FOREWORD

This publication was prepared under contract by the UNITED STATES JOINT PUBLICATIONS RESEARCH SERVICE, a federal government organization established to service the translation and research needs of the various government departments,
PRESSING TASKS IN THE CARE OF CHILDREN
OF PRESCHOOL AND SCHOOL AGE

-USSR-

Following is a translation of an article by I. G. Tseytlin in the Russian-language periodical Pediatriva (Pediatrics), Moscow, Vol. XXXVII, No. 6, 1959, Pages 3-10.

Two most important documents recently defined the pressing tasks of public health with regard to the care of children of preschool and school age for the near future. These are the control figures for the development of the national economy of the USSR for 1959-1965 adopted by the Twenty-first Special Congress of the Communist Party of the Soviet Union; and the law concerning the strengthening of the bond between school and life, and concerning the further development of the system of national education in the USSR.

In our country, which has entered into a period of developed building of a communist society, there is being created a material-technical base of communism; the economic and defense power is being strengthened, and, at the same time, the increasing material and spiritual needs of the people are being more and more fully satisfied. At the same time the law concerning the reorganization of the school system places, as its chief tasks, the preparation of our rising generation for life, for useful work, and the inculcation in our young people of a deep respect for the principles of socialist building.

In connection with the huge growth of the network of kindergartens, general instructional and professional-technical schools and boarding schools, the number of supervised children of preschool and school age, by the end of the seven-year-plan (1959-1965), will reach 45-47 million. In the speech of N. S. Khrushchev, at the Twenty-first Congress of the Communist Party of the Soviet Union, it was emphasized that the more quickly we include all children in creches, kindergartens, and boarding schools, the more quickly and the more successfully we shall solve the problem of communist education of the rising generation.

The importance, which children's institutions have, and also the reorganization of the whole system of national education require, from the medical workers, and, first of all, from school doctors, special attention to the organization of systematic and proper supervision of the physical development and state of health.
of the children and the timely carrying out of the necessary
therapeutic—prophylactic and sanitary measures.

The data of our systematic supervision for many years of
the state of health of the children of preschool and school age
graphically illustrates the significant improvement of the princi-
ple indices of their health during the postwar years.

Thus, the overwhelming majority of kindergarten and school
pupils are distinguished by good nutrition and adequate physical,
and normal sexual development. Among them there is only a small
number of children and teenagers with functional disturbances of
the cardiovascular and nervous system, diseases of the hearing
organ, etc. However, according to a number of health indices (bad
posture and curvature of the spine, myopic) there were no notice-
able positive improvements.

Children, suffering from rheumatism, deserve serious attention.
As is known, during the postwar years, up to the present time, the
child mortality from rheumatism has had a tendency to increase.
Among children of preschool and school age, according to our data,
rheumatic patients, on the average, amount to approximately 2%.
The majority of pupils attend school in the period between attacks.
Consequently, questions of the régime of study and work activity
of these patients require the resolution appropriate for individual
characteristics of the children and teenagers, for their condition.
Observations conducted in this direction by many authors (Volkov,
Edel'man, Sapochnikova and others) confirm the expediency of ef-
effectiveness of a number of measures taken in schools for the organi-
ization of the study activity of pupils, suffering from rheumatism
(additional day off, determination of the study load, individuali-
zation of physical culture studios and so on). It is the duty of
the school doctor and rheumatic consultation rooms of the children's
consultation—polyclinics to implement properly the available recom-
mandations applicable to the specific conditions of each school.

The doctors of the children's institutions (schools, kinder-
gartens, boarding schools and so on) and of the children's consul-
tation—polyclinics are faced with large and responsible tasks in the
discovery of the reasons for the indicated deviations. First of
all, it is necessary to turn attention to the improvement of the
sanitary conditions of the children's institutions: illumination
(natural and, in particular, artificial) of the work places of
school pupils and preschool pupils, the selection of furniture and
equipment in accordance with the size of the children, and also the
selection of instruments and equipment appropriate for the age of
the children. In addition to this, the textbooks, training, and
visual aids should correspond to the hygienic requirements (paper,
the print, the typesetting, illustrations, etc.).

For raising the general level of the sanitary condition of
children's institutions at the present time, special measures,
directed to the active improvement of sanitary conditions of the
external surroundings of the institutions, are acquiring great importance. Among such measures are the irradiation of the premises with ultraviolet rays, ionization, humidity control, etc. During the last 4 years we have carried out research in air-hydro-ionization of the premises of a child's home, creches and a kindergarten (Golovanova and Gracheva), which indicated, that by this method is achieved a certain normalization of the indices of the microclimate of the premises, a reduction of the bacterial contamination of the air and the improvement of the general condition of the children. In addition to that, there is noted a certain reduction of the morbidity of entamor of the upper respiratory tract. This problem requires further study. However the available data makes it possible to put it gradually, already at the present time, into mass practice.

Furthermore, attention should be given to the proper organization of the regime of the study and work load of the children at home and in the children's institution.

The regime of the school pupils deserves special attention, because upon the organs of public health, together with the organs of national education, is placed the responsibility to control strictly the alternating of the work and rest of the pupils, not to permit the overloading of the pupils with study, social work and work, to apply the necessary measures for the further strengthening of the health of the pupils" (the law concerning the strengthening of the connection between the school and life).

In this connection there arise numerous specific practical problems, whose solution requires the participation of medical workers.

First of all, the problem arises concerning the establishment of a rational regime of work and rest for the pupils in accordance with their age, anatomical-physiological characteristics, concerning the proper, physiologically and hygienically justified combination of study and work activity, concerning the age, study and work load. These tasks will require a preliminary, careful study of them in conformity with the specific conditions, local and different types of labor activity. It is necessary to work out appropriate medical contraindications in the directing of pupils of different ages into some types of productive labor and work in production. It may be that there are required more precise specifications and additions to the legislation existing at the present time for labor of teen-agers at various enterprises and institutions. It is especially important to enact the necessary legislative decrees concerning agricultural labor of teen-agers, because, at the present time, this type of legislation does not exist as yet.

The organization of work of the pupils in production will be a very important problem. It is generally known, that the rhythm and intensity of labor of the teen-ager, who works in a brigade of adults, differ essentially from the rhythm of work and the degree of labor intensity of the teen-ager, who works in a brigade of his
contemporaries. Consequently, the necessity arises wherever possible (in enterprises, on state farms and collective farms) to organize independent student brigades, for which there must be established specific norms and work quotas, corresponding to their age capacities. At the same time there will also be required the organization of the work environment of the pupils in production, for example the selection of equipment in accordance with size, instruments suitable to the age of the pupils, the installation of the necessary safety devices, the provision of appropriate lighting of the work place, and, finally, the supplying of protective outer garments for the pupils. All these measures must be well-grounded to a sufficient degree in conformity with the specific conditions of the given type of production.

No less important a question in connection with the reorganization of the school is the working out of a rational regime for the pupil.

In spite of the fact, that recently there has been carried out a number of important measures for the regulating of the load of the pupils (revision of curricula and programs, the abolishment of translation examinations, etc.), the overloading of pupils, especially in the senior classes, still remains significant.

In the reorganization of the school it is necessary to prevent the possibility of a similar overloading and to provide pupils with the conditions for sufficient and restful sleep, rest and walks in the fresh air, physical culture and sports, free time for reading, etc. It must be remembered, that the education of a healthy and well-developed future member of the communist society cannot be limited to academic studies and work training, but requires serious attention to his physical and aesthetic education. Therefore it is necessary that the school doctor actively participate in the drawing up of the curricular schedule for each class of the school for the purpose of providing the proper alternating of easy and difficult lessons, studies in the class, the laboratory, and in the preschool section, and also work in production. The experience of the work of the FZC (the seven-grade industrial training schools), the FZU (the industrial training schools), and trade schools, and also the observations of many authors (Zverov, Drozdova, Antrópova, Fokin and others) indicate, that the most expedient form of combination of school and work activity of the students of the upper classes in production is the alternating of a day of academic studies in school and a day of work in production. Both academic, as well as production training, as a rule, should be carried out during the morning hours. The work period of students in production must be not more than 6 hours, and for teen-agers, younger than 16 years, — not more than 4 hours. The students may be released for work in production only after a preliminary medical examination and in accordance with the established regulations. All students should enjoy vacations with simultaneous freedom from work in production.
In connection with the fact that the middle general instruction-work polytechnical school with production training will have to graduate students with a specific production trade, one of the essential tasks is the proper and timely acquaintance of the pupils with the characteristics of some productive trades from the point of view of the demands, which these trades make upon the organism of the teen-ager, the physical and psychic qualities, necessary for the most efficient work, and the hygienic conditions, which better provide the prevention of the possible negative effects upon the health of the individual.

In order that the student in production work, and the choice of a given trade could consciously solve the quite difficult problem standing before him, taking into consideration his individual potentialities and capabilities, the children's consultation-polyclinic must hold appropriate consultation for pupils every day. This vocational consultation, depending upon local conditions, may be organized in the school or in the children's polyclinic. The main problem, as has been said above, must be the acquaintance of the teen-ager with the characteristics of some production trades and active aid in the selection of a trade.

The indicated consultation may be carried out in two ways: 1) a consultation for a whole class or group of pupils; 2) individual consultation.

The group consultation must have as its purpose the general acquaintance of the students with the characteristics of various trades and the basic demands, which those trades place upon the individual in respect to his physical and psychic qualities. Thus, it is expedient to explain briefly the age anatomic-physiological properties of teen-agers, young boys and girls, the basic questions of labor hygiene, legislation for the protection of the labor of teen-agers, and also to indicate the importance of productive labor in the matter of the general development and strengthening of the health of the rising generation.

The individual consultation should be held in order to help each individual pupil select the trade in conformity with his individual characteristics. One must not be limited by the instruction, concerning which work or trade the teen-ager must not choose, i.e., what types of work are counterindicated for him in connection with the characteristics of his health, but one should indicate to the teen-ager, what types of work, trades are most suitable for his development and state of health. Thus, the individual consultation concerning the choice of a trade or profession to a certain degree should assume the character of a choice of a profession by teen-agers in accordance with their individual characteristics.

Properly organized and systematically carried out vocational guidance will permit the children's consultation-polyclinic not only to distribute rationally the students of the school for participation in a certain type of productive labor, but is the effective measure
in the prophylaxis of production injuries among teen-agers and their morbidity, providing at the same time the greatest efficiency of the productive labor of the students.

How should the vocational guidance in the children's consultation-polyclinics be organized?

It would be most expedient to organize for this purpose in the largest children's consultation-polyclinics special offices for individual vocational guidance of teen-agers, with specified days and hours for appointments depending upon local conditions. Inasmuch as such a consultation will require, naturally, a thorough acquaintance with the state of health of the teen-ager who is seeking the guidance, then in this office it would be possible to carry out also the necessary medical examination of the teen-ager, using in case of necessity doctors who are specialists in the polyclinic. The direction and organization of the work of the vocational guidance office must be entrusted to one of the most experienced and well-trained school doctors.

It should be emphasized, that in the carrying out of individual counselling it is necessary to use, in regard to each individual teen-ager, all the available medical data of the school doctor and polyclinic— the indices of the physical development, state of health, illnesses, which the teen-ager had had, and also a short pedagogical resume (characteristics of behavior, progress, aptitudes and interests of the teen-ager).

During the process of carrying out both the group, as well as the individual vocational guidance, a number of questions may arise on the part of the teen-ager. Therefore the doctor, carrying out the vocational guidance, taking into consideration these interests and needs, must systematically expand his knowledge in the given field, consulting with competent persons and not in any case evade an answer and explanation to teen-agers on questions interesting them.

In connection with the above indicated, there will arise the necessity of raising the skill of school doctors in problems of occupational hygiene and occupational pathology, hygiene and labor protection. For this purpose each oblast' (krey) health department and Ministry of Public Health of an Autonomous Soviet Socialist Republic must in the near future organize appropriate courses and ten-day periods, enlisting for this purpose sanitary inspection workers, in the first place industrial-sanitary inspectors, and also doctors of the medical-sanitary sections of enterprises.

For the further improvement and development of vocational counselling for school pupils, it is necessary that school doctors and pediatrians of the children's consultation-polyclinic systematically carry out observation of the work of the school pupils in production, study the work conditions, the character of its organisation, the hygienic behavior of students and would take into consideration the cases of trauma and morbidity.
In as much as vocational counselling, carried out by children's consultation-polyclinics, concerns only the students of the general education eight-year school, it is completely obvious, that it must conform to the work of the school doctors. The school doctor in his daily work in school should also render aid to students in their choice of a production profession, and in this connection, also, in the selection, after the completion of the eight-year school, of some general education polytechnical school with production training (9th, 10th and 11th classes). This work should be carried out by the school doctor together with the teachers, periodically informing the director of the school and the director of the training section.

One of the basic criteria for the proper evaluation of the physical condition of the children and teen-agers is the determination of their physical development.

Many years practice in the work in the study of the physical development of children in various cities and autonomous republics of the RSFSR indicate, that there still often occur essential defects and errors both in the organization and method of carrying out the work, as well as in the working out of the material obtained and its interpretation.

At the present time there are reliable "standards" as a criterion of the individual evaluation of the physical development of children and teen-agers only in a number of large cities (Moscow, Leningrad, Gor’kiiy, Khar’kov, Smolensk, Ishovsk and others). The absence in a number of oblasts, kray and autonomous republics of the RSFSR of local "standards" leads to an incorrect individual evaluation of the physical condition of children and teen-agers, and hence to incorrect conclusions.

In accordance with this, within the limits of each oblast', kray, autonomous and individual union republics it is necessary to work out local average criteria of the individual evaluation of the physical development of urban and rural children ("standards"), which must periodically, every 3-5 years, depending upon local conditions, be revised and defined more precisely. The working out of these "standards" should be carried out by the departments of local medical institutes, scientific-research pediatrich institutes, and where these do not exist, — by the local methodology offices. The working out of the "standards" should be carried out according to one methodology.

At the present time such a unified methodology has been developed by the Institute of Pediatrics of the Academy of Medical Sciences of the USSR and by the Institute of the Organization of Public Health and the History of Medicine named for N. A. Semashko, (A. B. Stavitskaya and D. N. Aron) and distributed to the localities. The use of this approved methodology at the present time is expedient for everybody, who is engaged in the study of physical development.
According to the data of the pediatric commission of the Scientific Medical Council of the Ministry of Public Health of the RSFSR in 1959 by various departments of medical institutes (departments of pediatrics, hygiene, the organization of public health, the hygiene of children and teen-agers) and by scientific-research pediatric institutes of the Ministry of Public Health of the RSFSR, there was planned the development of 73 topics on the physical development of children and teen-agers. It is obvious, that the proper solution of those problems requires complete unification of methodology and coordinated carrying out of all of the work. This task is being fulfilled by the scientific medical councils of the ministries of public health of the union republics.

According to the data of our research of many years during the pre-war, war and post-war years, and also according to the data of many other authors in Leningrad, Smolensk, Khar'kov, Kiev, Izhevsk, Sverdlovsk etc. (Leviant, Levin, A. I., Perevoshchikova, Stavitskaya, Kogan, Ilyshcheva, K. I., Korusinskaya, Goryunova, Ushvily and others), the indices of the physical development of urban and rural children at the present time significantly exceed the corresponding indices of 1940 and are much better than the data of foreign capitalist countries. Thus, according to the data of Bernfield and Wail, who had studied children of Paris in 1955, physically retarded children of various ages constituted 11-14%. In the German Federated Republic in 1955, according to the data of Inge Loetz, poor nutrition, a poor state of health were noted in 10-26% of the school children, and according to our data, in that same year in Moscow among school children there was only 2,9% with defective physical development.

Consequently, at the present time, in connection with those exceptionally favorable conditions, which were determined by the plan of development of the national economy of the USSR for 1959-1965, it is necessary to raise still more the level of the physical development of children and teen-agers in the city and the country.

The study of the physical development must be organically connected with the study of the state of health of the children and teen-agers. Unfortunately, the great amount of work, which is being carried out by doctors of children's institutions (kindergartens, children's homes, schools, boarding schools, etc,) in the annual profound investigation of the state of health of children and teen-agers, is not always sufficiently generalized and analyzed. As a result the data obtained in a number of cases is not fully exploited both for the evaluation of the dynamics of the health of the children's population, as well as for various practical therapeutic-prophylactic and sanitary measures. However, the value of these materials, when they are properly collected, is completely obvious. The daily direction of this work should be entrusted to the scientific-research pediatric institutes, and to the local methodological offices of the oblast hospitals. The Ministries of Public Health of the
republics should annually or no less frequently than every 3 years draw up a conjuncture survey concerning the state of health and physical development of children in republics, krais and oblasts, which will serve as one of the basic indices of the rise of the material and cultural welfare of the Soviet people, and also as an objective criterion of the effectiveness of the sanitation and therapeutic—prophylactic measures which have been carried out.

Together with the indicated indices, the daily taking into account and analysis of the morbidity of children of preschool and school age is of basic importance.

The timely prophylactic immunization, early discovery and early diagnosis of diseases, and in this connection, timely isolation of the sick are the most essential in the prophylaxis of infectious diseases in children's institutions.

Together with this, the following problems deserve much attention: problems of the sanitary condition and the planning and organization of children's institutions; the maintaining of the number of children in them in conformity with the established hygienic norms. Thus, in kindergartens, where the number of children significantly exceeds the norm, the morbidity is higher than in kindergartens, which have a normal number of children. It is interesting to note, that the lowest morbidity is noted in the around-the-clock groups of kindergartens.

The seven year plan of the development of the national economy of the USSR stipulates a large increase in the network of preschool children's institutions and boarding schools, the liquidation of multiple shift school hours. All of this, to a significant degree, facilitates and furthers the solution of the indicated problem.

For the further improvement of the physical development and the state of health of the children, one of the basic measures is rationally organized physical training in all children's institutions, and the proper setting up of medical control over its implementation.

It is generally known that great achievements there are in the USSR in respect to physical culture. The mass scope of different types of physical culture and sports available to the children and adult population, the successes of our sportsmen at various international competitions — all of these facts have received universal recognition not only in our own country, but also abroad. However, in a number of schools, in the setting up of physical education, there still are serious deficiencies. Physical culture lessons are often carried out without maintenance of the basic hygienic requirements. Even in some children's sport schools, according to our data (Uzhvly), there exists an improper organization of studies from the point of view of hygienic requirements. In the implementation of physical culture measures are often violated the basic requirements, connected with the age characteristics of children and teen-agers.
School doctors are insufficiently informed on questions of the physiology of physical exercises and medical control. These factors sometimes reduce the healthy effect of physical culture.

At the present time in connection with the reorganization of the whole system of the organization and direction of physical culture, favorable conditions are being created in the country for raising the quality of physical education in children's institutions, in the first place in the school, and for the improvement of medical supervision and control.

There also arises the question concerning a change of the content of physical education in the school in connection with the active participation of the pupils in production work. The physical culture lessons in the school should be set up in accordance with the work activity and the physical load of the students, which is connected with their work in production. In this respect a big role belongs to the school doctor and the medical-physical culture dispensaries, which must carry out the methodical direction, and help the school doctors.

Inasmuch as in the seven-year plan there is stipulated the development of a large network of institutions outside of the schools (children's parks of culture and rest, tourist bases, skiing stations, skating rinks, etc.), the tasks of the organs of public health are the provision of adequate medical service for all these institutions, and supervision of the proper organization of the measures which are carried out from the point of view of the protection of the health of the children and teen-agers. Special attention should be given to the development of a wide network of mass health institutions (country and urban pioneer camps, health areas, sending of children's institutions to the country, etc.), having provided them with the necessary medical service. The sending of children to the country should be propagated not only during the summer months, but also during winter vacation periods. The experience of a number of cities indicates the expediency and effectiveness of this measure.

The large amount of construction of kindergartens, schools and boarding schools, stipulated by the seven-year plan, will require, from the sanitary inspection service and children's doctors, active participation in the preliminary examination of the construction plans for the purpose of providing the necessary hygienic conditions for the residence of children, their school and work activity and physical education. In the light of the new tasks placed upon the school, there will be required the development of new projects, corresponding to the modern demands. Organs of public health should participate directly in the solution of these primary problems.

Mass health measures are acquiring much importance. In addition to the large network of pioneer camps, country summer homes, health areas, tourist bases, etc., summer urban pioneer camps, and
extended school day groups at school have recently been widely used. These measures, which include a large number of pupils, give good results in the condition of proper pedagogic and hygienic organization. School doctors and medical workers of children's consultation-polyclinics should provide not only proper medical supervision, but should also look after the rational organization of the regime and nutrition of the children.

All of this many-sided work will have sufficient success, if it will be combined every day with the mass sanitary-education work among children, teachers and parents. Sanitary-education work in all the variety of its forms (lectures, discussions, movies, plays, posters, wall newspapers, etc.) should occupy an important place in the medical service of the children's population. The enlisting of the cooperation of the parents' active, the whole community, pioneer and Komsomol organizations will provide success in this matter.

In conclusion it should be said that the provision of normal conditions for the doctor's work in the children's institution is of great importance for the successful carrying out of those serious tasks, which at the present time stand before the public health organs in the matter of medical service of older children. First of all it is necessary to staff all the positions of school doctors in accordance with the established standards. At the same time it is necessary to give serious attention to the training of middle medical personnel (nurses, fel'dshers (doctors' assistants)) for children's institutions. It is necessary, that each school doctor have on his staff 3 middle medical workers, who are stipulated by staff standards of the Ministry of Public Health of the USSR.

It is necessary to raise the authority of the school doctor, systematically raise his clinical and hygienic qualification, provide him with the necessary methodological direction, and then he actually will be the type of pediatrician-hygienist, who is necessary at the present time for the successful solution of the majestic problems of the seven year plan in the field of the protection of the health of the children.