights of the individual
- Beneficence – doing good
- Non-maleficence – not doing harm
- Justice – equity.

Responsibilities of researchers could be summarized as three positions that can be adopted as starting points for ethical decisions. These positions contain different estimations about the relationship between research and organization: “neutral outsider”, “liberal relativist”, and “radical” discipline (Green, 2004, 54 – 55).
The position of the “neutral outsider” is chosen for this study. Thus this position is chosen for the purpose to strive for being disinterested in political and social values but to produce knowledge for own purpose. The implications of that knowledge, and the impacts it has on society, are not the proper concern of the researcher. In this study the fundamental participants are seen as the discipline, and the primary responsibility of the researcher is to contribute knowledge to the research questions for this study such that those do not affect any political and social values but concern about the personal experience and opinions of the health promoters and the parents according to the health promotion for preschoolers are and thus the position of the researcher is neutral (Green, 2004, 54 – 55).

In order to conform to ethical principles the application was submitted to the head of the kindergarten Guravushka to allow the research work to be accomplished in the kindergarten. The application is given in Appendix 7 in both Ukrainian and English languages. After the research data was analyzed the collected video and audio material was destructed.

4.3.2 Method of Data Collection

In this research the qualitative strategy of data collection is based on in-depth interviews. The interviews were hold in a verbal, face-to-face form encouraging the participants to explore their opinions. “If one wishes to know how people see their world and their lives the best way is to ask them. The reason for this being that the world and self has a meaning to each of us” (Horck, 2004). The interviews were held in June-July 2008 at the Gyravushka kindergarten (described in chapter 0) in Kherson city, Ukraine. The permission for the interview was given by the head of the kindergarten. The pilot interview provided with one of the physical educators two weeks before the main interview. This is done for the estimation of an approximate time needed for prospected interviews as well as piloting the research question for their validity and understandability. It is estimated that the interview may lasts for approximately two hours.

The criteria of this method include the caregivers and children’s parents related to the same kindergarten. The caregivers and the parents are chosen as the main respondents
due to their direct relationship with the health promotion for preschoolers. The participants are asked to discuss specific questions combined in three main themes in the subjects of physical education, nutrition and hygiene. The amount of respondents consists of seven kindergarten workers (procurement manager, methodologist, two nurses, two physical educators and music educator) and five parents of children aged four to five years.

The interviews for the staff and the parents are held on the separate days. The data collected by in-depth interviews, following open discussions on three specific themes and provided in groups of respondents. Each theme consists of secondary questions that help to direct the discussion. These questions are given in the Appendix 8. The group of caregivers is interviewed initially in one of the physical educator’s office. The caregivers are interviewed first for the purpose of getting the data and some ideas that would help to deepen the discussion with the parents. The interview with the parents conducted in children’s room in the same kindergarten. For better concentration on the process of the interview the dictaphone and camera are used to record the data.

4.3.3 Trustworthiness

The qualitative content analysis differs from the quantitative in its fundamental assumptions, research purposes, and inference processes, thus making the conventional ways and criteria unsuitable for judging its research results (Bradley, 1993). Trustworthiness in a qualitative research, as a subset of naturalistic research, has several different dimensions: dependability, transferability, confirmability and credibility (Lincoln & Guba, 42-43).

**Dependability** refers to the stability (reliability) of data over time and over conditions. The dependability question is: would the findings of an enquiry be repeated if it were replicated with the same (or similar) participants in the same (or similar) context? Credibility cannot be reached in the absence of dependability, in a similar way as validity cannot be reached in the absence of reliability. Dependability can be demonstrated by providing an accurate and detailed description of the research approach so that readers can trace decisions made during the research work (Polit & Beck, 2003, 539).
The researcher fills that in this study enough information is provided to allow judging of the research consistency and accuracy. The discussion chapter accurately describes strengths and limitations of the study.

**Transferability** refers to the generalizability of the data. In other words it is the extent to which the findings can be transferred or be applicable in other settings or groups. It is the researcher’s responsibility to provide sufficient description in the research report to enable report consumers to evaluate applicability of the research findings in other contexts. (Polit & Beck, 2003, 539). The setting of the research subject is similar in many countries. However, because of cultural and social differences between the countries the research results may not be transferrable in “as is” fashion. Therefore it was attempted to provide rich descriptions of all the stages of the research work in order to enable the reader to transfer and apply similar research in another setting.

**Confirmability** refers to “the extent to which the characteristics of the data, as posited by the researcher, can be confirmed by others who read or review the research results” (Bradley, 1993, 437). Whereas dependability is determined by checking the consistency of the study processes, the confirmability is determined by checking the internal correctness of the research methods and results. Confirmability is “concerned with establishing that the data represent the information the participants provided, and that the interpretations of those data are not figments of the inquirer’s imagination” (Polit & Beck, 2003, 539). The results of the study do generally correspond to the reporter’s opinion on the subject. Obviously, the language translation results may have been affected by the researcher’s experience. However, the risk of influence was diminished by two aspects such as one month of personal experience in the social context where the research has the ability to familiarize with the subject and presence of two groups of respondents which indirectly confirm each other. Therefore, the researcher fills that these are followed from the research data and not from the researcher’s bias.

**Credibility** refers to confidence in the truth of the data and interpretations of them. “Qualitative researchers must strive to establish confidence in the truth of the findings for the particular participants” (Polit & Beck, 2003, 539). To improve credibility of the qualitative content analysis, researchers not only need to design data collection
strategies that adequately solicit the representations, but also to design an obvious process for coding and drawing conclusions from the raw data.

The credibility in this study is strengthened by the fact that the researcher was working in the participant environment for a period of one month and therefore became familiar with the social context. The credibility would have been even more improved if the research results were presented to the respondents and their confirmation was received. However, because the study was done in Ukraine – such step was not possible to perform.

4.4 Data Analysis

When using content analysis, the aim is to build a model to describe viewpoints of participants on health promotion for preschoolers. The data gained from the interviews is transcribed while listening to the tape in order to get non-verbal data. Non-verbal data is summarized and re-transcribed. Findings are divided into topics and then organized into themes and categories.

The inductive content analysis method was used for handling the acquired data. The method allows deriving themes and constructs from the data without imposing a prior framework and without counting (Holloway, 1997, 35). It also helps the researcher to interpret interview responses in a way that does not compromise the original expression of the subject (Ingwersen & Järvelin, 2005, 97).

Most of the content analysis methods are generally built out of four steps. Initially the units of the analysis are decided upon. The units are elementary construct of the research material being analyzed and it depends on the source material and the desired result. Secondly, the categories are built into which the collected units will be placed. These are normally done based on theoretical research prior to the collecting data or based on the research material if theory is not available. Finally, the analysis of data takes place when the research material is analyzed and collected units are classified into categories (Wilson, 1985, 408-409).
This study deals with two parties of preschool education: parents and caregivers. Therefore the collected data describes two different viewpoints onto the same matter. Important is to note that the understanding of the subject is very different by these two groups of people. Whereas all of the caregivers have undergone certain degree of education in the domain of research – parents do not generally have common understanding of health promotion practices. Therefore, most importantly, terminology understanding is very different by caregivers and parents. For example, the “physical education” term is understood by majority of the parents as “physical activities” which is very different from its meaning in the health promotion domain area. Therefore the “language” of data analysis has to be adapted to accommodate such difference and minimize the impact on the results. Notable is that this method of content analysis also supports overcoming of this challenge because by using that method the knowledge categories, themes and units “emerges out of data”, hence are not preset (Waltz et al., 2004, 242). In these circumstances the correctness of the analysis results are mostly dependent on the interviewer’s ability to speak in the “respondent’s language” and analyst’s ability to understand and “commonize” that language.

Step 1 of the method is the stage when units of analysis are decided upon. Generally these refer to the basic unit of text to be classified during the content analysis. However, because the analysis is done in English and research data is collected in the “caregiver’s Ukrainian” and “parents’ Ukrainian” it was decided to abstract from the language and set the unit to be an element of the health promotion subject such as “duration of physical activities”, “balanced diet” and “regimen”.

5 RESULTS OF THE RESEARCH

The viewpoints of the caregivers as well as the viewpoints of the parents are classified in three categories: physical activities, nutrition, and hygiene. Aspects of each category are illustrated at FIGURE 2.

![FIGURE 2. Coding scheme]

5.1 Physical Activities

5.1.1 Active Child

Most of the respondents said that the physical well-being of preschoolers is when children are active and able to perform exercises in accordance with the norms. Caregivers noticed that there is a voluntary activity, which becomes apparent when the child moves intentionally and purposive activity, which becomes apparent in the process of physical education:

"We think, the child is physically active and healthy when bought voluntary and purposive activities are ok."

Some of the parents’ respondents said:
“The child seems to be active when he or she is able to walk for a longer distance, to run and to pull oneself up.”

5.1.2 Main Activities

When discussing questions about methodologies and methods used in physical education, the majority of caregivers said:

“The main physical activities provided for children in the kindergarten are daily exercises, physical pauses during study lessons, physical exercises outside, hardening of the child organism after sleep and open classrooms on sports and dancing.”

Parents said that main activities are race walking, running, jumping, probably discus throwing, climbing etc. These answers suggest that the caregivers define the main activities as a complex exercising while parents divide main activities to something very single. Only one of the respondents from the parents group said:

“The main activities for the child are games and it is good when children play together because it gives them more motivation to move and develop their skills in a variety of ways.”

5.1.3 Duration

The duration of physical activities are easy to describe for professionals as they do their work in accordance with the methodologies and have better experience and knowledge than the parents do. Actually, there was not any specific question about the duration of the physical activities planned before the interviews. But because it came up so many times during the interviews in both groups that it was decided to include an extra aspect in this study. Generally speaking, it is discovered that there is a clash in view points of the caregivers and the parents about the duration of physical activities provided in the Gyravushka kindergarten. The caregivers think that having many physical activities daily is very useful for the child to be physically healthy. The activities they mentioned include:
- Morning gymnastics provided before breakfast
- Day physical exercises provided every Monday and Wednesday outside and every Tuesdays, Thursday and Friday in a sports hall
- Physical pauses during any study lessons
- Conditioning to the cold after sleep in Summer time
- Hygienic gymnastics - special exercising for improving the blood circulation, muscles stimulation and respiratory gymnastics provided for better awakening after sleep
- Dancing while singing two times a week
- Rhythmic provided ones a week
- Open class rooms (sports and dancing)

The caregivers said:

“We provide all these activities in accordance with the educational plan. We think that the duration of them is quite effective because we can see from the annual reports that the amount of children with the “above average” level of physical development increases.”

The physical development analysis done by the nurse of the kindergarten and it presented in Chapter 3.

“So, we belief that the duration of the physical activities we have in our kindergarten is very effective and has not to be changed.”

The respondents from the parents group have own thoughts about this aspect and many of them argued:

“In our point of view, the duration of physical exercises becomes too heavy to carry out for our children.”

One of the participants asked:
“I do not understand why children who just came to the kindergarten in the morning and have not eaten yet but have to participate in the mornings gymnastics, as they have already walked outside and probably hungry?”

Another added:

“Yes! The child might have not enough of energy for morning exercises.”

However, most of the parents noticed that the duration of physical activities is good in the kindergarten but it could be so that their children spent so much of energy day time that are tired to participate in other sport activities afternoon.

5.1.4 Best Method

This aspect came from the answers on the questions: “What methodologies of physical education are familiar to you?” and “What methods of physical education are most useful?” In this aspect all respondents have stated that there is no best method in physical education because many of different methods are very effective and many methodologies are used for different sites of physical health promotion. All agreed that physical education seem to be rather complex including variety of different methods combined in the most efficient way. Examples of physical exercises are given in Appendix 5. Within these combinations methodologies support each other. One of the care givers is methodologist, she said:

“In my point of view, the best method of physical education for children is learning by playing but I would place the conditioning of child to the cold on the first place when listing all methods familiar to me.”

The nurse has added:

“Our kindergarten is classified as a day care setting for children with general health status meaning that our children have no serious diseases and are mainly belonging to the primary or preparatory health groups.”
Thus we provide the conditioning of child to the cold almost for all children in our setting.”

This statement initiated a new discussion on conditioning of child to the cold as one of main methods used for physical education in the kindergarten.

However, every one from the caregivers group supported the opinion of the methodologist. Some of them said:

“Conditioning of child to the cold is good for prevention of flu diseases, muscle stimulation, strengthening of the children health status in general.”

The nurse added next:

“I like when children walk barefooted because it is also very good for the prevention of flat-footedness.”

When discussing the same aspect with the parents, most of them said that the best method is learning by playing outside. Same as caregivers, they mentioned conditioning of child to cold is good method supporting the children physical status. The main argument provided:

“Strong and healthy child is more physically active and more tolerant in many hard conditions, therefore the conditioning of child to cold is needed to be provided for preschoolers.”

However, one of the respondents concluded:

“Soon, our children go to school they would probably never use this method again. Therefore, it is a great possibility for our little pupils and for us to learn how to strengthen children health by using this method. Also it is good to receive knowledge from the qualified staff of the kindergarten.”
5.1.5 Child Centered Approach

In physical education, the physical educator, the nurse, the teacher and even the musical educator have responsibility to measure the objective and subjective reactions of the child on the physical exercising. For example, one of respondents explained:

“The objective reaction of the child on physical exercises may include following: tiredness, hyper metamorphosis (disturbances of the concentration), drop of the interest, visible dyspnea and hyperhidrosis caused by health problems. The subjective reaction is tiredness of the child when the exercise load is bigger than his/her physical capacity.”

The nurse added:

“Exactly, that is why I have to measure the pulse, the breath rate and some times the blood pressure of each child over the exercise period.”

“Every child has own medical card made by the doctor, from this card we can read about his or her physical and psychological health status. This helps us to know what physical exercises the child can and can not to perform.”

The parent views about child centered approach are:

“My child has serious health problems and belongs to group health number tree. You think he has an individual approach? Most of times he sits while others do exercises.”

“Why physical educator or the nurses do not create a special program for children with serious health problems?”

“No! When the child will be separated from own group of children thereby they may realize that my child is sick and may not count him as normal person”
“It is not necessary to separate your child from others but to teach him some light exercises that he can perform at the same time with healthy children.”

“This is not a physical educator’s fault. You know, we have only two physical educators for about 250 children. You should discuss with caregivers and they will do something about your case.”

Most of the respondents from this group suggested that to organize thematic lessons on physical education e.g. “physical active family” or “Mom, Dad and Me are Physically Strong” would promote the knowledge of the parents about child developmental characteristics in accordance with age, promote different methods of approaching to little girls and boys, to teach about specifics of physical exercising, basic measurements of the child health and many others. One of the respondents said:

“Many of us are not able to show even basic exercises to our child. What example we are for our children?”

Also, it would be good to point out that the physical educator of this kindergarten says:

“I have too small working day, only few hours that is not possible for me to cooperate well with the families.”

5.1.6 Collaboration

The questions included in discussion on Collaboration were:

- How the parents and caregivers cooperate in respect of physical education and counseling?
- What issues do usually come up while parents to caregiver cooperation?
- How the improvement work is carried out to make physical education better?
- How the team working is organized within the kindergarten to assure single view of the physical education?
The answers given by the respondents provided this study with some information on how caregivers and parents cooperate in respect of physical education. The methodologist said:

“In accordance with Malyatko program, the kindergarten performs group discussions and general meetings with the parents where they discuss about all existing problems and provide information on physical education. Also, there is an “open day” organized for parents to come and to see how the work is done in the kindergarten. There are sport holidays for children and their parents which are carried out once in a quarter. This makes it possible for the parents to evaluate children development and progress in learning of new things.”

The sport holidays include not only presentations on how children exercise but also performed with many games, competitions and accompanied by music. Also parents are very welcome to participate in some competitions. From the staff interview:

“We think we could achieve more effective collaboration in future but it is not easy to cooperate with the parents due to their own timetable.”

“We perform team works where every participant of this team plays a special role. For example, musician together with methodologist invent a scenario for every new event. The head of the kindergarten approves the scenario or gives some recommendations on it. The manager provides with all necessary equipment, the physical educator in cooperation with children teacher, musician and the nurse plan together how they will prepare the children for this event. Parents are not usually involved in the preparation process but are always welcome.”

5.1.7 Nursing Responsibility

This study is provided for the Medical Institution; therefore it would be a good thing to mention about nursing duties in physical education in a Ukrainian kindergarten. The
nursing responsibilities are investigated. The nurse listed her responsibility as following:

- Analysis of child physical development
- Work in collaboration with physical educators and pediatrician
- Being present at all physical education events
- To Perform anthropometry ones in quarter
- To inspect the conditioning of the child to the cold.

5.2 Hygiene

5.2.1 Cleanness

The staff of the kindergarten provided us with the following information on cleanness. Cleanliness of the premises in the kindergarten is given a great value. Cleaning is always made in a wet way with open windows. Tables are wiped after each meal. Floors, playpen surfaces and slides are washed twice a day. Walls, doors and window frames are washed at least once a month. Curtains, lamps and other not daily used equipment are washed every quarter.

Another important factor of the cleanness is air change. Rooms in the kindergarten are ventilated in different ways. Group rooms may be ventilated when children are in the room on discretion of educators. Whereas cross-ventilation of all rooms is performed by the cleaner 2-3 times a day before the arrival of children.

Physical educator said:

“Sanitation control in gym is important for physical education. For example, we observe physiologic reaction of children. When children become very sweat then we check room temperature which has to be in a range from 16º to 18º C in gym and not less than 20ºC in other premises. When we see that the windows are dump than it is sign for promoting room ventilation.”
“All cleaning equipments are preserved in purity and kept in separate places. For example, we separate cleaning stuff for toilet from cleaning stuff for children room and kitchen.”

“Every group has sanitary notebook. My responsibility is sanitation control and inspection in every group by observing the situation in every place like, toilet, play room, sleeping room, eating area and gym. I note all negative sites of observations in sanitary notebook and discuss them with the group teacher and cleaners.”

“Two times in a month there is a scheduled inspection of cleanliness in the Kindergarten implemented by the sanitary inspectors but unscheduled audit may occur on any given point of time.”

Parents’ answers include:

“We think that cleanliness and hygiene are main points in health promotion.”

“We do not know about norms in the kindergarten but we see that our children sleep in clean beds, eat from clean dishes, and play on clean playgrounds.”

“We have very strict instructions provided by the nurse on sanitation. For example, it is not allowed to bring food, toys and to place them into the child locker. We must put child shoes in a plastic bag.”

“Plastic bag is not a good idea because bacteria may grow in closed bag as it may become very wet in hot weather. And the smell of shoe is ….”

“Yes! The sanitary norms are too strict. Probably these are good for prevention of diseases but there is doubts about that sanitary norm promote the child health.”
“Generally speaking, we are satisfied with the cleanness in the
“Gyravuska” because we have not seen any health problems happened to
our children due sanitary norms in this kindergarten.”

5.2.2 Personal Hygiene

The child needs hygienic skills not only for strengthening of health but also for the
formation of behavioral culture and esthetic skills. The respondents from the caregivers
group defined hygiene as:

“Meaning of personal hygiene includes care of the body, wearing and
shoes, bed, daily regimen as well as hygiene of sleeping, resting and
eating.”

“Children have to be educated in such way that the hygiene procedures will
implement as a habit for them.”

The interview clarified that every child is inspected for personal hygiene. First step is
thermometry (every day), then there is inspection for pediculosis (every ten days). Other
aspects such as condition of the skin, nails and hears are inspected daily. Children of
age 3- 5 already learned how to wash their hands and have basic skills in personal
hygiene but their skills need to be supervised and developed all the time. The nurse
provides thematic lectures on personal hygiene “What are bacteria?”, “What we need
for being clean?” In cooperation with the teacher special games for learning hygiene are
performed regularly, for example “How do I brush my teeth!” “How do I wash my
hands?” “When I wash my hands?”

Also, nutrition and hygiene are in much closed connection. The nurse mentioned:

“We inspect every child when they wash their hands before meal.”

“Every child has own towel and we see when the towel become dirty after
hand wash that means that the child has not washed hands properly and we
ask him or her to wash it again.”
The parents views on personal hygiene include: hand washing, teeth brushing, clean closing and motivation for self care, personal skills, and esthetic development.

“Child has to know that eating of foreign substances like sand from the playgrounds may cause health problems.”

5.2.3 Factors Influencing Hygiene

The caregivers have brought up few factors to keep good hygiene during the interviews.

On motivation of children in regards of own hygiene they said:

“One particular example of such motivation is a tail with hygienic context. Often we carry out games with the soap and water teaching children to be clean and developing washing skills.”

About hygiene of individuals in the children environment including both kindergarten and home (caregivers and parents) it was said:

“Children are great repeaters. They copy behavior of people in authority. Therefore it is important to use study be example practice to achieve desired goal including good hygiene habits.”

Ergonomics (right size) of sanitaryware is suitable for children.

Yet another factor of hygiene is change of closing. The child has to be in clean closing and change it when it is dirty. Especially after physical activities or play outside. There must be extra closing for each child provided by the parents in the kindergarten.

The parents said that the most important thing in hygiene is that the child has to grow in clean environment and thus has not idea to switch to dirty places but to learn how to keep hygiene and clearness in everything. It does not mean that children should not touch the ground or animals but it means that they should know when to wash their hands.
“Children should not only know but to understand why they need to wash their hands, stay clean outside, do not eat unwashed fruits, etc.”

5.2.4 Nursing Responsibility

In discussion about hygiene the nurse in Gyravyshka kindergarten listed the following nursing responsibilities:
- Control of staff medical examinations (every worker of the kindergarten has to have medical examinations provided twice in a year)
- Daily inspection of cleanliness in the many areas of the kindergarten
- Inspection of child personal hygiene and education on hygiene at least twice a week
- To be aware of current epidemiologic aspects
- Inspection of the kitchen premises
- Collaboration with sanitary inspectors
- Professional development in the area of hygiene

5.3 Nutrition

5.3.1 Balanced Diet

Physical educated of the kindergarten said:

“Nutrition is the key to good health of every human being. Children are no exception. Feeding of children is considered to be properly organized if it contains enough calories and is a diverse set of products and the ways to cook them. It is properly organized if a balanced composition of nutrients is rationally distributed throughout the day. Balanced nutrition and physical activity improve children's growth, mood, quality of sleep and learning ability.”

The parents pointed out:
"It is difficult for us to say about balanced diet because. The amount of nutrients that children receive in the kindergarten might be different from the amount of nutrients eaten at home."

The preliminary menu of the kindergarten is made for 10 days but daily menu is posted up every morning. The menu is classified based on time of year such as summer-autumn, winter and spring. The menu is developed by the nurse in accordance with the below-mentioned regulations. Generally, the menu follows such recommendation: in the first half of the day foods rich in proteins is more appropriate, in the second - in carbohydrates, because it is easier to digest, told the nurse.

When asked about the balance between quality and quantity of food fits into the diet the nurse said:

"We do not use any Food Guide Pyramids or Eatwell Plate system. We only count the calorie intake and count the food in milligrams and milliliters."

"We have detected that the intake of carbohydrates is higher during the winter time due to seasonal diet in our kindergarten. Unfortunately, we can not do a lot about this problem but we try to provide children with more fruits and vegetables during spring, summer and autumn."

The procurement manager added:

"During the winter time we provide C vitaminization of food."

The daily diet of the child must contain vegetables (200 grams per day for young children, and 250 grams for preschoolers), butter, meat, cereals. Fish, cheese, eggs may be included in the menu 2-3 times a week. This list also contains herring, and sausages. However, these are cooked just once every 10 days. Strictly prohibited for use in kindergarten are semi-prepared foods, unbolted milk, spices, mushrooms, meat of waterfowl, spicy sauces, mayonnaise, smoked food, canned vegetables.
Most of the parents mentioned that they visited the kitchen they have seen the list of the daily diet and have recognized that there is no such thing as "fried" - all food is prepared using an industrial oven using a special technology.

“Ok there is a good technology of food preparation but what about gustatory senses?”

The caregivers answer this question as:

“The gustatory senses are developed together with habits development.”

5.3.2 Habits Development

Caregivers’ points of view on habits development are:

“One of the good aspects in habit development is the team. Eating in the team provides more pleasure and fun for children. Thus, the child starts to improve eating habits and skills in the kindergarten better than at home. Another aspect includes methods like playing moments for stimulation of the appetite.”

“There is a rule in our kindergarten “the plait has to be clean!” Also we have some tips and hints for our children. For example, if the child does not eat well I give him the minimal portion first and then increase the amount of food little by little.”

“Training of the discipline provided through conversation to the child. It is advisable to collect the group together and to say that we eat in a team therefore it would be good for all of us to keep silent and do not disturb each other. We are all equal and eat the same food therefore playing and joking is not permitted at this moment.”

Indeed, it is found out from the parents’ interviews that the majority of children who has not eaten properly at home started to eat better in the kindergarten.
“It is not a secret that children eat better in a team of peers”

“...My son started to eat baked pudding and eggs but he did not eat these previously at home.”

5.3.3 Regimen

When discussed about main roles helping to prevent diseases the most considered issues by both responded groups are balanced died (described in Chapter 5.3.1) and regimen.

“The kindergarten is an enterprise with regimen in everything. This means that the children have got accustomed to the regimen of nutrition in the kindergarten as well. That also affects how children behave at home.”

“The goal of the regimen is strengthening of children health and improvement of the physical activity same as their normal growth and development.”

5.3.4 Parents’ Awareness

“We would like to have more detailed information on what raw materials are used in food preparation and food processing in the form of brochures.”

Someone added: “TV and magazines are main resources for us to learn about healthy diet.”

“It would be much better if we would have a possibility to see menu for whole week and not only for today.” “Aha! We never know what our children eat tomorrow morning therefore some of us have to provide breakfast for child at home.”

“We think that the nurse has too many responsibilities in the kindergarten therefore has not enough time to discuss properly with the parents about nutritional aspects.”
Actually, all respondents from parents group have concluded that in their points of view the responsibility on nutrition better to be diminished for the nurse while increased for cooker.

5.3.5 Nursing Responsibility

The nurse stated that:

“The nurse of the kindergarten plays a major role in the child nutrition. The nurse provides guidance to the parents about the child diet, conducts quality control of products, compliance with the technology of cooking.”
6 DISCUSSION

This study has covered main aspects of physical activities, hygiene and nutrition for preschoolers. The results of this research showed that the viewpoints of the caregivers and the parents on physical activities, nutrition and hygiene are quite similar but some contradictions are however present. The respondents from both caregivers and parents groups are familiar with basic principles of health promotion concept for preschoolers. Caregivers are aware of the importance of health promotion in the area of nutrition, physical education and hygiene as well as in growth and development process of children. Parents are interested in their children health and education. Both groups reported many positive attitudes towards child health promotion practices as well as few negative views of some aspects of all discussed areas.

6.1 Physical Education

The research results indicate that children of Guravushka kindergarten improve their health via physical exercises, morning gymnastics, dancing, playing outside and having elective sport activities. In this kindergarten primary attention is given to conditioning of child to the cold. All of the above belong to the methodics used by the kindergarten to promote children health. Also this study described in details reasons and duration for these activities being performed.

Considering the responses from the interview on physical activities, it becomes evident that there is a gap in opinions of caregivers and parents according the amount of physical trainings provided for preschoolers. Parents think that there are too many daily physical activities that may lead to children tiredness and reduce child motivation to participate in the evening sports. Caregivers’ point of view that the duration of physical activities provided in the kindergarten is adequate and promotes children health well. According to the current literature, physical training is one of the best ways to prevent many health problems such as diabetes mellitus, cardiovascular diseases, and some cancer. It is found that even additional hour of physical education in kindergarten reduces the risk of overweight among both girls and boys (Datar & Strum, 2004, 1-12). However, the kindergarten annual report (Kartauceva, 2007) shows that there are no
problems with children health due to duration aspect in physical education. Finnish research taken by Sääkslahti (2005) also states that increasing in physical activity promotes child health and motor skills in a better way. Comparing the theoretical base with the findings from this research, it is possible to conclude that children have to be voluntary as well as purposefully active for being healthy.

It is difficult to say what method of physical education is the best for the child to exercise. Both caregivers and parents mentioned that the combinations of different methods will improve effect on the health of children. Also, Oliver et al. (2007) states that many researches were undertaken to determine the best method of measuring children physical activity but still there is a need for further researches to be done in this area. However, the results of this study states that conditioning child to the cold is one of the most important methods and it must be included in any combination of physical education. The effectiveness of used methods and impact on health of children is regularly measured in this kindergarten using:

- Anthropometric data for child growth development
- Pulse, blood pressure and breath rate for physical exercise load
- BMI for physiological changes and prevention of health problems
- Regular health examinations by the doctor.

The caregivers note that each child has to be treated individually in accordance with the age, health status and personal development of the child. That is why it children in Guravushka are divided into three different categories. Moreover, it is necessary to concern about psychological aspects and child own dynamics in order to prevent health problems and psychological disturbances. The accuracy of arrangement of physical education is assured by the child centered approach.

The results indicated that there is common problem in collaboration aspect. The parents think that there is not enough access to learn about physical education methods and it would be good to have elective study provided by the physical educator and the nurse but not just by a general caregiver. Kindergarten staff and nurses in particular are overloaded with other daily work they have to do.
However, the cooperation between the kindergarten workers internally was found to be well organized and working properly. This becomes evident while organizing kindergarten events. In order to make such an event interesting for children and parents there are considered multiple aspects and thus many different roles are required to organize such event. For example, sport event is prepared by musician, teachers, nurse, head of the kindergarten and physical educator.

6.2 Hygiene

Finding of this study have shown that cleanliness of the kindergarten premises and personal hygiene is done in accordance with sanitation regulations. Such both caregivers and parents are satisfied with hygiene educational programs for their pupils. Every child is inspected for personal hygiene using appropriate methods described by caregivers in chapter 5.2.2.

It is found out that in spite of hygienic programs, children are always willing to find a way to be at risk of getting bacteria or virus even if they learn how to follow rules of hygiene. Caregivers mentioned that there are many factors like copying from another child the way of playing and keeping secret from the parents and caregivers. Thus, it becomes evident for both caregivers and the parents that the education on hygiene is very sensitive thing that takes time and has to be taken care as a common effort of the society.

6.3 Nutrition

Kindergartens of Ukraine aim to keep a balanced diet. The interviews have shown that staff and parents are aware that the balanced diet and nutrition regimen are very important for children of preschool age. Also, the nutrition should be well tolerated with physical load in order to supply children organism with all the required nutrients.

It was found out that daily diet in this kindergarten is split into breakfast 25%, lunch 50% and afternoon snack 25%. Portion scale is based on the age of the child. However it is found out that the staff is not aware of Food Guide Pyramid or Eatwell Plate
System but only seasonal menu which may cause inadequate protein intake and lack of vitamins at winter time. Therefore they try to include more vegetables and fruits during the summer time as well as they use C vitaminization at winter time.

It is found out that even the menu is made 10 days ahead, only current day menu is placed onto the billboard. This is considered as unusable in parents’ points of view.

Also, teachers use creativity to teach children to develop their eating habits. For example, they give them small portions first and then increase the amount of food little by little. They educate children how to eat in a team and how to serve meal hygienically correct. This is appreciated by the parents who notice that children start to eat better in the kindergarten than at home. However, parents have still indicated lack of information about nutrition in the kindergarten. Discussion of nutrition aspect with the respondents also has drawn a conclusion that the responsibility of the nutrition practices is strongly felt by parents and the nurse of the “Gyravushka” kindergarten. Therefore, staff training, clear policies based on nutritional guidelines and clear communication of these policies to parents would help to reduce misunderstanding.

6.4 Nursing Responsibilities

This study has found out that the nurse of a Ukrainian kindergarten plays a key role in physical education, hygiene and nutrition aspects of health promotion. For example, in physical education area the nurse analyses physical development of child, works in collaboration with physical educator, performs monitoring of anthropometric data and general health status. Also, the nurse is present in all physical education lessons in the kindergarten. In the area of hygiene the nurse is responsible for all hygienic aspects of the kindergarten operation (see chapter 5.2.4). In the area of nutrition the nurse conducts quality control of used products, compliance with the technology of cooking.

The results showed that the nurse considers her having too many duties to perform. Therefore she does not have enough time for collaboration with parents. This collates with opinion of parent who would also like to have possibility to communicate with the nurse.
6.5 Summary and Future Research Ideas

There are many daily activities which are followed by the kindergarten staff to promote health of children. Also, areas selected for study described in the literature as having the impact on the health of preschool age children; physical activity, nutrition and hygiene. All three areas, however, could be improved. Professionals need to consider strategies for further improvement of nutrition aspects. Findings of this study suggest that child health professionals and early childhood educators can assist parents through education focusing on the benefits of daily health practices for present and future health of children with ideas for effective collaboration and timesaving practices. Educators can recommend parents valid and accurate child health information resources such as magazines, books or videos.

International collaboration with other countries and international exchange of the experience may solve many problems and improve many aspects in preschool child care. It might be useful for Ukrainian caregivers to know that for example in Finland, day-care staff has always co-operated with parents. The parents are those who mainly define the values and principles for their child’s care and instruction. These issues include the language to be spoken with the child, religious and ethical education, and arrangements for meals and the rest. The child individual plan forms the basis for assessment of child’s individual development. This plan is discussed during and at the end of each study year. However, day-care centers have parents’ councils to discuss or decide the objectives and principles of the day-care center’s activities (Grierson, 2000, 51-54). The information about weekly activities and nutrition in forms of hand outs or e-mail is provided for the parents.

Important finding of the research is the very positive feedback about the “Malyatko” program and physical development of preschoolers provided by all respondents. In fact, as confirmed by the research findings, physical education for preschoolers is given a high priority and organized in a rather effective way. Such, according to the Ukrainian Law on Preschool Education, the main attention in the concept of preschool education is given to the physical education as a part of child health promotion (Act 01.01.2009/2638-III). Such focus of preschool education is very different to e.g. focus in Finnish kindergarten system where the main objective of early childhood education
includes the promotion of child’s social, intellectual and emotional development. (Day care Act 15.11.1983/117/1983).

This study has conducted an in-depth analysis of three aspects of health promotion in Ukrainian kindergartens. An extended overview of health promotion theoretic grounds is given and their connections with the research findings were discussed. The researcher has also identified few more academically interesting issues of health promotion such as:

- This research also provides a good foundation to accomplish an international research which could potentially bring new ideas and recommendations. For example by comparing two national approaches for health promotion in preschool education
- Investigate how cultural and social aspects affect children health and methods of health promotion.

However, the scope of this study does not allow to research these aspects in detail. The researcher trusts that the results given in this thesis work will give an idea for other researchers as well as provide them with relevant information about physical education, hygiene and nutrition in Ukrainian kindergartens.
REFERENCES

Act 01.01.2009/2628-III. Preschool Education Act No2628-III.


Education of Ukraine. 25.06.1991. Ukrainian Legislation .

Food and Health in Europe.. 2003. Copenhagen DNK: WHO Regional Office for Europe.


Appendix 1. Prevalence of Excess Body Weight

## CONCLUSION

**Full name of the child**

**Date of birth:**

**Age:**

**Address:**

**Childcare institution:**

### Significant chronic deviations in the health of the child

<table>
<thead>
<tr>
<th>Record number</th>
<th>Description of pathology</th>
<th>Record number</th>
<th>Description of pathology</th>
<th>Record number</th>
<th>Description of pathology</th>
<th>Summary</th>
</tr>
</thead>
</table>

**Serious variations in the health of the child (lying in the zone of risk)**

**Anamnesis based on the questionnaire**

**Symptoms based on medical examination**

<table>
<thead>
<tr>
<th>Anthropometry</th>
<th>Function</th>
<th>Blood test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight, kg</td>
<td>BPsys, mmHg</td>
<td>Hemoglobin, g/l</td>
</tr>
<tr>
<td>Height, cm</td>
<td>BPdiag, mmHg</td>
<td>Leukocytes, 10^9/l</td>
</tr>
<tr>
<td>Chest, cm</td>
<td>TLC, ml</td>
<td>ESR, mm/hour</td>
</tr>
<tr>
<td>Right hand strength, kilogram-force</td>
<td>Visual acuity (left)</td>
<td></td>
</tr>
<tr>
<td>Left hand strength, kilogram-force</td>
<td>Visual acuity (right)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ECG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart rate, 1/min</td>
</tr>
<tr>
<td>VPB, 1/min</td>
</tr>
<tr>
<td>aP</td>
</tr>
<tr>
<td>aP, MB</td>
</tr>
</tbody>
</table>

**Results of the examinations**

The examination has not diagnosed any deceases

---

**Doctor**

(First name, second name) (Signature)
Appendix 3. Conditioning of Child to the Cold

Every day there is
awakening gymnastics:

Children pass the “road
of life”: 
In the bathroom children are sponged using a wet mitten. Contrasting splash of feet’s also happens here. One shower has hot water and second one has cold water. Every 2-3 days the water temperature decreases or increases. Also, children receive air shower right in the room using a regular fan, gradually reducing the distance to the fan and increasing the duration of the procedure.

Throat is gargled using cool water with added sea salt.

Walking on wet mops.
These are the parts of promotion of healthy lifestyle to children and their parents in the “Guravushka” kindergarten. The health benefits of air baths and walking outside make no doubt among “Guravushka” staff. In summer, walks last between 2.5 - 3 hours per day. At winter time it is 1.5 - 2 hours depending on weather.
Appendix 4. Checking of Basic Moving Skills

The procedure of checking of basic moving skills by children is done as (Gorunova, 1997, 18-19):

- Walking. Measure the speed of walking in seconds at distance of 10 meters.
- Running. Measure the speed of running in seconds at distance of 10 meters.
- Long standing jump. A cord is placed into the ground. The child stands in such a way that his/her toes touch the cord. The child is asked to jump as long as possible. Measured is distance between the cord and place of touchdown by the heels. The longest distance is counted out of 2-3 attempts.
- High running jump. A cord is placed onto a height of 30-35cm. The highest jump is counted for each child rising the height by 5cm each time.
- Throwing. A cord is placed into the ground. The child stands in such a way that his/her toes touch the cord. The child is asked to throw a sand packet (150-200gramm) is thrown by left and right hands. Counted is distance to the touchdown of the packet to the ground.
Appendix 5. Basic Physical Exercise Methodics

Orienteering Exercises

That type of exercises teaches children to understand simple commands and requests. It also teaches them to understand orienteering (Gerasimova, 2007).

Step onto the bench.  
Step into the circle.  
Step over the box.  
Step over the cord.
Walk in a circle (the child places feet onto the cord).

Jump over the stick.

Walk on the cord.

Jump over the circle.

Jump from one circle into another.

Jump back.
Jump using one leg.
Jump front.
Jump front and back.
Exercises for Hands and Shoulder Girdle

These exercises aim to strengthen hands and shoulder girdle (Gerasimova, 2007).

Move hands straight ahead, to the sides, up, to the back.

Move elbows in a circle. Put hands behind the head, move them to the sides and down.

Make a fist. Unclasp hands.

Revolve hands while moving them to the sides and back.

Body Exercises

This type of exercises load body and skeletal muscles (Gerasimova, 2007).
Turn body from one side to another. Hands on waist and then moved to the sides.

Bend forward, touch toes with fingers.

Bend to the sides, hands on waist.

Turn from belly to back keeping an item in the outstretched hands.

Tuck Exercises

Tuck exercises are started to practice in three basic positions (Kacherov & Arefiev, 2003):
Sitting position  Lying position  Squat position

From the lying tuck position roll back until back of the head riches the floor. Return to the original position. Same exercise may be executed from the sitting tuck position.

Similar exercise is done from the sitting position. The body is rolled over the back to the same position.
Dancing Exercises

Dancing exercises help children to develop coordination and timing (Kacherov & Arefiev, 2003).

Basic step.

Bouncing step.

Step touch.

Step touch with tapping.
Coordination of Hand Movements Exercises

While performing these exercises the child inlays figures using small sticks (like matches) using an example. Alternatively child may create shapes using own imagination (Gerasimova, 2007).
Appendix 6. Nursing Responsibilities in a Kindergarten

The nurse in a kindergarten regularly performs health promotion educational work with children, parents and staff of the kindergarten in a form of discussions, sanitary bulletin distribution on the following subjects:

- prevention of flu diseases
- personal hygiene of children and staff of a preschool institution
- prevention of infectious diseases
- prevention of respiratory infections
- prevention of helminthic invasions
- prevention of acute gastrointestinal infections
- prevention of herbal and mushroom poisoning
- prevention of pediculosis
- prevention of traumatism
- prevention of tuberculosis
- prevention of venereal diseases and AIDS
- healthy life style
- bad habits and their effect on the health
- benefits of health hardening
- benefits of vaccination
- principles of personal and social safety
- importance of balanced nutrition
- hygiene and sanitary regime of a preschool institutions
Appendix 7. Application for Research Accomplishment

In English

Mrs. Osipova Neonila
Head of Kherson kindergarten No7

Application

Please allow me to conduct research in your kindergarten as a preparation for my thesis work in the subject of "Health Promotion Aspect Of The Ukrainian Preschool Education System. Physical Education, Nutrition and Hygiene as Means of Health Promotion."

The study includes interviews with the staff, parents, acquaintance with the relevant documentation. Also, I would be grateful if you would allow me to capture photo and video of the kindergarten facilities, classes for children and other activities relevant to the topic of my thesis work.

Artemenko Maryna

Student of Jyväskylä University of Applied Science
Заява

Прошу дозволити мені провести дослідження у вашому дитячому садку в зв'язку з підготовкою моєї дипломної роботи на тему "Зміцнення здоров'я як аспект системи дошкільної освіти України. Фізичного виховання, харчування та гігієни, як засіб зміцнення здоров'я". Дослідження включає в себе інтерв'ю з працівниками садка, батьками ознайомлення з відповідною документацією. Також я буду вдячна, якщо Ви дозволите мені фото та відеозйомку приміщень занять з дітьми та інших подій що мають відношення до теми моєго диплому.

Артеменко Маріна
Appendix 8. Interview Questionnaire

Theme № 1 Physical Education

1. What is the meaning of physical well-being of a preschool child?
2. What methodologies of physical education are familiar to you?
3. What methods of physical education are most useful, in your point of view? Why?
4. What are criteria you use for choosing the methodology?
5. How the methodologies are adopted for children of different health status?
6. What are the measures for identifying child’s physical abilities and development?
7. How the parents and caregivers cooperate in respect of physical education and counseling?
8. What issues do usually come up while parents to caregiver cooperation?
9. How the improvement work is carried out to make physical education better?
10. How the team working is organized within the kindergarten to assure single view of the physical education?

Theme № 2 Healthy Diet

1. What is Nutrition in Health Promotion?
2. What does well–balanced diet mean for preschoolers? How balance between quality and quantity of food fits into the diet?
3. What are possible effects of a poor diet on the children’s health?
4. How physical activities affect choice of nutrition program?
5. What role Kindergarten plays in the formation of eating habits?
6. Who must take responsibility for planning healthy diet for children in the Kindergarten?
7. What is collaboration with parents / care providers in regards of diet questions?
8. What are the main rules helping to prevent diseases?
9. What are the most common mistakes in children’s diet?
Theme № 3 Hygiene

1. What is role of Hygiene in Health Promotion?
2. What is the controlling procedure to assure that hygiene norms are followed within the Kindergarten?
3. How hygiene promotes the strengthening of child’s health, physical and spiritual development?
4. How the practical hygiene skills are imparted to the children?
5. How nutrition and regimen is connected with hygiene?
6. What hygiene methodology is used in the Kindergarten?
7. How hygiene has to be controlled? Who is in charge to promote healthy hygiene for preschoolers?
8. What kind of collaboration is performed with the child’s family?
9. What hygiene related education is given for the caregivers?