Demo: How clean is your hand?

This exercise is called: 'Nimbu Pani' or lemon water. This is another funny exercise that makes everyone understand how clean / unclean one's hand is, at any given point in time.

Materials Required: *Water - safe to drink and two glass tumblers (or glass bowls)*

Step 1 Take a glass of water. Call a volunteer (who thinks his/her hands are clean) to participate in this game.

Step 2 Ask him / her to drink a few sips of water from the glass. She drinks a sip of water. (Ask her: Happy? She nods in agreement or says: yes. Happy.)

Step 3 Ask her if her hands are clean. She says: 'yes'.

Step 4 Ask her to wash her hands into a second glass, using the water from the glass where she sipped water, a little while ago. That means 'hand-washed water' is captured in the second glass. [You shall notice the colour of the water has turned like lemon water (nimbu pani).

Step 5 Now, ask the same person to drink that water (which looks like lemon water). [She refuses to drink, smiles and walks away].

Step 6 Ask her, what happened? [Discuss: It's the same water you sipped a little while ago. And you said your hands were clean. Water flew through your clean hands only. But 'how did the colour change'?]. Explain how clean our hands are. How our hands come in contact with door knob, handle, bike handle, on tables, on chairs etc. and collect dirt/ dust. These could be the same door knob, chair, table etc. that hundreds of people touched unsuspectingly. Therefore, handwashing with soap is important.

There are good videos available on these subjects. You can play.

(Play a good video on 'how to wash hands' clean and germ-free)

(Play a good video on 'proper way of sneezing and coughing')

Show Me the Science 2
Why Wash Your Hands

One critical lesson Covid-19 has taught us. 'Keeping hands clean is a very essential step we can take to avoid getting infected / infecting others'. Thus, teaching people about handwashing helps them and their communities stay healthy. Research results show that handwashing education / practice in the community:

- Reduces the number of people who get sick with diarrhea by **23-40%**
- Reduces diarrheal illness in people with weakened immune systems by **58%**
- Reduces respiratory illnesses, like colds, in the general population by **16-21%**
- Reduces absenteeism due to gastrointestinal illness in schoolchildren by **29-57%**

About 1.8 million children under the age of 5 die each year from diarrheal diseases and pneumonia, the top two killers of young children around the world. Preventing sickness reduces the amount of antibiotics people use and the likelihood that antibiotics resistance will develop. Handwashing can effectively prevent diarrhea-related sicknesses and respiratory infections (e.g., colds).

Antibiotics often are prescribed unnecessarily for these health issues. Reducing the number of these infections by washing hands frequently helps prevent the overuse of antibiotics. Handwashing can also prevent people from getting sick with germs that are already resistant to antibiotics and that can be difficult to treat. This brochure contains ideas for demonstration in a community meeting on how washing hands with soap actually keeps our hands clean and free-from disease-causing germs.

Demo: Hand-washing

People generally think washing hands with water after using toilet shall help them keep their hands clean. Unfortunately it is not so. You can demonstrate it through some fun-filled exercises. We present below, a demonstration that can help people understand why wash hands with soap after using a toilet.

Materials Required: *Fifty gram pocket of red chilli powder (mirchi powder)*

Step 1: Ask one of the community members to volunteer to help you in doing a simple exercise. Let one or two persons come forward.

Step 2: Hand him/her the red chilli powder, and a glass of water. Ask him to mix it like a paste, using his left hand.

Step 3: Once the paste is ready. Give two, three glasses of water and ask him to wash his hand very clean, until he is satisfied that his hands are truly clean. But do not give soap.

Step 4: Ask him to 'rub his left eye' with the hand that he used for mixing the red chilli powder. (The volunteer would start feeling a burning sensation in the eye. Let him talk, now).

Step – 5: Ask the community members / participants, why is he feeling the burning sensation despite the fact that he washed his hands with water to his entire satisfaction. Discuss.

Step 6: Give the volunteer soap or hand-wash liquid and ask him to wash hands clean. (You can use this opportunity to practically show how to wash hands clean, with soap)

Step 7: After washing with soap, ask the volunteer to rub his right eye. Let him say if he feels burning sensation in his right eye. He would say: No. Ask the people: why.

Step 8: This is the time to explain that washing hands merely with water after using a toilet shall not help us keep our hands clean. We need to inculcate the habit of washing hands with soap after using a toilet so that there is no trace of faecal matter remaining in the hands.

A Variant

A variant of this demo can be done using 'egg' also. Ask one participants to break an egg, and mix it in a bowl using his hands (for making omelette). Ask him to wash his hands clean to his full satisfaction – but only with water. Now, ask him (and others around) to smell the hand he used for mixing the egg. It smells egg. Why? Use this opportunity to explain the importance of hand-washing with soap after using a toilet, and before touching food. You can also explain the importance of sneezing / coughing into a hand-kerchief.

Remind people of the F Diagram that human hand can be one of the ways to transmit bacteria found in human faeces. While shaking hands, we may transmit such bacteria to each other.

Handwashing with soap destroys the outer membrane of the virus and thereby inactivates it.
As a result, handwashing with soap can help to reduce the spread of:

- Diarrheal diseases by 30% to 48%.
- Acute respiratory infections by 20%.
- Transmission of outbreak-related pathogens such as cholera, Ebola, shigellosis, SARS and hepatitis E.
- COVID-19.

It also helps in fight against the antimicrobial resistance that one gets in health care facilities.