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ЕЖЕМЕСЯЧНЫЙ НАУЧНЫЙ ЖУРНАЛ

Медицинские новости Грузии
საქართველოს სამედიცინო სიახლენი

GEORGIAN MEDICAL NEWS

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GMN: Georgian Medical News is peer-reviewed, published monthly journal committed to promoting the science and art of medicine and the betterment of public health, published by the GMN Editorial Board since 1994. GMN carries original scientific articles on medicine, biology and pharmacy, which are of experimental, theoretical and practical character; publishes original research, reviews, commentaries, editorials, essays, medical news, and correspondence in English and Russian.

GMN is indexed in MEDLINE, SCOPUS, PubMed and VINITI Russian Academy of Sciences. The full text content is available through EBSCO databases.

GMN: Медицинские новости Грузии - ежемесячный рецензируемый научный журнал, издаётся Редакционной коллегией с 1994 года на русском и английском языках в целях поддержки медицинской науки и улучшения здравоохранения. В журнале публикуются оригинальные научные статьи в области медицины, биологии и фармации, статьи обзорного характера, научные сообщения, новости медицины и здравоохранения. Журнал индексируется в MEDLINE, отражён в базе данных SCOPUS, PubMed и ВИНТИ РАН. Полнотекстовые статьи журнала доступны через БД EBSCO.

GMN: Georgian Medical News – საქართველოს სამედიცინო სიახლენი – არის ყოველთვიური სამეცნიერო სამედიცინო რეცენზირებადი ჟურნალი, გამოიცემა 1994 წლიდან, წარმოადგენს სარედაქციო კოლეგიისა და აშშ-ის მეცნიერების, განათლების, ინდუსტრიის, ხელოვნებისა და ბუნებისმეტყველების საერთაშორისო აკადემიის ერთობლივ გამოცემას. GMN-ში რუსულ და ინგლისურ ენებზე ქვეყნდება ექსპერიმენტული, თეორიული და პრაქტიკული ხასიათის ორიგინალური სამეცნიერო სტატიები მედიცინის, ბიოლოგიისა და ფარმაციის სფეროში, მიმოხილვითი ხასიათის სტატიები.

ჟურნალი ინდექსირებულია MEDLINE-ის საერთაშორისო სისტემაში, ასახულია SCOPUS-ის, PubMed-ის და ВИНТИ РАН-ის მონაცემთა ბაზებში. სტატიების სრული ტექსტი ხელმისაწვდომია EBSCO-ს მონაცემთა ბაზებიდან.

WEBSITE

www.geomednews.com

К СВЕДЕНИЮ АВТОРОВ!

При направлении статьи в редакцию необходимо соблюдать следующие правила:

1. Статья должна быть представлена в двух экземплярах, на русском или английском языках, напечатанная через **полтора интервала на одной стороне стандартного листа с шириной левого поля в три сантиметра**. Используемый компьютерный шрифт для текста на русском и английском языках - **Times New Roman (Кириллица)**, для текста на грузинском языке следует использовать **AcadNusx**. Размер шрифта - **12**. К рукописи, напечатанной на компьютере, должен быть приложен CD со статьей.

2. Размер статьи должен быть не менее десяти и не более двадцати страниц машинописи, включая указатель литературы и резюме на английском, русском и грузинском языках.

3. В статье должны быть освещены актуальность данного материала, методы и результаты исследования и их обсуждение.

При представлении в печать научных экспериментальных работ авторы должны указывать вид и количество экспериментальных животных, применявшиеся методы обезболивания и усыпления (в ходе острых опытов).

4. К статье должны быть приложены краткое (на полстраницы) резюме на английском, русском и грузинском языках (включающее следующие разделы: цель исследования, материал и методы, результаты и заключение) и список ключевых слов (key words).

5. Таблицы необходимо представлять в печатной форме. Фотокопии не принимаются. **Все цифровые, итоговые и процентные данные в таблицах должны соответствовать таковым в тексте статьи**. Таблицы и графики должны быть озаглавлены.

6. Фотографии должны быть контрастными, фотокопии с рентгенограмм - в позитивном изображении. Рисунки, чертежи и диаграммы следует озаглавить, пронумеровать и вставить в соответствующее место текста **в tiff формате**.

В подписях к микрофотографиям следует указывать степень увеличения через окуляр или объектив и метод окраски или импрегнации срезов.

7. Фамилии отечественных авторов приводятся в оригинальной транскрипции.

8. При оформлении и направлении статей в журнал МНГ просим авторов соблюдать правила, изложенные в «Единых требованиях к рукописям, представляемым в биомедицинские журналы», принятых Международным комитетом редакторов медицинских журналов - <http://www.spinesurgery.ru/files/publish.pdf> и http://www.nlm.nih.gov/bsd/uniform_requirements.html В конце каждой оригинальной статьи приводится библиографический список. В список литературы включаются все материалы, на которые имеются ссылки в тексте. Список составляется в алфавитном порядке и нумеруется. Литературный источник приводится на языке оригинала. В списке литературы сначала приводятся работы, написанные знаками грузинского алфавита, затем кириллицей и латиницей. Ссылки на цитируемые работы в тексте статьи даются в квадратных скобках в виде номера, соответствующего номеру данной работы в списке литературы. Большинство цитированных источников должны быть за последние 5-7 лет.

9. Для получения права на публикацию статья должна иметь от руководителя работы или учреждения визу и сопроводительное отношение, написанные или напечатанные на бланке и заверенные подписью и печатью.

10. В конце статьи должны быть подписи всех авторов, полностью приведены их фамилии, имена и отчества, указаны служебный и домашний номера телефонов и адреса или иные координаты. Количество авторов (соавторов) не должно превышать пяти человек.

11. Редакция оставляет за собой право сокращать и исправлять статьи. Корректур авторам не высылаются, вся работа и сверка проводится по авторскому оригиналу.

12. Недопустимо направление в редакцию работ, представленных к печати в иных издательствах или опубликованных в других изданиях.

При нарушении указанных правил статьи не рассматриваются.

REQUIREMENTS

Please note, materials submitted to the Editorial Office Staff are supposed to meet the following requirements:

1. Articles must be provided with a double copy, in English or Russian languages and typed or computer-printed on a single side of standard typing paper, with the left margin of 3 centimeters width, and 1.5 spacing between the lines, typeface - **Times New Roman (Cyrillic)**, print size - 12 (referring to Georgian and Russian materials). With computer-printed texts please enclose a CD carrying the same file titled with Latin symbols.

2. Size of the article, including index and resume in English, Russian and Georgian languages must be at least 10 pages and not exceed the limit of 20 pages of typed or computer-printed text.

3. Submitted material must include a coverage of a topical subject, research methods, results, and review.

Authors of the scientific-research works must indicate the number of experimental biological species drawn in, list the employed methods of anesthetization and soporific means used during acute tests.

4. Articles must have a short (half page) abstract in English, Russian and Georgian (including the following sections: aim of study, material and methods, results and conclusions) and a list of key words.

5. Tables must be presented in an original typed or computer-printed form, instead of a photocopied version. **Numbers, totals, percentile data on the tables must coincide with those in the texts of the articles.** Tables and graphs must be headed.

6. Photographs are required to be contrasted and must be submitted with doubles. Please number each photograph with a pencil on its back, indicate author's name, title of the article (short version), and mark out its top and bottom parts. Drawings must be accurate, drafts and diagrams drawn in Indian ink (or black ink). Photocopies of the X-ray photographs must be presented in a positive image in **tiff format**.

Accurately numbered subtitles for each illustration must be listed on a separate sheet of paper. In the subtitles for the microphotographs please indicate the ocular and objective lens magnification power, method of coloring or impregnation of the microscopic sections (preparations).

7. Please indicate last names, first and middle initials of the native authors, present names and initials of the foreign authors in the transcription of the original language, enclose in parenthesis corresponding number under which the author is listed in the reference materials.

8. Please follow guidance offered to authors by The International Committee of Medical Journal Editors guidance in its Uniform Requirements for Manuscripts Submitted to Biomedical Journals publication available online at: http://www.nlm.nih.gov/bsd/uniform_requirements.html
http://www.icmje.org/urm_full.pdf

In GMN style for each work cited in the text, a bibliographic reference is given, and this is located at the end of the article under the title "References". All references cited in the text must be listed. The list of references should be arranged alphabetically and then numbered. References are numbered in the text [numbers in square brackets] and in the reference list and numbers are repeated throughout the text as needed. The bibliographic description is given in the language of publication (citations in Georgian script are followed by Cyrillic and Latin).

9. To obtain the rights of publication articles must be accompanied by a visa from the project instructor or the establishment, where the work has been performed, and a reference letter, both written or typed on a special signed form, certified by a stamp or a seal.

10. Articles must be signed by all of the authors at the end, and they must be provided with a list of full names, office and home phone numbers and addresses or other non-office locations where the authors could be reached. The number of the authors (co-authors) must not exceed the limit of 5 people.

11. Editorial Staff reserves the rights to cut down in size and correct the articles. Proof-sheets are not sent out to the authors. The entire editorial and collation work is performed according to the author's original text.

12. Sending in the works that have already been assigned to the press by other Editorial Staffs or have been printed by other publishers is not permissible.

**Articles that Fail to Meet the Aforementioned
Requirements are not Assigned to be Reviewed.**

ავტორთა საქურაღებოლ!

რედაქციაში სტატიის წარმოდგენისას საჭიროა დაიცვათ შემდეგი წესები:

1. სტატია უნდა წარმოადგინოთ 2 ცალად, რუსულ ან ინგლისურ ენებზე დაბეჭდილი სტანდარტული ფურცლის 1 გვერდზე, 3 სმ სიგანის მარცხენა ველისა და სტრიქონებს შორის 1,5 ინტერვალის დაცვით. გამოყენებული კომპიუტერული შრიფტი რუსულ და ინგლისურენოვან ტექსტებში - **Times New Roman (Кириллица)**, ხოლო ქართულენოვან ტექსტში საჭიროა გამოვიყენოთ **AcadNusx**. შრიფტის ზომა – 12. სტატიას თან უნდა ახლდეს CD სტატიით.

2. სტატიის მოცულობა არ უნდა შეადგენდეს 10 გვერდზე ნაკლებს და 20 გვერდზე მეტს ლიტერატურის სიის და რეზიუმეების (ინგლისურ, რუსულ და ქართულ ენებზე) ჩათვლით.

3. სტატიაში საჭიროა გაშუქდეს: საკითხის აქტუალობა; კვლევის მიზანი; საკვლევი მასალა და გამოყენებული მეთოდები; მიღებული შედეგები და მათი განსჯა. ექსპერიმენტული ხასიათის სტატიების წარმოდგენისას ავტორებმა უნდა მიუთითონ საექსპერიმენტო ცხოველების სახეობა და რაოდენობა; გაუტკივარებისა და დაძინების მეთოდები (მწვავე ცდების პირობებში).

4. სტატიას თან უნდა ახლდეს რეზიუმე ინგლისურ, რუსულ და ქართულ ენებზე არანაკლებ ნახევარი გვერდის მოცულობისა (სათაურის, ავტორების, დაწესებულების მითითებით და უნდა შეიცავდეს შემდეგ განყოფილებებს: მიზანი, მასალა და მეთოდები, შედეგები და დასკვნები; ტექსტუალური ნაწილი არ უნდა იყოს 15 სტრიქონზე ნაკლები) და საკვანძო სიტყვების ჩამონათვალი (key words).

5. ცხრილები საჭიროა წარმოადგინოთ ნაბეჭდი სახით. ყველა ციფრული, შემაჯამებელი და პროცენტული მონაცემები უნდა შეესაბამებოდეს ტექსტში მოყვანილს.

6. ფოტოსურათები უნდა იყოს კონტრასტული; სურათები, ნახაზები, დიაგრამები - დასათაურებული, დანომრილი და სათანადო ადგილას ჩასმული. რენტგენოგრამების ფოტოასლები წარმოადგინეთ პოზიტიური გამოსახულებით **tiff** ფორმატში. მიკროფოტოსურათების წარწერებში საჭიროა მიუთითოთ ოკულარის ან ობიექტივის საშუალებით გადიდების ხარისხი, ანათალების შედეგების ან იმპრეგნაციის მეთოდი და აღნიშნოთ სურათის ზედა და ქვედა ნაწილები.

7. სამამულო ავტორების გვარები სტატიაში აღინიშნება ინიციალების თანდართვით, უცხოურისა – უცხოური ტრანსკრიპციით.

8. სტატიას თან უნდა ახლდეს ავტორის მიერ გამოყენებული სამამულო და უცხოური შრომების ბიბლიოგრაფიული სია (ბოლო 5-8 წლის სიღრმით). ანბანური წყობით წარმოდგენილ ბიბლიოგრაფიულ სიაში მიუთითეთ ჯერ სამამულო, შემდეგ უცხოელი ავტორები (გვარი, ინიციალები, სტატიის სათაური, ჟურნალის დასახელება, გამოცემის ადგილი, წელი, ჟურნალის №, პირველი და ბოლო გვერდები). მონოგრაფიის შემთხვევაში მიუთითეთ გამოცემის წელი, ადგილი და გვერდების საერთო რაოდენობა. ტექსტში კვადრატულ ფხიხლებში უნდა მიუთითოთ ავტორის შესაბამისი N ლიტერატურის სიის მიხედვით. მიზანშეწონილია, რომ ციტირებული წყაროების უმეტესი ნაწილი იყოს 5-6 წლის სიღრმის.

9. სტატიას თან უნდა ახლდეს: ა) დაწესებულების ან სამეცნიერო ხელმძღვანელის წარდგინება, დამოწმებული ხელმოწერითა და ბეჭდით; ბ) დარგის სპეციალისტის დამოწმებული რეცენზია, რომელშიც მითითებული იქნება საკითხის აქტუალობა, მასალის საკმაობა, მეთოდის სანდოობა, შედეგების სამეცნიერო-პრაქტიკული მნიშვნელობა.

10. სტატიის ბოლოს საჭიროა ყველა ავტორის ხელმოწერა, რომელთა რაოდენობა არ უნდა აღემატებოდეს 5-ს.

11. რედაქცია იტოვებს უფლებას შეასწოროს სტატია. ტექსტზე მუშაობა და შეჯერება ხდება საავტორო ორიგინალის მიხედვით.

12. დაუშვებელია რედაქციაში ისეთი სტატიის წარდგენა, რომელიც დასაბეჭდად წარდგენილი იყო სხვა რედაქციაში ან გამოქვეყნებული იყო სხვა გამოცემებში.

აღნიშნული წესების დარღვევის შემთხვევაში სტატიები არ განიხილება.

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KNOWLEDGE OF SECONDARY SCHOOL STUDENTS REGARDING PREVENTIVE MEASURES FOR RESPIRATORY INFECTIOUS DISEASE IN TIKRIT CITY

Athraa Essa Ahmed.

Department of Community Medicine, College of Medicine, Tikrit University, Tikrit, Iraq.

Abstract.

Background: Respiratory tract infections (RTIs) have increasingly been reported as a challenging issue for school administration resulting in student absence and/or disseminated contagious pathogens. The present study aimed to characterize the knowledge and preventive measures of the respiratory tract infectious diseases in Tikrit City (Iraq).

Methods: A total of 200 male/female secondary school students enrolled in the present study. A questionnaire was prepared and directed toward assessing student knowledge regarding disease symptoms and prevention knowledge. **Results:** the students' knowledge regarding symptoms was graduated in order of high to low starting with a cough (71.7%), sneezing (63.1%), difficulty of breathing (55.1%), Running nose (rhinorrhoea) (65.2%), chest pain (41.9%), muscle pain (myalgia) (40.4%), and joint pain (arthralgia) (40.9%). The preventive measures of ARTIs were recognized by students ranging in order from using a face mask (87.6%), Proper hand washing several times daily (83.4%), Good aeration (80.3%), Vaccination (79.3%), Elimination by paper tissue (77.2%), Avoid contact with infected persons (68.9%), to avoiding crowded area (66.3%).

Conclusion: The secondary school students in Tikrit City had generally good knowledge with a good practice and a positive attitude toward prevention (RTIs) in family planning. Hence, the results highlight the important measured parameters providing a clue for the local health authorities in their awareness campaigns.

Key words. School student, respiratory tract infection, preventive measures.

Introduction.

Infections are the commonest diseases and children or adolescents are at high risk for developing infections the commonest one is the acute infections of the respiratory tract (ARIs), hence it's important for individuals, families, society, and healthcare providers [1-4]. ARIs are the most important causative factor responsible for child death [5]. Additionally, ARIs cause morbidity due to being responsible for acute illness and hospital admission, especially in undeveloped countries [6,7].

Transmission of infections is important, especially in a crowded area, such as schools and transmission are achieved by droplets usually or physically touching contaminated surfaces or handshaking with diseased individuals when sneezing, coughing, laughing, or exhaling and prevention strategy involves covering droplets and wiping surfaces with disinfectant which will minimize transmission, especially in schools [7,8].

The gold standard of treatment of ARIs is prevention to fight against ARIs to minimize their spread via controlling the

diseases [9,10]. However, prevention is unlikely to be applicable because of the cost of applicability and the unacceptability of people around the world [11]. This study aimed to assess the realization of school adolescent concerning the avoidance of ARIs and their elements. To measure the realization of school adolescent in Tikrit city concerning preventive measures for respiratory infectious disease and its Determinant.

Materials and Methods.

Study design and settings: the students enrolled in the present study were collected from two schools of a total of 200 males and females of the governmental secondary school students in Tikrit City (Iraq), during the period 15 November 2022 till 15 March 2023 using paper-based questionnaire provided by the researchers and completed by the students anonymously. Data were collected and analysed using a Statistical Package. Data expressed as mean±standard deviation. Categorical variables were presented by using frequency and percentage.

Informed consent was collected from participants' parents. All official agreements were collected from schools and ethical committees from the Tikrit University.

Results.

The interviewed participants (n=200, age 13-20 years, sex male and female secondary school students) have filled out the required questionnaire. University-graduated parents represent 47.5% and 14% of fathers and mothers, respectively. Primary school-graduated parents represent 12.5% and 37.5% of fathers and mothers, respectively (Table 1).

The causative agents for ARTIs were clearly stated by 45.5% of participants. Up to 68.9% claimed that they recognize the mode of transmission of ARTIs. ARTI's Prone victims were reported as 56.4%. Cough and difficulties in breathing are the most common symptoms recognized by participants; 71.7% and 55.1%, respectively. One-half of participants have reported knowledge regarding other symptoms including Chest pain, myalgia, and arthralgia and more than one-half of participants have reported knowledge regarding other symptoms including sneezing and running nose.

The preventive measures of ARTIs were recognized by students ranging in order from using a face mask (87.6%), Proper hand washing several times daily (83.4%), Good aeration (80.3%), Vaccination (79.3%), Elimination by paper tissue (77.2%), Avoid contact with infected persons (68.9%), to avoiding crowded area (66.3%) (Table 2).

Discussion.

This study provides important information regarding the knowledge available to secondary school students towards ARTI. The characterization of these important parameters

Table 1. Demographic parameters of studied subjects.

Parameters (n=200)		n(%)
Age (years)	13-15	69 (34.5)
	15-17	71 (35.5)
	17-20	60 (30)
Nationality	Iraqi	200 (100)
Gender	Male	91 (45.5)
	Female	109 (54.5)
Address	Tikrit 100 dar	200 (100)
Scholastic Year	First	30 (15.1)
	Second	25 (12.6)
	Third	39 (19.6)
	Fourth	46 (23.1)
	Fifth	20 (10.1)
	6th	39 (19.6)
Father Education	Primary	25 (12.5)
	Intermediate	24 (12)
	Secondary	56 (28)
	University	149 (47.5)
Mother Education	Primary	75 (37.5)
	Intermediate	27 (13.5)
	Secondary	70 (35)
	University	28 (14)
Secondary Schools	Sheikh Muzahim AL- Mustsfa	91 (45.5)
	AL-Marjan	109 (54.5)

Table 2. Participants' knowledge of acute respiratory tract infections.

	Knowledge of ARTI	N(%)
URTI symptoms	Cough	142(71.7%)
	Sneezing	125(63.1%)
	Difficulty of breathing	109(55.1%)
	Running nose (rhinorrhoea)	129(65.2%)
	Chest pain	83(41.9%)
	Muscle pain (myalgia)	80(40.4%)
	Joint pain (arthralgia)	81(40.9%)
URTI prevention	Using face mask	169(87.6%)
	Proper hand washing several times daily	161(83.4%)
	Good aeration	155(80.3%)
	Vaccination	153(79.3%)
	Using paper tissues and getting rid of them immediately	149(77.2%)
	Avoid contact with infected persons	133(68.9%)
	Avoid crowding areas	128(66.3%)
	The main causative agents for ARTIs	91(45.5%)
	The mode of transmission for ARTIs	138(68.9%)
	The most susceptible persons to ARTIs	113(56.4%)
	Most ARTI patients need treatment with antibiotics	91(46%)
	ARTI patients cured in one week	113(57.1%)
	Vitamin C plays an important role in ARTI prevention	150(75.8%)
	Among the dangerous symptoms of ARTIs are chest pain and difficulty in breathing	105(53%)
	The lung is the most affected part with ARTIS	90(45.5%)
	Bacteria cause most of the ARTIs	28(14.1%)

provides helpful insight into the future direction of counselling campaigns for secondary school students to halt the spread of infection and direct health towards better well-being status. Therefore, the present study was designed to characterize the situation of the secondary school students in our locality.

In the present study, the student's knowledge regarding symptoms was graduated in order of high to low starting with a cough, sneezing, difficulty of breathing, Running nose (rhinorrhoea), chest pain, muscle pain (myalgia), and joint pain (arthralgia). Regarding cough, completely different results were reported in a China study conducted by Wang and Fang (2020) who reported that the knowledge regarding cough changed and became similar to our results after a course of health education [12]. A slightly higher cough rate as a symptom was reported by participants enrolled in a Saudi study conducted by Saleh M (2013) probably due to the involvement of more mature students at ages greater than our study [13]. Nonetheless, fever was the commonest symptom in a study conducted by Tan et al. (2015) in a study conducted by Malaysia and fever was the cause for seeking medical help [14]. Moreover, Barrett et al. (2006), reported that nasal and throat were involved in greater extent than cough or systemic symptoms, such as headache or fever [15]. Rhinorrhea and cough were reported to be the prominent symptoms and equivocally reported symptoms by Vinker et al. (2003), and fever was the second most reported symptom related to respiratory infections [16]. These variations in our reports could be related to the fact that the sample is different since most of these studies were conducted on mature persons. Kevin et al. (2017) have reported that acute rhino sinusitis (nasal obstruction, purulent nasal discharge, facial pain) is the commonest symptom presented by ARTIs, but the samples were the general practitioners [17]. Sinusitis, Otitis media, Headache, Vomiting, Sore throat, Diarrhoea, and Fever were reported in order of the more prevalent symptoms of the common cold by a Saudi study conducted by Al-Haddad et al. (2016) [18].

In the present study, the student's knowledge regarding preventive measures was graduated in order of high to low starting with a using face mask, proper hand washing several times daily, good aeration, vaccination, Elimination by paper tissue, avoid contact with infected persons, and avoid crowding areas. Zeru et al. (2020) reported completely different stories regarding knowledge of preventive measures since participants reported using antibiotics as a preventive measure [19]. A high percentage (57.9) of responders in the Godycki-Cwirko et al. (2014) study reported that they know when to take antibiotics [20]. Mask, good aeration, vaccination, Elimination by paper tissue, avoiding contact with infected persons, and avoiding crowding areas have been weakly reported as preventive measures in a Malaysian study conducted by Dauda et al. (2019) aeration by opening windows, washing hands, wiping surfaces with alcohol were the highly scored (99.8%, 75.8%, 71.3%, respectively) [21].

Students weakly recognized the causative agent of ARTIs and well-recognized the mode of transmission for ARTIs. The susceptible persons for ARTIs are modestly recognized by students. Three-quarters of the student sample also believe that vitamin C provides prophylaxis against ARTIs. Incorrectly, one-half of participants believe that chest pain is

a symptom associated with ARTIs. Incorrectly, nearly one-half of participants believe that the lung is the most affected organ in ARTIs. Correctly only a few students believe that bacteria cause ARTIs. Approximately one-half of students believe that antibiotics required for ARTIs and treatment for one week might cure the disease. In a study conducted by Ashraf et al. (2016) reported that most patients with ARTIs were self-treated by antibiotics [22].

Conclusion.

The secondary school students have an acceptable and reasonable knowledge regarding their acute respiratory tract infections, and also the idea of the student regarding their health and wellbeing is markedly noticed. The idea behind that includes recommendations for school students to wash their hands with soap and water throughout the day, vaccinations to prevent infectious diseases, and the use of personal protective equipment (e.g., gloves, masks).

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