# Integration and health care of pupils with special needs in Kaunas schools

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In recent years Lithuania has been changing its education policies as regards pupils with special needs in agreement with the new legal acts regulating these needs and the ways of meeting them.

Aim of the study was to analyse the diversity of disorders of students with special needs who are integrated into general schools of Kaunas and to find their health care possibilities and integration.

**Methods.** The data were collected at 77 Kaunas general schools in the year 2010 on the distribution of pupils by age, the nature of integration and curriculum as well as according to the medical documentation and corrective intervention reports on the health of pupils with special needs.

**Results.** In 2010, all pupils with special needs studied at general secondary schools according to the programmes meeting their potentiality. The number of pupils with special needs is bigger among younger learners. Most pupils had speech and communication disorders; most of them were in primary grades. Other health disorders were typical of pupils with special needs. Their diversity by age was insignificant; more pupils had mental disorders and specific cognition problems, and less suffered chronic disorders.

In each school, education and assistance in corrective help to pupils with special needs were provided not only by teachers, but also by special health care professionals. Achievements in improving speech and communication skills reflects well-organized work.

**Conclusions.** Despite achievements in working with pupils with special needs, some problems, such as poor accommodation to the school environment, lack of adapted methodological tools should be solved.

Key words: general secondary school, integrated education, health correction

# INTRODUCTION

In recent years, a lot of attention is paid to pupils with special needs as regards their full participation in social peers' life. There can be traced changes in the policy of the special integrated education, approach to organization of medical and corrective help to pupils with special needs as well as to the qualification of those providing this particular service and interdisciplinary communication. However, as indicated in the literature (1, 2), integration of pupils with special needs at schools as well as the assistance in corrective adjustment are fairly complex processes which are often judged rather diversely and meet various difficulties and multiform problems in solving them. Among the peers, there still are negative attitudes and unwillingness to communicate with students with special needs; there is also a lack of knowledge about the problems of disabled people (3, 4) Sometimes even 59% of students having speaking dif-

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ficulties, such as stuttering, experience bullying (5); teasing impedes self-expression and participation in class activities for students with special needs (6). Sometimes teachers do not pay as much attention to students with special needs as they should (3, 7). In assessing the work of a special educator, a lack of direct support for adapting to the educational content, training materials and training tools for work in the classroom could be noted; in most cases it is impossible to get an instant consultation and support while teaching all subjects (8,9). Moreover, families having pupils with special needs participate rather inactively in the process of making decisions. There is still a great demand for knowledge about the problems that students with special need face. It is essential to find out how to achieve interpersonal relations, dissemination of working experience and the policy change in working with students with special needs (10, 11).

While evaluating the corrective, rehabilitation work with pupils with special needs who are integrated in general secondary schools, groups of children with different disorders are often chosen. It is indicated that properly selected physical exercises always help students who have cerebral palsy: they reduce the features of palsy or slow down their progress (12, 13). A particular help enables to reduce a variety, and even most severe ones, of speech disorders (6, 14). Knowledge of how to behave properly and when their behaviour is being assessed positively help visually impaired children to overcome fear (15). The usage of remedial games improves the emotional state, reduces fear, sadness intensity and reinforces positive emotions of children with chronic diseases (16). Despite the fact that the responsibility for those who are ill with diabetes is formed at a relatively early stage, they still need assistance (17). It was found that a number of students with special needs in schools depend on the collective methods of health survey typical of all the pupils. In such cases, the characteristics of health needs are of approximate frequency and do not highlight the differences (18). The situation when schools have a regular system of assistance for students with special needs enables a more accurate diagnosis of a disease; therefore, a more accurate medical assistance is given (19, 20). Changing educational situations for students with special needs, individualization of satisfaction of educational and health needs and additional special education law (21) implementation in Lithuania are accompanied by the new legislation on the education of pupils with special needs. Therefore, the integration of pupils with special needs into general schools, both in terms of health and education, is relevant today and will be in the near future.

The aim of the study was to analyse the diversity of disorders among students with special needs who are integrated into general schools of Kaunas and to elucidate their health care possibilities and the achievements of their integration.

### ORGANIZATION AND METHODS OF STUDY

In 2010, a questionnaire was compiled to collect data about the distribution of pupils with special needs attending general schools of Kaunas. The factors that were taken into account were as follows: age, number of teachers and specialists working with these children, organizational forms for integration of pupils with special needs into general schools, achievements, difficulties and problems. On the basis of the data of medical documentation, there were analyzed the distribution of pupils with special needs and changes in their health, records about health problems and their variations made by doctors, records made by specialists working with pupils with special needs, remarks, medical corrective work reports about the achievements and deprivations of the work with pupils with special needs.

The data were collected in September 2010. In 77 general schools of Kaunas with the total number of 44 146 pupils, 4 258 had special educational needs.

The statistical analysis of the data was carried out using the SPSS software. There were calculated data distribution in percentage and margin among groups  $\chi^2$ . A correlation between integration of pupils with special needs and health problems was estimated using Pearson's correlation coefficient. Differences were considered statistically significant if a chosen level of significance was p < 0.05.

### RESULTS

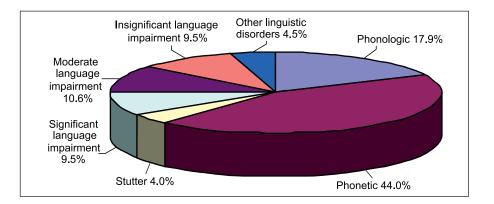
In recent years, in general schools of Kaunas the number of pupils with special needs has remained nearly the same: 9.2% in 2004, 8.2% in 2006, 9.7% in 2008 and 9.6% in 2010. This is due to a steady and constantly improving system that allows identifying and integrating pupils with special needs. The majority of pupils with special needs were completely integrated into the system of general education, i. e. they attended lessons together with other students. Only at one general school the integration was partial: there were four classes where pupils with mental disorders were taught and four classes for children with impaired hearing.

Certain tendencies of integration of pupils with special needs into general schools emerged. The biggest number of pupils with special needs was found among students of younger age. As is shown in Table, in 2010 there were significantly more pupils with special needs in primary classes if compared with basic and higher schools (p < 0.05).

Speech and communication disorders were the most common ones among pupils with special needs (74.2%). Younger students with these disorders significantly outnumbered the elder ones. Cases of these disorders were rather scarce among elder pupils (Table) (p < 0.05).

Number of pupils per class	Total number of pupils		Pupils with special needs		Pupils having speech and communication disorders		Pupils with other special needs	
	number	%	number	%	number	%	number	%
Primary school: classes I–IV	11 844	26.8	2 826	66.4	2 505	79.1	321	29.7
Main school: classes V–VIII	14 121	32.0	1 053	24.7	568	17.9	476	44.1
Higher school: classes IX–XII	12 996	29.5	322	7.6	48	1.5	274	25.4
Gymnasium	5 185	11.7	57	1.3	48	1.5	9	0.8
Total	44 146	100	4258	100	3169	100	1 080	100

Table. Distribution of pupils with special needs by age (classes), groups



**Fig. 1.** Distribution of pupils with special needs having speech and communication disorders by their nature, in percentage

As shown in Fig. 1, among pupils having speech and communication problems, most common were phonetic and phonologic disorders, one third of pupils had language impairment (insignificant, moderate and significant), and only a small group of pupils stuttered or had some other linguistic disorder (p < 0.05).

Among pupils with special needs, 25.8% had other development and health disorders. As shown in Fig. 2, the majority of pupils with special needs had complex mental disorders and specific cognition problems, and less were hearing- or visually impaired, had physical and locomotive problems or chronic somatic and neurological disorders. In this group of pupils with special needs, the age was not significantly important (see Table); however, these are disorders that are more common in pupils in main schools.

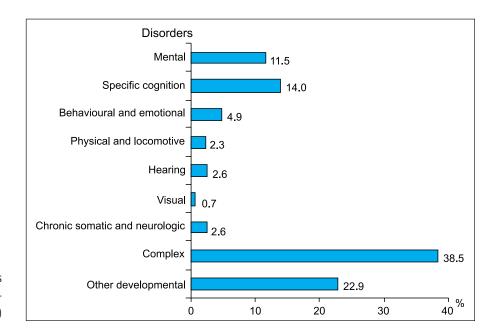






Fig. 3. Make-up of the committee for special education in general schools

The targeted and well coordinated work of teachers and specialists stimulated a successful educational process, integration of pupils with special needs and a full-fledged complex aid. In all schools, work with pupils with special needs was coordinated by a specially formed committee of 5–9 members (see Fig. 3). The committee calls 3–6 meetings annually, discusses the quality of pupils' education, analyzes and disseminates work experience.

Among pupils with special needs, 57.6% are taught according to modified programmes, 30.7% according to adapted programmes, 2.5% according to modified / adapted programmes, 8.1% according to special programmes, and 1.1% are taught according to individual programmes. In the previous years, teaching was organized rather similarly; for example, in 2005, 46.6% of pupils with special needs were taught according to modified programmes, 28.5% according to adapted programmes, and 24.9% according to general and special programmes.

In 2010, in general schools, apart from class and subject teachers, 30 special educators, 27 teachers-assistants, 80 speech therapists, 56 psychologists, 67 social educators and 59 community health care professionals worked with pupils with special needs. Due to the focused and well coordinated work of these specialists it was possible to provide pupils with special needs with full-fledged corrective aid. Moreover, in three of the general schools there operated health education assistance advisory centres (HEAAC) to help pupils having physical and locomotive problems and specialists who work with these children. In four schools such centres were meant for students with mental, speech and communication disorders and specialists who deal with these particular problems. Integrated pupils with special needs who had hearing problems or were visually impaired could also gain corrective aid at special rehabilitation centres in the city: three meant for handicapped and one for those with visual disorders. Specialists consulted not only teachers working with pupils with special needs at their school, but also other teachers in the district; they also helped children who did not attend any educational organizations and family members of those children.

The well-organized work can be reflected in the achievements of pupils with speech and communication disorders. In the school year 2009 / 2010, speech and communication disorders were eliminated in 36.9% of pupils, 29.1% achieved a significant improvement, for 23.2% of students the situation improved; in 10.1% the improvement was insignificant, and only 0.7% (4 pupils) did not experience any changes.

Despite all the above-mentioned achievements in the work with pupils with special needs, there still remain some problems to be solved. Out of 74 schools of Kaunas, only 6 have the environment suitable for pupils with special needs. While forming classes, little attention is paid to the number of pupils with special needs per class. In general schools, there is a lack of specialists able to provide special correction: there are only 17 special educators, 12 teacher assistants, 9 social educators. There is also a need of adapted methodological tools for working with pupils with special needs. Just a few of such pupils participate in out-of-school activities, and there are just a few schools where some attention is paid to the self-expression and education of special abilities, formation of social skills and cultivation of working skills in pupils with special needs.

# DISCUSSION

Twenty years ago, in Lithuania, pupils with special needs were taught at special boarding-schools. Alongside with the beginning of Education Reform there have gradually appeared changes in the policy of special education. During the first decade, the number of pupils with special needs, who were totally or partly integrated into general schools, increased significantly. This process was evoked by the Special Education Law (21) which established the structure of special education, bases of the organization of general education, goals for persons with special needs, educational forms, and duties for educators working with pupils with special needs. In the recent years, integration of pupils with special needs into general schools has stepped up. This process was induced by the development of legal documents validating the special education reform (22) and a more favourable peers and educators' attitude towards pupils with special needs (2, 7).

Data indicate that certain tendencies of health education and the integration of pupils with special needs into general schools have emerged. Most of these pupils have speech and communication disorders. There were significantly more pupils with special needs in primary classes than in basic and higher schools (p < 0.05). It might be presumed that this is due to the fact that in 2008 all children with special needs attended nurseries, and the most common disorder was that of speech and communication (23). Also, there is a strong correlation (Pearson's correlation coefficient 0.98) between the number of pupils with special needs and their age. Primary school age is more beneficial for the development of speech peculiarities and for a more effective impact of corrective educational tools. Similar data have also been reported by other researchers (6, 14).

Among pupils with special needs who attended general schools, 25.8% had other developmental and health disorders. More pupils had complex mental and specific developmental disorders, less were hearing- or visually impaired, had physical and locomotive problems or chronic somatic and neurological disorders. Age did not play a significant role in this group of pupils with special needs. The statistically insignificant increase in basic schools could be due to a more intense expression of sexual maturation at this particular age.

As Liu et al. (19), Nageswaran et al. (20) and other researchers indicate, education and correction of disorders of pupils with special needs in general schools depend on focused, well coordinated activities of teachers and specialists and a constant aid system. In general schools of Kaunas, pupils with special needs are taught according to modified, adapted special and individual programmes adjusted to their potential. Committees of special education are formed at general schools so as to take care of those pupils. Corrective aid is provided by specialists working at school (special educators, teacher assistants, speech therapists, psychologists, social educators and community health care professionals); the specialists are supported not only by health education assistance advisory centres which operate in seven schools, but also by rehabilitation centres in the city for handicapped children and for those with visual disorders.

Despite achievements in the education of and health aid to pupils with special needs, there still remain some problems that must be solved: adjusting the environment to pupils with special needs, the lack of specially adjusted methodological tools, of attention to children's self-expression and formation of working skills.

# CONCLUSIONS

1. In 2010, in Kaunas, all 9.6% of pupils with special needs were attending general secondary schools. The majority were fully integrated and studied according to the programmes meeting their potentiality. There were more pupils with special needs among younger learners (p < 0.05).

2. Most pupils with special needs had speech and communication disorders, more often in primary grades than in secondary and higher classes. Other health problems were typical of 25.8% of pupils with special needs. Their diversity by age was insignificant, whereas differences could be traced in the nature of disorders: more had complex mental disorders and specific cognition problems, and less were hearing- or visually impaired, had physical and locomotive problems or chronic somatic and neurological disorders.

3. In each school, education and assistance to corrective help for pupils with special needs were provided not only by class and subject teachers, but also by special educators, teacher assistants, speech therapists, psychologists, social educators and community health care professionals. These children were also consulted at various education advisory assistance centres. The well-organized work is reflected in achievements improving the linguistic and communicative skills of pupils with special needs.

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# SPECIALIŲJŲ POREIKIŲ MOKSLEIVIŲ INTEGRACIJA IR JŲ SVEIKATOS PRIEŽIŪRA KAUNO MOKYKLOSE

### Santrauka

Lietuvoje įgyvendinant specialiojo ugdymo įstatymą (1998), naujus teisės aktus, besikeičianti specialiųjų poreikių moksleivių ugdymo politika siejama su esama būkle ir galimybėmis.

Darbo tikslas. Išanalizuoti Kauno miesto bendrojo lavinimo mokyklose besimokančių integruotų specialiųjų poreikių moksleivių sveikatos sutrikimų įvairovę, integracijos, ugdymo ir sveikatos priežiūros galimybes.

Metodai. 2010 m. iš 77 bendrojo lavinimo mokyklų buvo surinkti duomenys apie specialiųjų poreikių moksleivių pasiskirstymą pagal amžių, integracijos pobūdį bei ugdymo programas. Remiantis medicinine dokumentacija bei teikiamos korekcinės pagalbos ataskaitomis, analizuoti sveikatos priežiūros ypatumai ir efektyvumas.

Rezultatai. Nustatyta, kad 2010 m. Kauno mieste visi specialiųjų poreikių moksleiviai mokėsi bendrojo lavinimo mokyklose visiškos integracijos sąlygomis pagal jų galimybėms pritaikytas programas. Tarp specialiųjų poreikių moksleivių vyravo jaunesnio amžiaus vaikai, turintys kalbos ir komunikacijos sutrikimų. Pastarųjų daugiau buvo pradinėse nei vidurinėse ir aukštesnėse klasėse. Kiti specifiniai sveikatos sutrikimai buvo būdingi tik specialiųjų poreikių vaikams, kurių pasiskirstymas pagal amžių buvo panašus. Tarp jų daugiau buvo kompleksinius intelekto, specifinius raidos sutrikimus ir mažiau – įvairius lėtinius somatinius bei neurologinius sutrikimus turinčių vaikų.

Kiekvienoje mokykloje ugdymą ir korekcinę pagalbą užtikrino mokytojai bei sveikatos pagalbos specialistai, dirbantys mokyklose ir skirtinguose konsultaciniuose ugdymo centruose. Gerai organizuotą darbą atspindi specialiųjų poreikių moksleivių kalbos ir komunikacijos korekcijos rezultatai.

Išvados. Nepaisant darbo su specialiųjų poreikių moksleiviais rezultatų, vis dar lieka spręstinų problemų: menkai jų poreikiams pritaikyta mokyklų įranga, trūksta jų ugdymui tinkamų metodinių priemonių.

**Raktažodžiai:** bendrojo lavinimo mokykla, integruotas ugdymas, sveikatos sutrikimų korekcija