Hand Hygiene: “It Should Be a Habit in the Kids"

Abstract
Promoting hand hygiene at an early age is the KEY, that is, children must be taught from an early age to sanitize their hands, so that it is an established habit, and in the future, they do not see it as an obligation.

Keywords: Hand hygiene, Pathogens, Sanitize

Introduction
From my experience of more than 10 years working on the issue of hand hygiene in a private health institution, I consider it important that efforts should be focused on teaching children to sanitize their hands from an early age, which is difficult to learn as a child. Forget big, we are guaranteeing a habit and not only that but that it is replicated as adults with their own children in order to have a better world. And having also participated in hand hygiene campaigns in schools on awareness, promotion, and prevention of infections in kindergarten and first-grade children, said participation was in public schools in the city of Buenos Aires. We teach why, how, and with what they should perform hand hygiene. With COVID-19 we realized that hand hygiene was truly essential, added to the use of the mask to enhance care, since transmission according to the evidence is by (contact and aerosols). Hand hygiene receives little attention within integrated programs. Therefore, there is still a need to advocate for hand hygiene at the level of policies, and education programs in schools, communities, and health care facilities. Demonstrating the importance of handwashing requires a clear understanding of its benefits and why investment should be made, and there is sufficient evidence that hand hygiene is key to infection control and prevention worldwide. Hand hygiene with soap can drastically reduce the spread of disease, particularly acute respiratory infections, and diarrhea, two of the leading causes of child death (WHO, 2019a). Despite significant progress, child survival remains a critical issue: in 2018, more than five million children under the age of five died from these causes (WHO, 2019a). Research suggests that handwashing with soap can reduce episodes of diarrhea by 28-47% and would likewise reduce acute respiratory infections, such as pneumonia, by 20-50% [1]. Handwashing can also limit disease outbreaks, such as cholera and Ebola, and reduce healthcare-associated infections by more than 50% (WHO, 2018a) [2].

Hygiene interrupts the transmission of disease-causing pathogens. For example, it can serve as a barrier in the fecal-oral route of exposure to pathogens contained in human feces, the main source of diarrheal diseases such as typhoid fever, cholera, and gastrointestinal infections. One gram of human feces can contain 10 million viruses and 1 million bacteria [3]. However, recent global estimates suggest that one in six healthcare facilities lack hand hygiene facilities both at points of care and near toilets (WHO and UNICEF, 2019) [4]. Interventions that promote sustainable changes in hand hygiene behavior in healthcare settings can prevent healthcare-associated infections and other diseases [5].

Development
It is essential that hand hygiene be promoted in schools, involving students, teachers, and school personnel, among others. In this sense, the Global Handwashing Association (GHP) established the Global Handwashing Day on October 15, 2008, when it mobilized 120 million children in 73 countries to wash their hands with soap. Every year, October 15 should be celebrated as World Hand Hygiene Day in the community/schools, raising awareness, especially among children. According to the vision of Piaget, Vigotsky, and Montessori, it is considered that a child’s learning is more significant and lasting when they are taught through playful activities, that is why we must take
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advantage of educating through creative talks, songs, or games, that is the key to grab your attention. If we achieve in children the habit of sanitizing their hands, it will be a behavior that they will repeat many times until it becomes part of their daily activities, in this way, after a while, this habit will become automatic.

The Pan American Health Organization (PAHO), the regional office for the Americas of the World Health Organization (WHO), calls for strengthening infection prevention and control to prevent antimicrobial resistance, prevent suffering, and prevent deaths. As part of the Save Lives campaign: clean your hands. Every May 5th of each year, World Hand Hygiene Day is celebrated in health centers, according to PAHO, 61% of health workers do not sanitize their hands when necessary [6]. PAHO calls for improving hand hygiene to prevent the spread of resistant bacteria that endanger the lives of people in health services. For this reason, the five moments for hand hygiene recommended by the WHO are key:

a) Before touching the patient
b) Before performing a clean or aseptic task
c) After the risk of exposure to bodily fluids
d) After touching the patient
e) After contact with the patient’s environment.

Just as there are moments for hand hygiene in health settings, there should also be specific moments for hand washing in the community and educational centers. I consider it very important that we determine which are the most critical moments to prevent infections and avoid deaths in children, in my opinion, there are four strategic and important moments.

i. Before eating
ii. After going to the bathroom
iii. After playing
iv. After coughing/sneezing

Cross-transmission through hands occurs when hand washing is ignored because if there is hand hygiene at this time, the chain of transmission of microorganisms is cut, avoiding infections between different people and surfaces [7]. Dirty hands also contaminate touched surfaces or elements, which is why it is essential to have the habit from a young age Figure 1. Understanding what is the form of transmission of germs, I am going to write my experience during training in schools for kindergarten and first-grade children, we know that children learn by imitating, with games, with images, for them if there are two people involved in this process: one that acts as a model of a certain behavior and another that imitates it, that is, the child will reproduce what he sees Table 1. The presentation (PPT) must be short with only drawings so as not to bore and distract the children, it must achieve their attention and active participation. Ask questions and each child must raise their hand before answering (see example).

Example

What are the Questions We are going to Ask?

To gain confidence, we start by asking, raise your hand who washed their hands today? Thus, we achieve that they are the ones who seek knowledge. To the one who answers yes, we congratulate him and say very well. We continue with another question. When should you wash your hands? They are going to respond, we explain that there are moments BEFORE and AFTER such as before eating, after going to the bathroom, after coughing, etc., another question is: who has pets? Everyone wants to answer, so they take the opportunity to explain that after playing with the pet they should wash their hands, and so on, they build knowledge among all. I make it bounce with a small ball, then I ask them if the floor is clean or dirty. They answer dirty, so if the ball touches the floor, it gets dirty and if I’m touching the ball my hands get dirty. In this way, it is achieved that they develop knowledge alone. They are shown that the germs are on the hands, but that they cannot be seen, they are imperceptible, with a small hand I make points that cannot be seen with the naked eye, but I show them with a UV light that the points made with light They look like microorganisms, they are surprised to see the bright spots on the party favors.

![Image](image.png)

Figure 1: Cross-Transmission Through Hands Occurs.

Table 1: Experience during Training in Schools for Kindergarten and First-Grade Children.

<table>
<thead>
<tr>
<th>Plan Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>The 15-minute talk: the presentation must only contain images (PowerPoint)</td>
</tr>
<tr>
<td>Show a video of no more than (3 minutes) “germ warfare”</td>
</tr>
<tr>
<td>Practice how to wash your hands (15 minutes)</td>
</tr>
<tr>
<td>And finally, the children will be given drawings to paint</td>
</tr>
<tr>
<td>Leave laminated instructions with the correct hand-washing technique, to be placed in the bathrooms</td>
</tr>
<tr>
<td>Leave bottles of alcohol gel or soap, so they can continue what they learned.</td>
</tr>
</tbody>
</table>

Another Question that is Asked is What Do I Need to Wash My Hands?

And there we let them look for the answer, I am only a link to search for learning. Once the answers are heard, they are confirmed. We need: water, soap, and a towel to dry our hands Figure 2.

Something Important

It is to remind them and emphasize that if we wash our hands, we will be able to be healthy, play with our friends, go to the park, go to school, etc. And what happens if we don’t: we’re going to feel bad, we’re not going to go out to play, we’re going to have a fever, etc. (Figure 3, 4). Finally, we are going to put "Hands to work" They will practice how to wash their hands correctly, we have some children pass by to wash their hands. For this, we carry a jug with water, Palanga, soap, and towels. And finally, we give them drawings to paint, and we leave them samples of alcoholic gel. Our hands play an important role in daily activity, with them we touch different surfaces and everyday objects in our home (bathroom, kitchen, food, clothing, etc.) also in public spaces, such as groups, we visit relatives in hospitals, restrooms, restaurants, etc. Our hands also serve us to prepare our food, to eat, to caress our children, our pets, etc. For 24 hours the hands permanently touch these and other surfaces. Hands are the main carriers of disease-causing germs, which is why it is very important to wash

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your hands. We can also sanitize hands with alcoholic solutions or gels, which are first-choice disinfectants, which are recommended to be used especially in healthcare establishments for health professionals. Hand hygiene is an obligation that they must comply with their patients, and it cannot be omitted under any circumstances. Hand washing minimizes the incidence of skin diseases, eye infections, and intestinal parasitic infections (Global Handwashing Partnership, 2008) [8], Figure 5, 6.

Figure 2: What Do I Need to Wash My Hands?

Figure 3: Something Important.

Figure 4: Something Important.

Figure 5: Correct Hand Hygiene and Technique.

Figure 6: Correct Hand Hygiene and Technique.

The steps for a correct hand hygiene technique (Duration 60 seconds) [9, 10],

A. Getting hands wet
B. Apply enough soap to cover the entire hand.
C. Rub the palms together.
D. Rub the palm of the right hand against the back of the left hand, interlocking the fingers, and vice versa.
E. Rub the palms of the hands together, with the fingers interlocked.
F. Rub the back of the fingers of one hand against the palm of the opposite hand, keeping the fingers together.
G. Surrounding the left thumb with the palm of the right hand, rub it with a rotating movement, and vice versa.
H. Rub the tips of the fingers of the right hand against the palm of the left hand, making a rotating movement, and vice versa.
I. Rinse hands.
J. Dry them with a single-use towel.
K. Use a paper towel to close the faucet.

Conclusion

Children are the future, if we teach them to sanitize their hands from a young age, we will achieve healthy adults, and with healthy habits, it depends on the importance that each home, school, municipality, and nation gives to hand hygiene. Governments must bet on promoting prevention and promotion.

References

7. Centers for Disease Control and Prevention (CDC) (2020), when and how to wash your hands.