

# Driving hygiene behaviors – essential elements of universal healthcare?

A virtual roundtable discussion



# Introduction

Hygiene is a critical foundation of health. Good hygiene saves lives, promotes growth and well-being among children, and significantly reduces the economic, societal, and personal toll of illness. It can also play a role in reducing socioeconomic and gender-based health disparities and inequities.

While behavior drives hygiene, the ability to be hygienic is supported by appropriate infrastructure, such as access to clean water and soap. Therefore, the largest impact from inadequate hygiene is estimated to come from LMIC countries, where access to WASH (water, sanitation, and hygiene) is limited.

Water is just one part, albeit pivotal, of the hygiene debate. It is essential not only to health, but also to poverty reduction, food security, peace and human rights, ecosystems, and education. Nevertheless, countries face growing challenges linked to water scarcity, water pollution, degraded water-related ecosystems, and cooperation over transboundary water basins. In addition, funding gaps and weak government systems hold many countries back from making necessary advancements.

Developments in pharmaceutical options in the 20th through to 21st centuries have diluted the focus on basic hygiene as an intervention. The recent emergence of novel coronaviruses causing SARS, MERS, and COVID, and the lack of immediate pharmaceutical solutions, has brought hygiene sharply to the front of our minds once again. While the emphasis of conventional hygiene practices has been on fecal-oral diseases, the COVID pandemic has prompted a focus on respiratory hygiene practices beyond handwashing/keeping clean and relevant to transmission of acute respiratory infections (ARIs).

Global community leaders have work ahead of them to expand access to good hygiene. The UN has set access to clean water, sanitation, and hygiene as a sustainable development goal, but sound sanitation services reached little more than half the world's population as of 2020.<sup>1</sup>

Reckitt Global Hygiene Institute (RGHI) and Chatham House convened a high-level virtual roundtable on the ways that changing hygiene behaviors can lead to better health, for the individual, the wider population, and the economy. The meeting took place under the Chatham House Rule.

This meeting summary reports on the findings from the summer 2022 virtual roundtable Driving hygiene behaviors – essential elements of universal healthcare? where 32 international experts, including politicians, policymakers, academics, physicians, behavior experts, and others representing international charities and Ministries of Health discussed:

- Quantifying the potential contribution of hygiene to population health;
- Understanding the motivations for change; and
- Identifying how to build hygiene into a universal healthcare system.

While around 74% of the world's population have access to handwashing facilities with soap and water,<sup>2</sup> it is estimated that handwashing with soap after fecal contact only occurs in about 26% of events globally.<sup>3</sup> Even in high-income countries where access to handwashing facilities is reported to be "near-universal", people are estimated to only wash their hands with soap after about 51% of potential contacts with fecal material.<sup>4</sup>

# Quantifying the potential contribution of hygiene to population health

## Defining hygiene

A universally acknowledged definition of hygiene is yet to be agreed upon by key stakeholders, such as academics, policy makers, and NGOs. Once a framework is in place, community activists and public health scholars can work to ensure that good hygiene has a place on the political agenda in both low-income and wealthy countries. Hygiene is often included within the WASH agenda, and a strong hygiene definition will allow it to create a clearer presence and differentiation within the current WASH parameters.

Meeting participants agreed that a concise meaning and understanding of hygiene is essential as this affects all hygiene behavior and helps to differentiate it within WASH. Language is an imperative when discussing hygiene to create a critical framework within which behavior change can happen. This definition needs to be concise to create a common benchmark that provides practitioners with a mutual understanding of what is meant by hygiene. This is the starting point for change. Equally, if political commitment at the highest level is to be secured, it is important that the industries and practitioners working in the field know what they are collectively referring to.

The group agreed that the underlying question that will set the best definition is “hygiene for whom?”. Hygiene plays different roles in different settings and sectors, and creates better health outcomes, prevents disease, delivers dignity, reduces school absenteeism, and brings with it a return on investment. A flexible definition to tackle multiple behaviors is necessary.

The evolving nature and narrative around hygiene must also be considered when deciding on a definition. In the past, hygiene has been centered around sanitation and hand washing. The present narrative has expanded to include environmental and agricultural hygiene. The future narrative will expand into climate change and environmental sustainability, respiratory and menstrual hygiene.

2 <https://ije-blog.com/2018/12/17/hygiene-gaps-between-access-and-practice-and-from-region-to-region/>

3 Wolf, J et al. Handwashing with soap after potential faecal contact: global, regional and country estimates. *International Journal of Epidemiology*. 2018. Retrieved from: <https://academic.oup.com/ije/article/48/4/1204/5238107>

4 Pruss-Ustin, A et al. Burden of disease from inadequate water, sanitation and hygiene for selected adverse health outcomes: An updated analysis with a focus on low- and middle-income countries. *Int J Hyg Environ Health*. 2019. Retrieved from: <https://pubmed.ncbi.nlm.nih.gov/31088724/>

## Effective interventions in hygiene behavior

Human behavior is influenced by a combination of environmental, societal, and cultural factors. Despite the evidence and commonplace understanding of the significance of hygiene practices, there is huge room for improvement.

Investments in intervention must go beyond research to build workable, scalable interventions, and to build “customer demand” and hygiene needs awareness in populations at a national level. Communities in rural and LMIC countries are often unaware of their right to sanitation, and that their hygiene needs are not being provided by the government. This awareness needs to be fostered within such populations.

If LMIC rural communities are enabled to become productive through technology and agriculture, they are empowered to afford basic hygiene requirements. Starting behavioral discussions early in life, within school policies addressing behaviors that increase hygiene, is a valuable approach.

Multimodal strategies for interventions are important, whether through implementation of infection prevention and control in the healthcare sector, toilets, hand hygiene infrastructure, or training for school children.

To influence behavior, visual reactive cues and nudges that trigger an emotional reaction have been shown to have worked for organizations such as WaterAid in home, school, faith, and community settings.<sup>5</sup> Understanding what motivates and influences people is vital when designing an intervention package to change behavior.

5 Gautam OP et al. Trial of a Novel Intervention to Improve Multiple Food Hygiene Behaviours in Nepal. *The American Journal of Tropical Medicine and Hygiene*. 2017. Retrieved from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5462581/>



┌ The annual cost of behavioral change promotion to those with no hand washing facilities represents 4.7% of median government health expenditure in least developed countries, and 1% of their annual aid receipts.<sup>6</sup> These costs could be covered by mobilizing resources from across government and partners and could be reduced by harnessing economies of scale and integrating hand hygiene with other behavioral change campaigns where appropriate.

# Understanding the motivation for change

## Why isn't hygiene on the political agenda?

A lack of safe water, sanitation, and hygiene results not only in loss of dignity, safety, health, and education, but also economic potential. It is at the heart of “human capital,” not only for the current working generation, but for generations to come. However, the subject of hygiene has never been near the top of the political agenda, something that needs to change.

Ensuring the health sector take the issue more seriously is imperative and building a multisectoral approach, akin to that employed for HIV and AIDS, may lead to a political breakthrough. Global communities dealt with COVID-19 quickly because of its disruptive nature to the world economy, especially western economies. This has not been the case with hygiene-related diseases prevalent in Africa such as tuberculosis, HIV/AIDS, diarrhea, dysentery, cholera and upper respiratory tract infections.

In places where basic water and sanitation are not available and hygiene is poor, public health interventions aimed at preventing diarrheal diseases are extremely cost-effective, according to the World Bank.<sup>7</sup>

6 Ross, I et al. Cost of hand hygiene for all in household settings: estimating the price tag for the 46 least developed countries. *BMJ Global Health*. 2021. Retrieved from: [https://researchonline.lshtm.ac.uk/id/eprint/4664345/1/Ross\\_etal\\_2021\\_Costs-of-hand-hygiene-for-all.pdf](https://researchonline.lshtm.ac.uk/id/eprint/4664345/1/Ross_etal_2021_Costs-of-hand-hygiene-for-all.pdf)

7 <https://documents1.worldbank.org/curated/en/971951468138877337/pdf/Priorities-in-health.pdf>

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## What evidence needs to be built?

For politicians to see the significance in hygiene, it must start with communities. It is not as tangible as other aspects of WASH, so communicating the overall benefits, savings and the return on investment must be expressed in the language that politicians and ministries of finance understand.

There are multiple papers that estimate cost-effectiveness of hygiene behaviors and the subsequent economic benefits, but these are not enough. The public health sector still needs more information on the cost-benefit of hygiene behaviors, and the return-on-investment in the workforce.

The evidence gap is lacking, leading to weak investment cases when convincing policy makers. If more evidence were collected around the economic development that hygiene supports, not only on the outcomes side, but also on the job creation aspect, it could create compelling data. Currently, this level of evidence does not exist. Fundamentally, there is a lack of science linked to policy-influencing outcomes.

The impact of preventable diseases also needs to be demonstrated. Evidence connecting this to economic development, including employment, products and services is scarce and unconvincing. The global community needs to show the catalytic effect of public sector investment in hygiene.

## Which actions need to be prioritized?

Popularizing hygiene and finding champions – politicians or celebrities – to highlight the importance of hygiene could help the elevation of hygiene on the popular and political agenda, while enabling parliamentary champions requires cross-party support. Having champions of WASH in multiple countries to form a knowledge network could also help make hygiene a priority in international and national settings.



┌ In a world where one billion people still practice open defecation and over 600 million do not have access to even a basic level of drinking water,<sup>8</sup> it is important to prioritize the basics of hygiene such as hand washing and consider a country's environmental and institutional arrangements.

# How to build hygiene into a universal healthcare system

## What is the first step required to ensure that hygiene becomes an integral part of universal health?

The majority of those taking part in the roundtable work within their communities and LMIC countries as healthcare stakeholders. The issues discussed throughout the panel were widely seen as requirements in building national healthcare systems.

Defining and quantifying the impact of hygiene measures is imperative if hygiene is to be built successfully into a national health system. While hygiene promotion can improve the benefits of water and sanitation programs in developing countries, there are few studies with data on the costs and effectiveness of individual programs, and even fewer comparing the cost-effectiveness of different promotional approaches.

In parallel, the ability to measure the impact of new physical infrastructure (latrines and wash stations, for example), and behavior change linked to using new substructures is a key piece of data that is currently missing. A consolidated measure, such as a hygiene index, could be useful.

Hygiene should be linked to universal healthcare because of the global understanding and political traction associated with it. Currently, hygiene is under the United Nations' SDG 6 umbrella. However, if there is a strong will to make hygiene part of the health agenda, there needs to be more evidence gathering and questions asked about how to motivate the health sector to act, and the best way to integrate hygiene effectively into health programs.

The investment case for making hygiene a critical element of universal health is a pivotal part of the conversation and a call to action going forward.

# Key takeaways

## Four main points are clear where action is needed

- 1 Hygiene will always be included within the WASH community. However, there is a need to strengthen its presence to ensure other areas of hygiene, such as menstrual and respiratory hygiene, have a place. Building a universal understanding of the wider scope of 'Hygiene' is essential.
- 2 It is evident that efforts are being made within the global community to link hygiene to policy-influencing outcomes. However, there is a need for more fundamental science that evaluates that link and establishes return on investment (ROI) to drive policy change.
- 3 Investments are needed beyond research. First, to build workable, scalable hygiene interventions, and secondly to build "customer demand" and hygiene needs awareness in populations at national levels.
- 4 While hygiene has long been seen as beneficial to health, it now needs to be understood as a connected part of the basic requirements in building national health systems.

# Reckitt Global Hygiene Institute

The Reckitt Global Hygiene Institute (RGHI) is a not-for-profit foundation that was established in 2020. RGHI is focused on plugging significant gaps in the health research space and improving access to information that will bridge epidemiology, public health, and behavior change.

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