

Analysis of health and development disorders of preschool children with special needs in Kaunas kindergartens in 2000 and 2008

Elvyra Griniene¹,

Vida Bliumbergienė²

¹ Lithuanian Academy of Physical Education, Kaunas, Lithuania

² Department of Education, Kaunas, Lithuania

The aim of the study was to clarify the variety of health and development disorders in preschool children with special needs attending Kaunas kindergartens and to arrange the ways of their integration, health and correction care in 2000 and 2008.

Methods. The sample comprised 11985 children aged 2–7 in 2000 and 11873 children in 2008, including in 2000 5075 and in 2008 4096 children with special needs. The possibilities of their health and correction aid were estimated by analyzing the related programs and results of their implementation.

Results. In 2000, there were 8 special kindergartens for children with special needs. In 2008, all the children with special needs were partially or fully integrated in kindergartens according to their place of residence. Besides, there were centres of special education and health (CSEH) in 8 kindergartens. In both years, the number of children with speech and communication disorders was the biggest among children with special needs. In 2000, there were more children with motion and support disorders and visual impairment, and in 2008 there were more intellectual and other neurological and somatic disorders. The most efficient help was provided to children with speech and communication disorders. The health of children with cerebral palsy, scoliosis and severe deformations of parts of body has significantly improved with the help of correction.

Conclusions. In 2008, the care of preschool children with special needs was reformed: all children were partially or completely integrated and received more attention from health specialists working closely with the CSEH.

Key words: preschool, health and development disorders, health correction

INTRODUCTION

In their childhood, the majority of children attend kindergartens. Modern kindergartens are not only limited to the care of the child, but also they strive for a universal development of the child as an individual, nurture an independent future student and a member of society to the program “Healthy Kindergartens” (1, 2). The factors influencing the maintenance of good health are a good organization of the physical activity of children attending kindergartens, good nutrition, formation of healthy living skills (3–5). According to the Lithuanian Health Information Centre, in 2007 (6) among pre-school children (aged 0–6 years) visiting health

care facilities there were children with special needs who had visual impairments, hearing disorders, scoliosis, posture impairments and speech and other health disorders. Data of researchers show the spread of other diseases among preschool children. For example, 4.94% of children were found to have visual impairments (7); there are children with bronchial asthma, allergies (8); only 19.5% of children have a good oral hygiene (9).

The integration of children with special needs into kindergartens requires a specific approach and understanding that banning the division line for disabled children and striving for equal educational and career opportunities is a rather complicated process (10). Despite the changing attitude of teachers towards children with special needs, there still remains a great shortage of knowledge about the problems of the disabled, positive interpersonal relationships and socialization (11, 12). In the recent years, the situation with the

Correspondence to: Prof. Elvyra Griniene, Habil. Dr. Lithuanian Academy of Physical Education, Sporto 6, LT-44221 Kaunas, Lithuania.
E-mail: e.griniene@lkka.lt

upbringing of children with needs is changing. In Kaunas, beginning from 1993, more attention is given to children with special needs; in special institutions there remained only children with severe developmental disorders; the number of children with special needs in comprehensive educational institutions, who are being fully integrated, is growing, the experience of work with children who have special needs is being widely spread (13). The new additional laws supplementing the implementation of special education change the education policy towards children with special needs in kindergartens. Therefore, the integration of disabled children into comprehensive educational institutions is and will remain urgent today and in the nearest future from the point of view of both their health and education.

The aim of the study was to clarify the variety of health and development disorders in preschool children with special needs attending Kaunas kindergartens, and arrange the ways of their integration, health and correction care in 2000 and 2008.

Objectives:

1. To elucidate changes of the net of preschool facilities in Kaunas in 2008 versus 2000.
2. To compare the number of children with special needs and the character of developmental and health disorders of such children attending kindergartens in 2000 and 2008.
3. To determine the possibilities and achievements of work with children with special needs in kindergartens in 2000 and 2008.

MATERIALS AND METHODS

The data were collected in the years 2000 and 2008 applying a questionnaire concerning Kaunas kindergartens, namely their distribution according to purpose and type, the age of children attending these institutions, the number of teachers and other special educators working there, their work hours, possibilities and difficulties of organizing the integration of children with health and development disorders, the priority integration schemes, achievements in working children with special needs.

Data concerning children's health and / or developmental disorders are based on medical documents (records of medical examinations and recorded information provided by special educators working with children with health disorders, descriptions of the correction aids). Besides, special educators' annual reports about their work with children having health and development disorders have been analyzed, too.

Data of the analysis were collected in 2000 in 85 Kaunas kindergartens attended by 11 958 children and in 2008 in 87 kindergartens attended by 11 873 children.

The statistical analysis of data carried out employing the Excel 2003 program. The difference reliability was estimated by the *chi* square (χ^2) test at $p < 0.05$.

RESULTS

Although in 2008, in comparison with 2000, there were two more kindergartens in Kaunas, the number of children attending these institutions did not increase. The decreasing tendency of attendance was noted in 2001 (11 559) and in 2004 (11 442), and the tendency returned in 2008 (11 873). The change was noted in the number of children that attended kindergartens depending on their age. In 2000, the number of children at the age of infancy attending educational institutions was 1127 (9.3%) of all children, the number of children at the age of nursery was 10,889 (90.7 %), while in 2008 the numbers were 1572 (13.2%) and 7767 (65.5%), respectively. Besides, in 2008, 2534, or 21.3% of children attending kindergartens were being prepared for school in pre-primary groups. In 2000, there were five types of kindergartens: 52 crèche-nurseries, 14 nurseries, 12 nursery-schools, 4 special crèche-nurseries and 4 special nurseries. Due to the rapid integration of children with health disorders into the general education kindergartens, in 2008 there was only one institution left for the education of these children – the nursery-school for children having hearing disorders, whereas there were 64 crèche-nurseries, 14 nurseries and 9 nursery-schools. Figure 1 presents the distribution of children having health and developmental disorders according to the degree of integration in educational institutions in 2008.

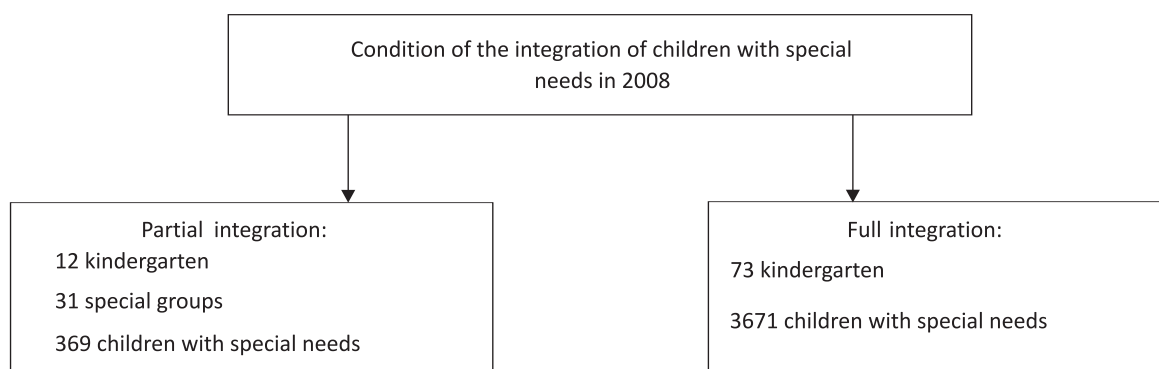


Fig. 1. The distribution of children with special needs according to the degree of integration in kindergartens in 2008

In addition, special education aid consultation centres have been established in eight CSEH kindergartens: in two crèche-nurseries and in one nursery there are speech and communication CSEH, in two crèche-nurseries there are visual impairment CSEH, in one – the allergies CSEH, in one – the motion and support disorders CSEH. In these centres, specialists provide help not only for children attending kindergartens and their teachers, but also for the children that do not attend educational institutions and for their family members. At the Kaunas City Rehabilitation Centre, help to children suffering from autism is also rendered.

45.8% of children with special needs attended Kaunas kindergartens in 2000. In 2008, however, their number decreased to 34.5%. The reason is the change in the evaluation of children's health and / or developmental disorders. In both years, speech and communication impairments prevailed among children with special needs: in 2000 – 62.3%, in 2008 – 77.8%. As one can see in Fig. 2, in 2000 there were more children with motion and support disorders as well as visual impairments, while in 2008 children with intellectual and other disorders prevailed ($p < 0.05$). The number of children with hearing disorders was similar.

Figure 3 demonstrates that in 2000 and 2008, among children with speech and communication disorders children having phonetic speech disorders and speech non-development of different degrees prevailed. In 2000, there were more children having speech non-development, while in 2008 phonologic speech disorders prevailed ($p < 0.05$). The correction aid for these children was rendered in kindergartens, in specially arranged rooms by speech therapists working according to special programs with groups or individually; 112 speech therapists worked in all kindergartens in 2000 and 118 in 2008. In 2000, most children attended kindergartens according to the place of residence, but children with severe speech disorders attended special groups. In 2008, it was decided that there was no need for special groups. Both in 2000 and 2008, speech therapists' correction aid was purposeful and well organized. In Fig. 4, one can see the efficiency of correction work in children having speech and communication disorders. In 2000 and 2008, speech disorders were corrected for one third of the children, and only for 4.8% and 2.9% of children, respectively, no speech and communication improvement was noted.

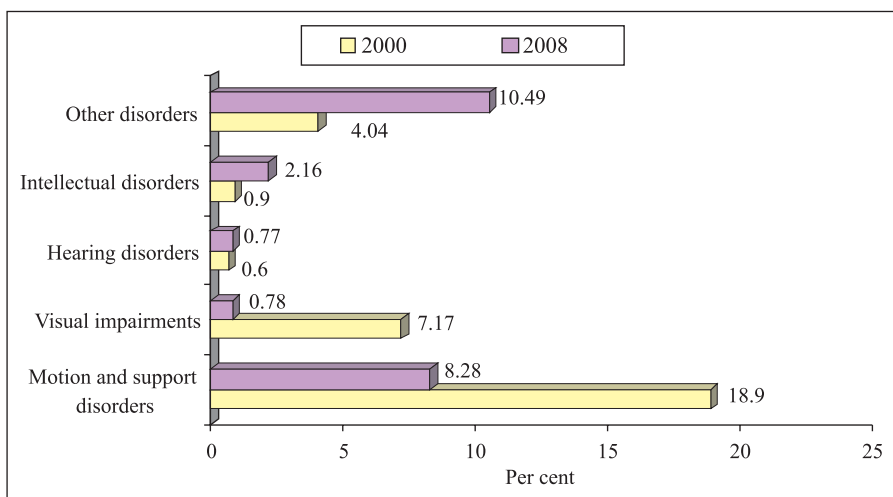


Fig. 2. The distribution of children with special needs according to developmental and health disorders except speech and communication impairments

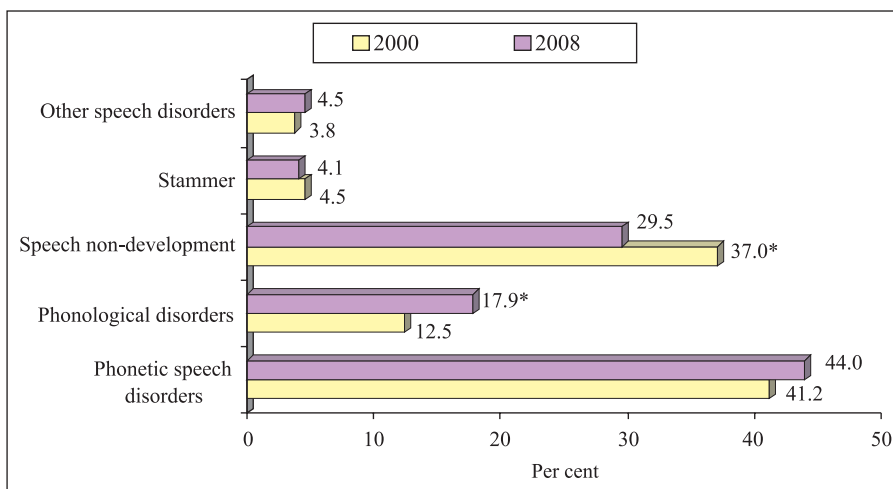
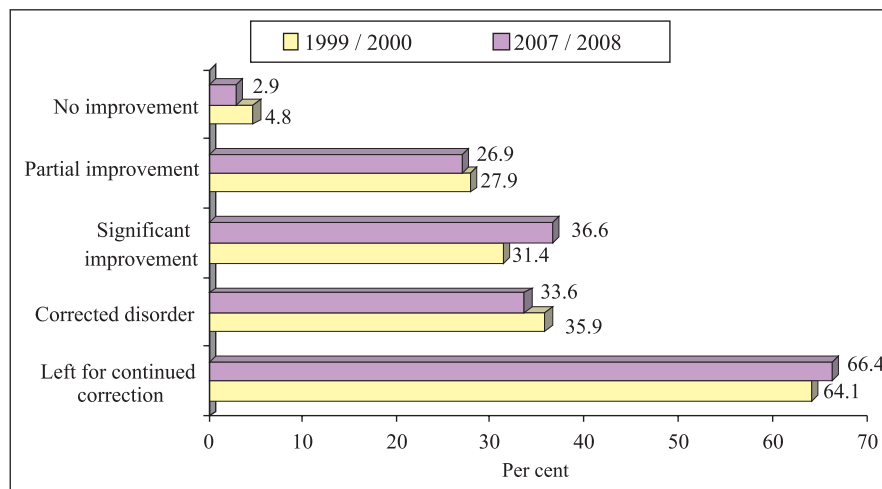


Fig. 3. The distribution of children attending Kaunas kindergartens according to the character of speech and communication disorders

Fig. 4. Results of the correction of speech and communication disorders in 1999 / 2000 and 2007 / 2008



In 2000, the rehabilitation and correction aid was rendered to children having severe motion disorders due to cerebral palsy, scoliosis and other deformations or disorders only in the kindergartens that had specialists of physical education. In 2008, children having these disorders attended 21 kindergartens, and physical and rehabilitation therapists and specialists from CSEH worked with them. Furthermore, according to the program, specialists of physical education in all kindergartens trained good posture, corrected anomalous carriage, flat-footedness and other motion and support disorders of the children that were not considered to be handicapped and took care of all children's physical development.

In 2000, correction aid for children having visual impairments was rendered only in special kindergartens or special groups attended by children with severe diseases. Medical specialists and special educators worked with them according to individual programs. The parents whose children had less severe visual impairments, took care of children's vision correction themselves through vision specialists. Moreover, kindergartens did not pay enough attention to the prevention of visual impairments. In 2008, vision specialists, pedagogues, consulted by the CSEH according to a special program, worked with children having visual impairments individually, in the conditions of full integration. More attention was paid to the visual impairment prevention program. Improved contacts were noted not only with parents, but also with vision specialists that were working in two CSEH crèche-nurseries.

Recently, more and more children having health disorders are educated not in special kindergartens, but in the conditions of partial or full integration. Therefore, in 2008, in comparison with the year 2000, there were more children with intellectual disorders that attended kindergartens (Fig. 2); 27 special emotion and behaviour educators were consulted by the CSEH. This was an effective support for those children.

In 2008, there were more children having different chronic neurological and somatic diseases (other disorders in Fig. 2). Not only teachers are responsible for the supervision

and education of those children, but also nursing specialists and the CSEH. In 2008, the allergies CSEH kindergarten was established, and 79 nursing specialists worked in kindergartens. The success of children's integration and education depended on the purposeful and well-coordinated work of all specialists.

Despite of the more efficient system of supervision and education of children with health disorders, still there are some problems to work out. Unfortunately, only in kindergartens the environment is suitable for the work with children having health disorders. Our survey revealed groups where, together with two or three children having health disorders, up to 20 children were educated. There is a lack of special educators for rendering correction aid.

DISCUSSION

Since 1993, in Kaunas more and more attention has been paid to the integration of children with special needs into kindergartens. Appropriate educational conditions for these children are the aim to be achieved: the attitude of children towards disability is being formed, and proper specialist's preparation for the care and correction of these children is another aim. Our analyses made in 1998 and in 2000 showed that the attitude and cooperation of children of similar age and educators with children who have special needs is changing. This was also noted by other researchers (11, 14). Integration of children with special needs into kindergartens during the recent years was specially accelerated by additional legal acts of the education law (15).

Since 2000, the number of kindergartens and children who attend them in the Kaunas city has not changed, only the number of kindergarten-age children has increased, preschool groups were opened, where children are prepared for school according to a special program. In 2008, all integrated children with special needs attended kindergartens, and only one specialized kindergarten-school for the deaf was left. Consultation centres of special educational help worked

in eight kindergartens. This was not done in 2000. According to a more accurate evaluation system of children's disability, less children (34.5%) attended kindergartens in 2008 than in 2000 (45.8%). This corresponds to other authors' references to the importance of qualified diagnostics which is done by evaluating children's development and health disorders (1, 10).

In 2008 as in 2000, the largest number of children in Kaunas kindergartens had speech and communication disorders, only the nature of disorders was different: in 2000 there were more children whose speech development was very weak, and in 2008 there were more children who had phonological disorders. During a year, through the purposeful help of speech therapists, in one third of children their language disorders were corrected. Other authors also indicate similar results (16).

Correction help became better in 2008 for children who had motion and support disorders. They got correction help when required in kindergartens according to place of residence. In addition, all kindergartens educated and corrected children's posture, flat-footedness and overall physical training. Other authors emphasize the importance of children's motion and support disorders (12). The help for children with visual impairment also improved. Pedagogues worked with them individually, the CSEH consulted them. This, as indicated by Gudonis et al. (14), is especially important for the socialization of these children in a group. Kindergartens also increased attention to the prevention of visual disorders.

In 2008, after refusing educational programs in special educational institutions, partial or complete integration has also been applied to children who had various degrees of intellectual disorder, chronic neurological and somatic needs. The education of these children was provided not only by teachers: they got help also from special educators, nursing and CSEH specialists.

In spite of the achievements in working with children who have special needs, there are also problems to be solved. Not in all kindergartens the environment is suitable for the education of children with special needs. Educational groups of children with special needs are bigger than they should be. Correction help is still needed from many special educators.

CONCLUSIONS

1. In 2008, all children with special needs were partially or fully integrated into general education institutions; only one specialized kindergarten-school for deaf children was left.

2. In 2008, 34.5% of partially or fully integrated children with special needs attended kindergartens. In 2000, there were 45.8% of such children. Both in 2000 and 2008, the number of children with speech and communication disorders was the biggest. In 2000, in kindergartens there were more children who had motion and support disorders, and in 2008 there were more children with intellectual retardation and other neurological and somatic needs.

3. Correction of disorders is guaranteed by specialists who work in kindergartens and by the possibility to use the support of special education help of the CSEH. All the kindergartens were successfully correcting speech and communication disorders and carrying out preventive programs of movement, support and visual impairment.

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Elvyra Grinienė, Vida Bliumbergienė

IKIMOKYKLINĖS ĮSTAIGAS LANKANČIŲ SPECIALIŲJŲ POREIKIŲ VAIKŲ SVEIKATOS IR RAIDOS SUTRIKIMŲ 2000 IR 2008 METAIS ANALIZĖ

Santrauka

Darbo tikslas. Išsiaiškinti 2000 ir 2008 metais Kauno miesto ikimokyklinės įstaigos lankiusių specialiųjų poreikių vaikų sveikatos ir raidos sutrikimų įvairovę, kaip buvo organizuojama šių vaikų integracija, sveikatos ir korekcinė pagalba.

Metodai. Darbe naudoti 2000 m. duomenys apie 11 958 vaikus ir 2008 m. – apie 11 873 vaikus 2–7 metų amžiaus. Iš jų 5075 (2000 m.) ir 4096 (2008 m.) buvo specialiųjų poreikių vaikai. Jų ugdymo, sveikatos ir korekcinės pagalbos suteikimo galimybės buvo

nustatytos analizuojant atitinkamas programas ir jų įgyvendinimo rezultatus.

Rezultatai. Nustatyta, kad 2000 m. specialiųjų poreikių vaikai buvo ugdomi 8 specialiuose darželiuose, 2008 m. visi specialiųjų poreikių vaikai buvo ugdomi iš dalies arba visiškai integruoti ikimokyklinėse įstaigose pagal gyvenamą vietą. Be to, 8 ikimokyklinio ugdymo įstaigose veikė specialiojo ugdymo pagalbos centrai (SUPKC). Tarp specialiųjų poreikių vaikų 2000 ir 2008 metais daugiausia buvo turinčių kalbos ir komunikacijos sutrikimų: 2000 m. daugiau buvo vaikų, turinčių judesio ir atramos, regos sutrikimų, o 2008 m. daugiau buvo intelekto ir kitų neurologinių bei somatinių sutrikimų turinčių vaikų. Minėtais metais vaikų su klausos sutrikimais kiekis buvo panašus. Geriausiai organizuota ir kryptinga pagalba teikiama vaikams, turintiems kalbos ir komunikacijos sutrikimų. Turintiems negalią dėl cerebrinio paralyžiaus, skoliozės, ryškesnių kūno deformacijų, intelekto sutrikimų, taip pat neurologinėmis ir somatinėmis ligomis sergantiems vaikams reabilitacinė ir korekcinė pagalba labai pagerėjo, su jais dirbo specialistai, kuriems talkino SUPKC darbuotojai. Daugiau dėmesio buvo skiriama kūno kultūros ir regos sutrikimų prevencijos programoms.

Išvada. 2008 m. ikimokyklinėse įstaigose pakito darbas su specialiųjų poreikių vaikais: visi ugdomi iš dalies arba visiškai integruoti, daugiau dėmesio jų sveikatai ir sutrikimų korekcijai skiria specialistai kartu su SUPKC.

Raktažodžiai: ikimokyklinis amžius, sveikatos ir raidos sutrikimai, sutrikimų korekcija