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Hygiene behaviour among youths before and during the COVID-19 pandemic

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Abstract

Introduction and purpose of work: For years, scientific bodies have emphasized the essential role of proper hygiene in preventing infectious diseases. However, as is well known, many do not follow basic hygiene rules. Only in the face of spreading epidemics does the society understand the need to take care of it. Such simple actions are crucial in limiting and inhibiting the effects of an epidemic.

Material and method: The results of the study were obtained on the basis of an online survey.

Results: Before the outbreak of the COVID-19 pandemic, most of the respondents washed their hands 4 to 7 times a day, which took them mainly 10-25 seconds. 91% of adolescents used soap and water to wash their hands. Almost every respondent (96.4%) washed their hands after using the toilet, about 78% after returning home, and every 5th person after contact with money. The vast majority of respondents did not use disinfectants when washing their hands was impossible. As many as 60% of teenagers covered their face with their hands while sneezing and coughing.

During the coronavirus pandemic, still the most respondents (37.5%) wash their hands 4 to 7 times a day, but as many as 32.1% do it more than 10 times a day. Almost 37% of people take about 30 seconds to do so, compared to less than 10% before the pandemic. In addition, 66.7% use hand disinfectants.

Conclusions: In the situation related to the coronavirus pandemic, an increase in hygiene has been noted in each of the categories. The current situation has prompted young people to change their habits and keep them in the future.

Key words: COVID-19 pandemic; hygiene; youths

Introduction

For years, scientific bodies have emphasized the essential role of proper hygiene in preventing infectious diseases.¹ Each of us is taught to take care of it from childhood. However, as is well known, many do not follow the basic rules of hygiene, considering them unnecessary. Especially young people seem to be downplaying the matter. Only in the face of spreading epidemics does the society understand the need to take care of hygiene. Such simple actions are crucial in limiting and inhibiting the effects of an epidemic.² Therefore, emphasis was placed on numerous educational campaigns and information about the need to comply with hygiene rules during the COVID-19 pandemic. Regularly and thoroughly washing your hands with soap and water or disinfecting your hands with an alcohol-based agent (at least 60%), avoiding touching the face area, especially the mouth, nose and eyes with your hands, as well as observing the hygiene of coughing and breathing (when coughing and sneezing, cover your mouth and nose with a bent elbow or a handkerchief) are extremely important activities in the time of a pandemic.³

Purpose

The aim of the study was to test and compare the hygienic habits of schoolchildren before and during the SARS-CoV-2 pandemic.

Material and methods

The results of the study were obtained on the basis of an online survey. 112 respondents aged 13 to 19 participated in the study. 73.2% of the respondents were women and 26.6% men. Most of the respondents are rural residents (63.4%).

Results

Before the development of the COVID-19 pandemic, 42% of adolescents washed their hands 4 to 7 times a day, 33% 1-3 times a day, and 12.5% did so 8 to 10 times or more than 10 times a day. This activity took most of them (59.8%) from 10 to 25 seconds, 27.7% of the respondents only a few seconds, 9.8% about 30 seconds, and only 2.7% longer than 30 seconds. (Fig. 1). 91.1% of the respondents declared washing their hands with soap and water, 8.9% only with water. 64.3% of the respondents had the opportunity to read the instructions for proper hand washing, but only 37.8% complied with it. As many as 57.1% of respondents did not use hand disinfectants if they could not be washed. 59.8% covered their face with their

Hand washing time before COVID-19 pandemic

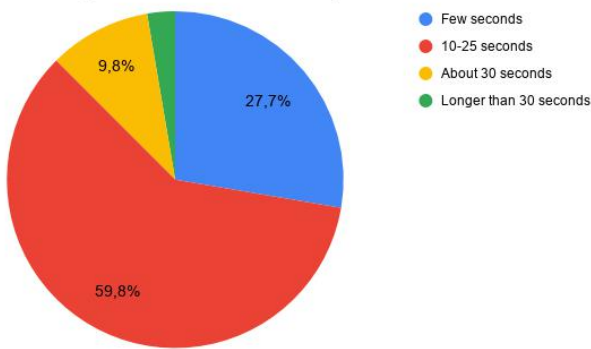


Fig. 1.

Hand washing time during COVID-19 pandemic

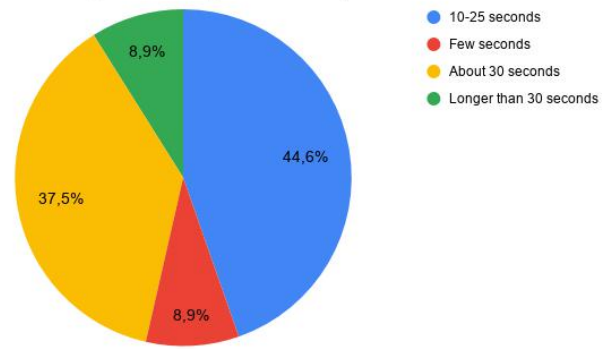


Fig. 2.

hand when sneezing and coughing, 33.9% with elbow, 1.8% with a tissue, and 4.5% did not cover their face.

Almost every respondent (96.4%) washed their hands after using the toilet, 81, 1% before eating, approximately 78% after contact with animals and returning home, and every 5th person after contact with money and before touching their face. 96.4% of young people declared washing vegetables and fruit before eating. 56.3% did not eat food after it fell to the floor, 35.7% ate if the food was on the ground for less than 5 seconds, and 8% of the respondents decided to eat it regardless of the time the food was on the ground.

During the COVID-19 pandemic, still the most respondents (37.5%) wash their hands 4 to 7 times a day, but as many as 32.1% do it more than 10 times a day, 20.5% 8-10 times a day, while only 9.8% from 1 up to 3 times a day. Almost 37% of people take about 30 seconds to do so, compared to less than 10% before the pandemic (Fig. 2). The percentage of people washing their hands with soap and water also increased - it amounts to 96.4%. The same percentage of respondents declares that they had the opportunity to read the instructions for proper hand washing, of which 74.5% follow it. 67% of respondents disinfect their hands with cleaning agents when it is not possible to wash their hands - this is an increase of over 20 percentage points compared to the period before the pandemic. The vast majority cover their face with their elbows when sneezing and coughing (64.3%), 20.5% with their hands, 10.7% with a tissue, while only 4.5% does not cover the face. More people wash their hands after touching money (45.5%) and before touching their faces (49.1%) compared to the pre-pandemic period (then 23.2% and 21.4%, respectively). Also, after returning home, washing hands was declared by more respondents (93.8%). Unfortunately, not all of them still wash their hands after using the toilet (96.4%) (Table 1).

Table 1. When do you wash your hands?

	Before COVID-19 pandemic	During COVID-19 pandemic
Before eating	81.3%	93.8%
After using the toilet	96.4%	96.4%
After returning home	77.7%	93.8%
After contact with animals	77.7%	85.7%
After touching money	23.2%	45.5%
Before touching the face	21.4%	49.1%

98.2% wash vegetables and fruits before eating them. 72.3% of respondents do not eat food after it has fallen to the ground. 83% of young people asked to assess whether they care more about hygiene at present answered in the affirmative. 89.3% also intend to pay more attention to hygiene after the coronavirus pandemic is over.

Discussion

Both pharmaceutical measures and non-pharmaceutical measures are available against COVID-19. Although pharmaceutical measures are the most highly effective strategy, it takes a lot of time to develop vaccines and antiviral medications, so they cannot control an outbreak caused by a new pathogen in the early stage.⁴ Non-pharmaceutical measures like washing hands are important to reduce the risk by establishing a barrier to curb the aerosol spread and protect susceptible populations.⁵⁶ Hand hygiene is considered a remarkably important element of infection control. Studies have confirmed the effect hand-washing imposed on the prevalence of respiratory illness⁷⁸, claiming that an appropriate hand-washing intervention could break the transmission cycle and reduce the risk between 6% and 44%⁹. Hand-washing is recommended as an inexpensive and widely available protective measure for both personal protection and epidemic prevention of some viral respiratory infections, like influenza and severe respiratory syndrome¹⁰¹¹. Unfortunately, not everyone is still washing their hands after using the toilet. Washing your hands properly should take about 30 seconds.¹² Studies of various research centers around the world emphasize the need to raise standards and practices in the field of limiting the transmission of microorganisms on the hands.¹³ Sneezing and coughing are effective aerosol generators¹⁴. That is why it is so important to cover your face with an elbow or a tissue, not with your hand when coughing and sneezing.

Conclusions

- 1) The COVID-19 pandemic has increased youth awareness of hygiene.
- 2) In the situation related to the COVID-19 pandemic, an increase in hygiene has been noted in each of the categories.
- 3) The current situation has prompted young people to change their habits and keep them in the future.
- 4) The respondents did not ignore the threat and want to prevent similar situations from occurring.
- 5) During a pandemic, the frequency and duration of hand washing increases.

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