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## ANALYSIS OF CHARACTERISTICS AND QUALITY ASPECTS REQUIRED FOR CHILD AND ADOLESCENT-FRIENDLY HEALTH SERVICES

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### Abstract

**The aim:** Analysis of the main characteristics and aspects of quality necessary for implementing medical services that are friendly to children and adolescents.

**Methods.** An analysis of the main characteristics and aspects of quality necessary for implementing medical services that are friendly to children and adolescents in all age groups of 10 schools in Nur-Sultan, Akmola region, Kyzylorda region, East Kazakhstan region, Atyrau region was made.

**Results.** The provision of school health services to children and adolescents is carried out free of charge in full and equally, and also predominantly (60%) guarantees social justice and security principles. At the same time, only 18% of parents have ever received information about the medical services provided at school. The analysis shows that 41% of the legal representatives of children are not informed about the working hours of the school medical center, 41% consider visiting hours convenient for children and 7% inconvenient. However, the results of an online survey among school workers (16.7%) show violations of the confidentiality of examinations at the school health center.

**Conclusion.** The provision of school medical services to children and adolescents is carried out free of charge in full and equally and guarantees social justice and security principles. The basic regulations and by-laws for providing school health services generally guarantee the confidentiality of personal information concerning children and adolescents and their legal representatives. When providing medical care to children and adolescents, the rule of informed consent for invasive manipulations through a legal representative is observed.

School health services are held in a hygienically clean environment and supportive environment. SHS has the necessary equipment, supplies, and resources to provide the required services

**Keywords:** Health Services, School, School Health Promotion, School Health Services, School Services, Services, School Health.

### Резюме

## АНАЛИЗ ХАРАКТЕРИСТИКИ И АСПЕКТЫ КАЧЕСТВА, НЕОБХОДИМЫЕ ДЛЯ МЕДИЦИНСКИХ УСЛУГ, ДОБРОЖЕЛАТЕЛЬНЫХ ПО ОТНОШЕНИЮ К ДЕТАМ И ПОДРОСТКАМ

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**Цель исследования:** Анализ основных характеристик и аспектов качества, необходимых для реализации медицинских услуг, доброжелательных по отношению к детям и подросткам.

**Методы.** Проведен анализ основных характеристик и аспектов качества, необходимых для реализации медицинских услуг, доброжелательных по отношению к детям и подросткам во всех возрастных группах 10 школ в г. Нур-Султан, Акмолинской области, Кызылординской области, Восточно-Казахстанская области, Атырауской области.

**Результаты.** Обеспечение детей и подростков услугами школьной системы здравоохранения осуществляется бесплатно в полной и равной мере, а также преимущественно (60%) гарантирует принципы социальной справедливости и защищенности. В то же время только 18% родителей когда-либо получали сведения об оказываемых медицинских услугах в школе. Анализ демонстрирует, что 41% законных представителей детей не информированы о режиме работы школьного медицинского пункта, 41% считают приемные часы удобными для детей, 7% неудобными. Однако, результаты онлайн опроса среди школьных работников (16,7%) демонстрируют нарушения конфиденциальности осмотра в школьном медицинском пункте.

**Выводы.** Обеспечение детей и подростков услугами школьной медицины осуществляется бесплатно в полной и равной мере, а также гарантирует принципы социальной справедливости и защищенности. Базовые принципы и нормы подзаконных актов предоставления школьных медицинских услуг в основном гарантируют конфиденциальность персональной информации в отношении детей и подростков и их законных представителей. При оказании медицинской помощи детям и подросткам соблюдается правило информированного согласия на инвазивные манипуляции через законного представителя.

Услуги школьной службы здравоохранения предоставляются в гигиенически чистом помещении и благоприятных условиях. ШСЗ располагают необходимым оснащением, расходными материалами и основными ресурсами для оказания необходимых услуг.

**Ключевые слова:** Медицинские услуги, Школа, Укрепление здоровья в школах, Школьные медицинские услуги, Школьные услуги, Услуги, Школьное здоровье.

Түйіндеме

## **БАЛАЛАР МЕН ЖАСӨСПІРІМДЕРДІҢ ДЕНСАУЛЫҚ САҚТАУ ҚЫЗМЕТТЕРІНЕ ҚАЖЕТТІ СИПАТТАМАЛАР МЕН САПА АСПЕКТИЛЕРІН ТАЛДАУ**

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**Зерттеудің мақсаты:** Балалар мен жасөспірімдерге қолайлы денсаулық сақтау қызметтерін жүзеге асыру үшін қажетті негізгі сипаттамалар мен сапалық аспектілерді талдау.

**Әдістері.** Нұр-Сұлтан қаласы, Ақмола облысы, Қызылорда облысы, Шығыс Қазақстан облысы, Атырау облысындағы 10 мектептің барлық жас топтарында балалар мен жасөспірімдерге қолайлы медициналық қызмет көрсетуді жүзеге асыру үшін қажетті сапаның негізгі сипаттамалары мен аспектілеріне талдау жасалды.

**Нәтижесі.** Балалар мен жасөспірімдерге мектеп медициналық қызметтерін көрсету тегін және тең көлемде жүзеге асырылады, сонымен қатар басым (60%) әлеуметтік әділеттілік пен қауіпсіздік қағидаттарына кепілдік береді. Бұл ретте ата-аналардың тек 18%-ы ғана мектепте көрсетілетін медициналық қызметтер туралы ақпарат алған. Талдау көрсеткендей, балалардың заңды өкілдерінің 41 % мектеп медициналық пунктінің жұмыс уақыты туралы хабардар емес, 41 % келу уақытын балаларға ыңғайлы, 7 % ыңғайсыз деп санайды. Дегенмен, мектеп қызметкерлері арасында жүргізілген онлайн сауалнаманың нәтижесі (16,7%) мектептегі сауықтыру орталығында емтихандардың құпиялылығының бұзылғанын көрсетеді.

**Қорытынды.** Балалар мен жасөспірімдерге мектептегі медициналық қызмет көрсету толық және тең көлемде тегін жүзеге асырылады, сондай-ақ әлеуметтік әділеттілік пен қауіпсіздік қағидаттарына кепілдік береді. Мектептегі денсаулық сақтау қызметтерін көрсетудің негізгі принциптері мен заңға тәуелді актілері жалпы алғанда балалар мен жасөспірімдерге және олардың заңды өкілдеріне қатысты жеке ақпараттың құпиялылығына кепілдік береді. Балалар мен жасөспірімдерге медициналық көмек көрсету кезінде заңды өкіл арқылы инвазиялық манипуляцияларға ақпараттандырылған келісім беру ережесі сақталады.

Мектептегі медициналық қызметтер гигиеналық таза ортада және қолайлы ортада көрсетіледі. SHS қажетті қызметтерді көрсету үшін қажетті жабдықтарға, керек-жарақтарға және негізгі ресурстарға ие.

**Түйінді сөздер:** Денсаулық сақтау қызметтері, Мектеп, Мектеп денсаулығын нығайту, Мектеп денсаулық сақтау қызметтері, Мектеп қызметтері, Мектеп денсаулығы.

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**Introduction**

Adhering to equity in health by addressing social determinants is a crucial tool to close the gap within a generation. Children have different life opportunities from an early age, both globally and within one country [15]. The school health system can equalize their chances of accessing medical services. Moreover, as part of the primary health care system (PHC), according to the Declaration of Alma-Ata, school health services should be universally accessible to individuals and families in the community with full participation [16]. Ratified in Kazakhstan, the Convention on the Rights of the Child also declares the unique role of PHC in ensuring full access to medical services for children and adolescents at all stages of life [4].

Many studies show that often children and adolescents express low satisfaction with primary health care due to the impression they have of a lack of respect, privacy, and confidentiality, due to fear of stigmatization and discrimination [2,14,17]. The Kazakh PHC system should also systematically recognize the needs and requirements of children and adolescents, considering current trends and changes.

To date, no relevant studies in Kazakhstan have identified the need for strengthening school health services, the degree of their implementation, and the objective attitude of children and adolescents to the school health care system. Therefore, these facts in more depth in the context of existing conditions need to be studied.

**Materials and methods**

For the analysis, we carried out the following activities: monitoring the legal acts governing the conditions for the implementation of school medicine in Kazakhstan; retrospective analysis of reports of authorized bodies and departments in the field of healthcare; a list of warnings for persons participating in studies related to geographical conditions and representativeness in the habitat was defined (Nur-Sultan, Akmola region, Kyzylorda region, East Kazakhstan region, Atyrau region); interviewed identified individuals using the National School Health Assessment Questionnaire; and conducted focus group discussions based on the Guidance for Gathering Information from Different Groups of Detected Parties.

To conduct this qualitative study, we previously tested the questionnaires taking into account ethical standards and approved by the Local Ethical Commission. The questions for interviews with key informants, focus group discussions with key stakeholders, and an online survey was adapted to the current conditions and translated into Kazakh.

To collect and summarize the opinions of representatives of specific stakeholders (school students,

considering age groups, school health workers, teachers, school administration, and parents), emphasizing specific issues and topics, focus group discussions were held. Due to COVID-19 pandemic restrictions, face-to-face meetings were limited, and critical interviews and focus group discussions were conducted using Zoom, telephone, and a Google questionnaire.

When forming the sample at the initial stage of the study, we planned to select 12 schools across the country for participation in focus groups and interviews, that is, three schools from four regions. The choice of four regions is due to the country's enormous territory and the presence of 17 regional units. Thus, four regions represented the northern, southern, eastern, and western parts of the republic:

North - Nur-Sultan, Akmola region

South - Kyzylorda region

East - East Kazakhstan region

West - Atyrau region.

As a result, ten schools out of 12 planned took part due to the restrictive measures associated with the COVID-19 pandemic. Local health authorities carried out the choice of schools (Health departments of akimats / territorial departments of the Committee for Quality Control of the Safety of Goods and Services of the Ministry of Health of the Republic of Kazakhstan), taking into account the representativeness of the sample.

School authorities identified focus group participants from school staff and administration. The school health workers who participated in the focus groups were specialists attached to the school from the territorial PHC and were permanently based at the school. In working with schools, we had to show flexibility and loyalty, as restrictive measures to prevent the spread of coronavirus infection in educational institutions prevented pre-planned activities.

At the time of the study, the educational process for preschool and grades 1-11 was carried out in a remote format, except in schools with a contingent of 5 to 180 people (22), where the number of children in a class was limited to fifteen students, according to the statements of parents and legal representatives of children the availability of appropriate conditions in schools (32) and the opening of duty classes with the presence of up to 15 children for students in grades 1-4.

To work with schools, the methods recommended by the research team and those adequately adapted to the restrictions during the COVID-19 pandemic were chosen: interviews and focus group discussions. An online survey on the Google forms platform was chosen as an additional method for working in schools.

A horizontal method was used to analyze the data from the focus group results. After systematizing the data, a search was made for the relationship in all the focus groups conducted. We checked the questions for the answers' completeness and the wording's accuracy. Questions with more than 20% unanswered questions were excluded from the analysis, which accounted for 2.7% of the total number of questions in the focus group. Since the focus groups were formed according to socio-demographic parameters, the reaction of the target groups was compared by pre-coding open questions and grouping the respondents' answers.

### Results

The study involved schoolchildren from 6 to 18 years old (41.2%) and parents (42.2%). The gender representation of respondents in the study among students was 1:1, among parents - 4.4% of men and 95.6% of women.

In the sample, the representativeness of the ethnic composition was observed by the official statistical ratio in the republic: 68.1% Kazakhs, 17.3% Russians, and 14.6% representatives of other ethnic groups (Tatars, Uighurs, Uzbeks, Poles, Germans).

In a breakdown by place of residence, participants from the urban population amounted to 27.9%, and the rural population - 72.1%. The proportion of participants in the study by region is relatively evenly represented: in the Atyrau region (31.3%), East Kazakhstan region (26.7%), Nur-Sultan (22%), and Kyzylorda region (19.9%).

Twenty people participated in interviews with informed persons from ministries, local governments, and PHC. One hundred thirty-one people participated in the focus group discussions from the school administration.

For focus group discussion, the students were divided into three age groups, and the total number of them was 371 people:

- The first group - 6–9 years old (n 129);
- The second group - 10–14 years old (n 129);
- The third group - 15–18 years old (n 111);
- In total - 371 people.

It should be noted that children in focus groups of 6 years of age were relatively few (n 24) and adolescents of 18 years of age (n 6).

Parent participation in the SHS assessment was ensured through online questionnaires selected for the Google Forms database and online focus group participation via ZOOM for in-depth discussion. The number of participants found among parents in the two formats was found to be the same. However, during the study, it was decided to conduct an online discussion on ZOOM with parents in the East Kazakhstan region since the interim analysis among parents showed that the main results do not matter in the context of all groups and regions. In total, there were 383 parents surveyed. The total number of participants was 1193 people.

According to the "European concept of quality standards for school health services and competencies of school health professionals", school health systems should take into account the principles, characteristics, and quality aspects necessary for child and adolescent-friendly health services and use them appropriately for children and adolescents at all stages of development and in all age

groups. The principles of accessibility, social justice, and acceptability are also used in the interaction between the school and parents [19].

### Social equity

The current regulatory legal acts, strategies, and policies in the healthcare system are based on the sectoral Code and the State Health Development Program for 2020-2025. It guarantees the principles of social justice and protection of citizens of the Republic of Kazakhstan, ensuring joint responsibility for protecting public health and minimizing social risks by updating the select categories of citizens in the compulsory medical insurance system, contributions for which are made by the state.

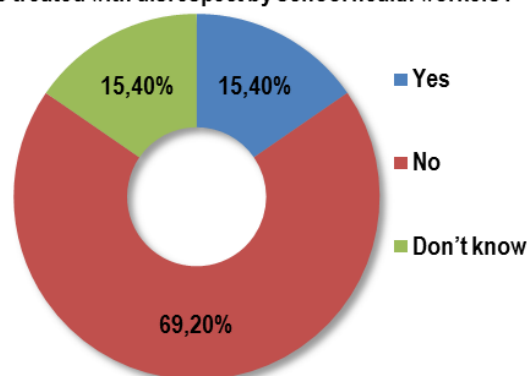
Since 2020, the beginning of a full-fledged transition to the compulsory health insurance system has been laid, which will ensure the expansion of the list and volume of medical care and drug provision, increase the availability of medical care to the most vulnerable categories of citizens, including children [5].

Under the Algorithm of actions of PHC specialists, school health workers and other persons involved in providing school health services treat all children and adolescents politely, with equal care and respect, regardless of their social status, establishing trusting relationships with them [8].

Online and face-to-face focus group discussions with students of all ages showed predominantly positive responses regarding the respectful attitude of school health workers and other professionals involved in providing student services.

However, 15.4% of school professionals believe that SHS employees disrespect students, while 69.2% of respondents deny that school nurses disrespect students (Figure 1).

**Do you know of situations where a child/adolescent was treated with disrespect by school health workers?**



**Figure 1. Social justice. Respectful attitude of school health workers. Opinion of school workers.**

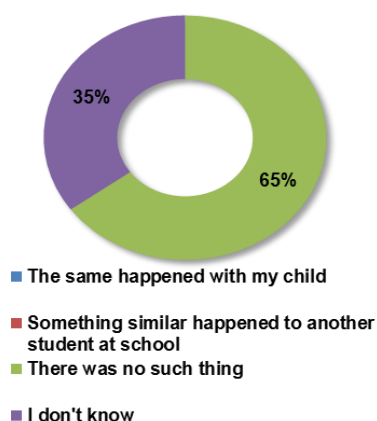
A separate opinion of one of the school specialists in the focus group on this issue is as follows:

*"Nurses think kids are lying about not feeling well to get out of school. Often, they do not understand what the child is complaining about. I think it is disrespectful to the child."*

65% of the parents surveyed unequivocally state that there has never been a disrespectful attitude on the part of a medical worker towards a student in their school (Figure 2).

The position of parents regarding the respectful attitude of SHS specialists towards students in focus groups was also overwhelmingly expressed positively.

Do you know of situations in which a child/adolescent was treated disrespectfully by school health workers



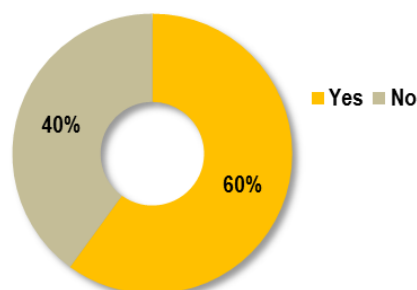
**Figure 2. Social justice. Respectful attitude of school health workers. Parents' opinion.**

Comment:

*"We as parents do not have much contact with the nurse at school ourselves. My child has never complained about disrespect on her part" - Mom of a 6th-grade student.*

*"Once, before the Olympiad, my son was overworked, and he had a headache during the lessons. I was called to the school to take him home. The nurse was an adult, about 50 years old. She met me very politely and said that the child was overtired and needed rest. Gave us recommendations and guided us." - Mom of a 8th-grade student.*

In your opinion, do school health services ensure social equity for all children, regardless of their background or other characteristics?



**Figure 3. Social justice. Parents' opinion.**

Most parents (60%) give an upbeat assessment of the provision of social equity in school medical services, while 40% of parents demonstrate ignorance of this issue (Figure 3).

Immigrants who arrived in the Republic of Kazakhstan to return to their historical homeland (oralman, ethnic Kazakhs, and members of their families) receive free medical care on an equal basis with citizens of the Republic of Kazakhstan by the list of guaranteed free medical care [7].

A review of existing regulations, strategies, and policies did not reveal transparent practices that can facilitate access to services for minorities, migrants, and refugees, as well as ensure high quality of care, including, if necessary, the provision of interpreters or intermediaries, knowledgeable about cultural issues.

#### Availability

The provision of medical care to students and pupils of educational organizations is carried out within the State

Compulsory Health Care System under the compulsory medical insurance system and does not provide any form of payment from students and parents.

Availability of SHS services for schoolchildren is ensured by conducting preventive medical examinations of target population groups, including preschool and school age children.

Preventive medical examinations of children of preschool and school age are carried out by specialists of the territorial organization of PHC with a visit to the territory of educational organizations. For preschool children who do not attend preschool organizations, preventive medical examinations are carried out at the PHC organization at the place of attachment [8].

For preventive medical examinations of schoolchildren of each age group, one month is determined in the schedule of the PHC institution, and six months to complete the examination of this age group.

Revision and evaluation of the procedure for conducting preventive examinations (screenings) are systematically carried out by the Ministry of Health of the Republic of Kazakhstan. Thus, in 2018, the Ministry of Health of the Republic of Kazakhstan made changes and additions to the Rules for conducting preventive medical examinations of target population groups under the introduction of compulsory medical insurance [6]. In particular, screening studies are excluded by questioning and testing for early detection and prevention of the risk of using psychoactive substances among schoolchildren aged 17 years and older studying in secondary general education schools and secondary specialized and higher educational institutions.

The increase in screening coverage was covered by ensuring full access to preventive examinations for the most significant number of the population at risk by age; in addition, efforts were directed at increasing the level of screening efficiency, early detection of diseases, and reducing mortality.

Most pupils in the focus group, ages 6–9, believe that the SHS office is open at convenient times. Some children said they do not go to the SHS office of their own free will, only if they are called for vaccinations or examinations. The main share of applications of children aged 6–9 years to the SHS, according to the children themselves, occurred for the following reasons:

- headache
- pain in the abdomen
- nausea
- temperature
- bruises and injuries.

Children aged 10–14 are also predominantly satisfied with working hours and the availability of SHS. However, this age group showed relative restraint in applying to the SHS office. Girls are more likely to apply to SHS than boys.

Comments:

*"Sometimes my head hurts. The nurse measures my temperature, looks at my throat and lets me go home" – Girl, 10 years old, Kyzylorda region.*

*"It is useless to go to them. The nurse is always busy" – Boy, 11 years old, Nur-Sultan.*

Pupils of the third age group aged 15–18 express their position regarding the SHS more actively. They also

demonstrate satisfaction with the working hours of the SHSS. This age group relatively rarely accesses the services of the SHS on its own, only as part of mandatory medical examinations.

*"It seems that nurses are not up to us. They always have younger students in their classrooms" – Girl, 16 years old, Semey.*

*"I used to fight a lot at school and often went to the infirmary with a bruise. Now I do not fight, and I do not go to the first-aid post," Boy, 15 years old, Kyzylorda region.*

Adolescents' awareness of the range of available SHS health services and access to them was assessed through focus group discussions with children and parents and an online survey of parents.

Students are partially aware of the range of SHS services available. The primary association with SHS services is vaccinations and health screenings. Pupils said

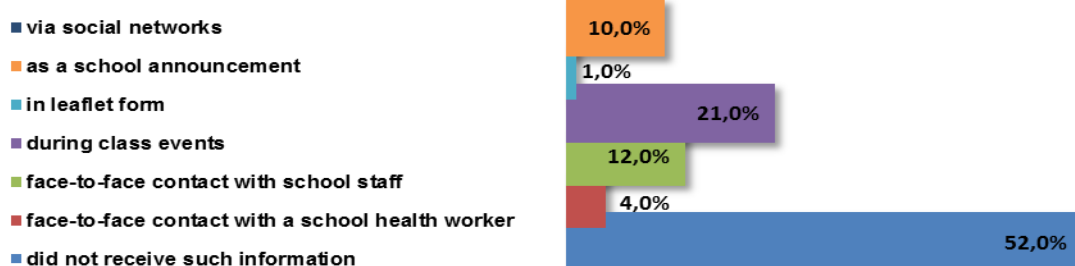
the nurse did not enter the classrooms before and did not discuss the SHS's list of services. However, due to the COVID-19 pandemic, the nurse began to attend classes more often with information about precautions and symptoms of coronavirus infection.

The level of parent's awareness of the list of SHS medical services and access to them is deficient. Only 18% of parents have ever received information about the medical services provided in the SHS, and 82% are not informed at all.

Parents received the most up-to-date information about SHS services from the form teacher and during class hours (33%) or through informed consent forms (11%).

Also, the survey results demonstrate ineffective communication between the school health worker and parents, as only 4% of the interviewed parents received information about the range of medical services from the SHS worker.

**In what form did you or your child receive information about the services provided at the school health center and how they can be obtained?**



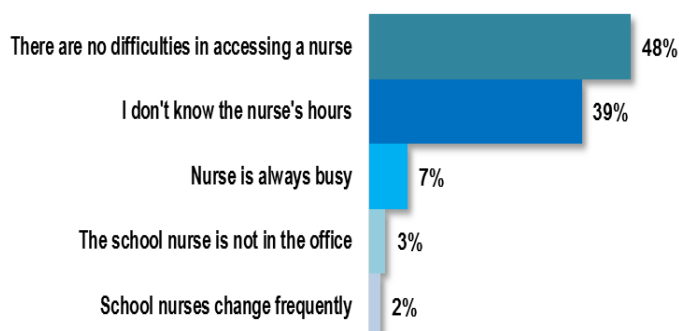
**Figure 4. Availability. Source of information about the services provided in the SHS. Parents' opinion.**

The assessment did not reveal any effective practice of informing children and parents about the services the SHS provided, based on the school and the basis of PHC. Moreover, 52% of parents received no information about the services the SHS provided (Figure 4).

We found that 41% of the legal representatives of children are not informed about the working hours of the school medical center, 41% consider the school's office hours to be convenient for children, and 7% are

inconvenient. Of the parents surveyed, 48% do not experience difficulties in accessing the school health worker, while 39% of parents are not aware of the working hours of the school health worker (Figure 5).

School workers also demonstrate low awareness (41.7%) about the working hours of the SHS in their school. In comparison, 50% of their colleagues consider the working hours acceptable, and 8.3% consider the working hours of the SHS not convenient for students (Figure 6).

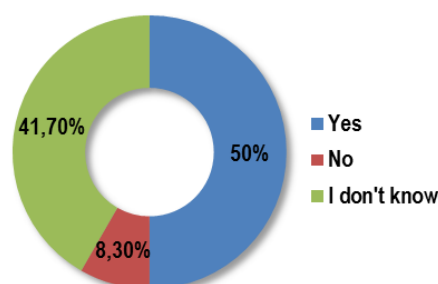


**Figure 5. Availability. Difficulties in accessing the school health worker due to hours of work or other issues. Parents' opinion.**

#### Acceptability

Guarantees for ensuring the confidentiality of medical information at any level of medical care are regulated by the leading industry act - the Code on the Health of the People and the Health System [13]. In addition, health entities provide minors aged 10 to 18 years with confidential, comprehensive assistance, including medical, psychosocial, and legal services.

**Is the waiting time for an appointment acceptable?**

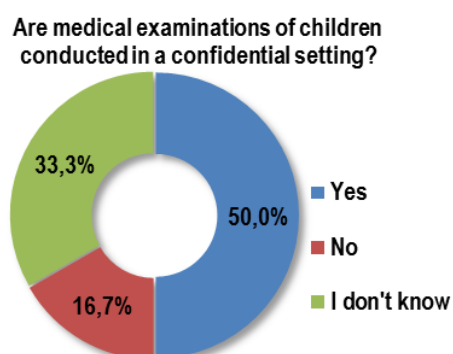


**Figure 6. Availability. SHS opening hours. Opinion of school workers.**

Focus group discussions and the results of an online survey of parents ruled out violations of the principle of confidentiality in SHS.

However, the results of an online survey among school workers (16.7%) show violations of the confidentiality of the examination at the school health center, 33.3% are not aware of this, 50% exclude violations of confidentiality during the examination of children in the SHS (Figure 7).





**Figure 7. Acceptability. Confidentiality of inspections in SHS. Opinion of school workers.**

School workers believe that ensuring the confidentiality of information work with children and adolescents in SHS is also not always observed (8.3%). Focus group discussions show that the violation of the confidentiality of the examination of information work occurs mainly during school check-ups.

School check-ups are carried out by specialists of the territorial-district PHC organization with a visit to the school base under the approved schedule, where only one month is allocated for a particular age group. In this regard, the school check-up schedule significantly limits specialists' time. In addition, the school provides facilities for preventive examinations in the form of sports halls, libraries, and other spacious facilities. In this case, specialized specialists are located in a large room at a certain distance. Even with the provision of separate classes for each specialized specialist, a large flow of children and time constraints somehow increase the risk of violating the confidentiality of the examination of children.

#### **Participation**

A review of documents and strategies in the field of SHS did not find the current practice of involving children and adolescents in individual decision-making processes under their abilities, as well as existing methods for obtaining feedback and opinions of students on their satisfaction with the assistance provided within the framework of the SHS.

The child's right to informed consent to diagnostic manipulations and treatment is observed under the current Code: minors aged 16 years have the right to informed consent or refusal to provide preventive, consultative, and diagnostic assistance, except for surgical interventions, artificial termination of pregnancy, which are performed with the consent of their parents or legal representatives [1].

#### **Efficiency and Safety**

Even though SHS specialists regularly participate in continuing education and advanced training programs provided by PHC organizations, only a tiny part of them receive training in the principles of providing youth services based on the principle of a friendly attitude, which is not systematic. In addition, at the policy-making level, SHS specialists have no mandatory requirement for mastering this program.

Focus group discussions with girls and separately with boys show that most of them are embarrassed to contact the school nurse for reproductive health issues. Among students in the pubertal period of development, there is not a single case of self-referral to a specialist of the SHS on

issues of reproductive health, physical development, and nutrition. Therefore, SHS professionals need additional skills and competencies in working with adolescents to provide them with the health care services they need.

Regarding the use of evidence-based protocols and clinical recommendations for SHS services, the healthcare system of the Republic of Kazakhstan, based on the principles of evidence, reviews and evaluates the conduct of preventive medical examinations (screenings).

SHS specialists are guided by the Standards of Pediatric Care and the Standards of Primary Health Care, which contain algorithms for the provision of medical care for children and adolescents [9, 8].

#### **Discussion**

This study describes the features and quality aspects required for child and adolescent-friendly health services. It applies appropriately to children and adolescents at all development stages and age groups. Comparable data revealed marked differences in the judgments of children, adolescents, parents, and school workers. Observed differences may arise from the lack of strategies to inform children, parents, and school staff about the work of the SHS at the local level, involving local communities and using various means and channels, and also due to the lack of confidentiality of medical examinations.

Structural units of PHC that provide SHS services do not fully use strategies to inform the school community, while parents and local governments should be directly involved in the discussion of health issues in schools; school feeding programs; family traditions can contribute to the formation of healthy lifestyle habits [3]. The protocols of intercountry meetings in NCD prevention among children and adolescents demonstrate that this trend continues throughout the CIS.

We found that during school check-ups, the confidentiality of the examination and informing students about their state of health were not fully respected. The topic of compliance with the confidentiality of medical examinations of children and adolescents has not been sufficiently studied in the literature [18]. These are mainly articles on policy statements, practice reviews, commentaries, one observational study, one qualitative study, and the author's opinion. Moreover, even if there are such, there is no age group or division into "children" or "adolescents" groups.

Relying on the ethics framework, children are recognized as active agents with their ethical interests, which concern how their best interests are interpreted but are not yet formally autonomous [13]. On this basis, children should receive confidentiality in medical examinations and take an active part in discussions and decisions regarding their care. Such experiences allow children to trust healthcare professionals, develop agency, and express their experiences and priorities in healthcare [18].

To date, when working with children, SHS specialists are guided by the Standards for Pediatric Care and the Standards for Primary Health Care, which spell out the algorithms for the provision of medical care. However, there are no regulatory standards and protocols for organizing the provision of school health services for children and adolescents in the school environment. The provision of

medical care to children and adolescents in a polyclinic and a school is fundamentally different regarding resources, the physical environment, the availability of the necessary specialists, and conditions.

Global and regional reviews of SHS have shown that, while some form of HPS exists in most countries, many such programs are not evidence-based, poorly implemented, underfunded, and limited in scope and scale [19, 11]. For the full implementation of the SHS program, it is necessary to introduce guidelines and algorithms for the provision of medical care by the doctor and paramedical personnel of the ShHS, regulating the procedure, quality, safety, and duration of the provision of SHS services.

The study allows us to make the following recommendations:

- PHC units providing SHS services should implement strategies to inform children, parents, and school staff about the work of the SHS at the local level, involving local communities and using various means and channels.
- Rules should be implemented to ensure complete confidentiality of medical examinations and student information at the SHS.
- It is necessary to introduce guidelines and algorithms for the provision of medical care by the doctor and paramedical personnel of the ShHS, regulating the procedure, quality, safety, and duration of the provision of SHS services.
- It is necessary to provide conditions for the active involvement of children and adolescents:
  - in individual decision-making processes according to their abilities;
  - in the development of programs, evaluation, and provision of services of the SHS;
  - to provide feedback on their satisfaction with the assistance provided within the framework of the work of the SHS.
- Training SHS specialists in additional skills and competencies in working with adolescents is necessary to provide them with the medical services they need.
- Provisions should be made for periodic evaluation of screening examinations for their applicability and evidence; in the absence of an evidence base, such surveys should be reviewed.

### Conclusions

Providing school medical services to children and adolescents is free of charge in full and equally and guarantees social justice and security principles. School health personnel and other professionals providing school health services treat all children and adolescents equally, regardless of their social status.

The basic principles and by-laws for providing school health services generally guarantee the confidentiality of personal information to children and adolescents and their legal representatives. When providing medical care to children and adolescents, the rule of informed consent for invasive manipulations through a legal representative is observed.

School health services are provided in a hygienically clean environment and supportive environment. SHS has the necessary equipment, supplies, and essential resources to provide the necessary services.

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