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Letter to the Editor

Back to the basics: Hand washing is public health 101 and it works to slow down the spread of viruses

KEYWORDS
Handwashing; Public health; COVID-19

Highlights

- Despite the advice of normative health institutions such as the CDC and WHO on the importance of handwashing to slow the spread of viruses, in the U.S. there is an almost exclusive focus on social distancing, mask wearing and disinfecting the environment.
- A central component to reopening safely should be requiring hand sanitizing upon entering an establishment. Washing hands should become as automatic as wearing a seatbelt, bike helmet or refraining from smoking in public, all of which are simple and cost-effective ways to prevent injury and disease.
- Although this novel virus requires innovation in balancing control measures to maximize safety while protecting livelihoods, there is tremendous value in relying on proven strategies and ‘getting back to public health basics,’ such as hand washing.

To the Editor:

As of July 12, 2020, Latin America is the world’s new COVID-19 hotspot [1,2]. In Mexico, Brazil, Chile, Peru and elsewhere in the region the number of cases and deaths is spiraling out of control. Latin American countries are looking to the United States and Europe for lessons learned on controlling the spread of COVID-19, despite the challenges these regions have had and continue to have in fighting this pandemic. However, a combination of weak health systems, limited fiscal space and poverty prevent resource poor nations from implementing the extensive mitigation strategies being introduced in more advanced economies. Instead, they are left with low cost, yet proven, basic public health approaches such as hand washing to decrease virus spread. Might there be a lesson here for the US on incorporating hand washing more centrally into the package of mitigation strategies, instead of the current narrow focus on mask wearing and disinfecting the environment, which has resulted for some states in dramatic surges in the number of COVID-19 cases?

The Centers for Disease Control and Prevention emphasized the importance of hand washing to reduce the transmission of SARS-CoV-2 early on in the pandemic, and it is still the first approach listed on their website under protection from COVID-19 [3]. Similarly, the World Health Organization recommends universal access to hand sanitizing stations and making their use obligatory upon entering indoor facilities and public transport because improving hand hygiene helps to prevent COVID-19 transmission [4]. Despite the advice of these normative institutions, in the U.S. there seems to be an almost exclusive focus on social distancing, mask wearing and disinfecting the environment. Although this novel virus requires innovation in balancing control measures to maximize safety while protecting livelihoods, there is tremendous value in relying on proven strategies and ‘getting back to public health basics.’

We now know that the primary mode of virus transmission is through respiratory droplets and contact routes. Meaning, when an infected person coughs, sneezes or even sings or shouts, respiratory droplets containing the virus are expelled and can be inhaled by another person in close proximity through their mouth, nose or eyes. Contact transmission occurs when a person’s hands become contaminated and subsequently touch the mucosa of their
moutn, nose or eyes; contaminated hands can also spread the virus indirectly via surfaces. The primary mitigation strategy in the US to reduce transmission is a combination of mask wearing, social distancing, disinfecting the environment and to some extent personal hygiene. And yet, at present universal mask wearing to prevent respiratory infection including COVID-19 is presented as part of a ‘comprehensive package,’ and is deemed insufficient for source control if implemented in isolation of other behaviors [5]. It is important to also note that there are no effectiveness standards on mask type worn by the general public. Similarly, while there have been innovative attempts to disinfect the environment, this is a daunting and seemingly endless task with debatable effectiveness [6]. Meanwhile, studies have shown that people touch their faces an average of 23 times an hour, which is why hand hygiene should be one of the fundamental policy tools in the fight to control COVID-19 [7]. It is feasible, enforceable and low cost.

Whether a person is in Rio, Mexico City, Phoenix or New York City, we know from extensive research on mitigation of seasonal flu that personal hygiene, and specifically hand washing, is effective in decreasing virus transmission from an infected to a susceptible person [8]. This is thought to be true for other respiratory illnesses such as COVID-19 because it is a virus that is encased in a lipid envelope (essentially a layer of fat) which can be broken apart by soap, after which the virus is unable to infect its host. Hand washing also works because by rubbing hands together germs are literally pried away and rinsed off. Why then in the U.S. is there a seemingly exclusive focus on mask wearing and disinfecting the environment, i.e.: public spaces, workplaces, and schools? When the former comes with a significant degree of variability depending on the type of mask and the latter is time consuming, expensive and its effectiveness is unknown? Hand washing is cost effective and works to stop the chain of transmission.

Therefore, as the U.S. continues to underperform in its fight against COVID-19, policy makers should not be remiss in including the importance of hand washing in communications campaigns on COVID-19 to inform people on comprehensive behaviors needed to decrease their exposure and keep themselves and their communities healthy. Similarly, as businesses, places of worship, schools, restaurants and bars begin to reopen, a central component to reopening safely should be requiring hand washing or sanitizing upon entering the establishment. Washing hands should become as automatic as wearing a seatbelt, bike helmet or refraining from smoking in public, all of which are simple and cost-effective ways to prevent injury and disease [9].

COVID-19 may be here to stay. While this means many changes in the way we live, work and go to school, hand washing, whether with soap or alcohol sanitizer requires minimal effort but is guaranteed to deliver maximum impact, regardless of whether you live in Santiago, San Francisco, or Bogota or Boston.

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