



An assessment of handwashing promotion in South Asia during COVID-19

Are messages reaching everyone,
consistently understood
and achievable?

September 2020

Summary



Good hand hygiene is one of the most critical behaviours needed to reduce transmission of COVID-19. During the pandemic response, governments and development partners launched intensive and widespread campaigns using mass, social and digital media to promote handwashing with soap and water. However, there is a need for real-time data on how messages are received and understood, what factors may be driving behaviour change, and what barriers may prevent good hand hygiene.



To help address this, WaterAid conducted rapid research studies in Bangladesh, India, Nepal and Pakistan during May and June 2020, to assess the effectiveness of handwashing promotion with a focus on marginalised and vulnerable groups. Travel was largely impossible at the time because of lockdown, so the research was conducted remotely using telephone interviews in three of the countries; while in India areas were selected which had a relatively low case rate where partner staff and volunteers already in the communities could safely conduct interviews in person. This report presents a synthesis of key findings from the four research studies and proposes a series of programme and policy recommendations.

The research found that the overall reach of mass media campaigns has been very high, the majority of people found the messages clear, and most respondents knew of the importance of handwashing with soap and water. However key gaps were identified – in particular, awareness of critical times for handwashing to protect against COVID-19 transmission, exposing the limitations of mass media campaigns in communicating new and more nuanced behaviour. A further limitation (though not covered in this study) is the well-documented gap between knowledge, reported and actual practice of hand hygiene.

The research also showed that immediate behaviour change has primarily been triggered by fear. This may not be sustained as the risk (or perceived risk) of COVID-19 reduces. It is essential that large-scale hygiene promotion continues and applies different emotional triggers to motivate hand hygiene practice and sustain behaviour change.

Furthermore, the research found that a significant proportion of some marginalised and vulnerable communities faced challenges in washing their hands at home. Access to a reliable water supply, affordable soap and accessible handwashing devices urgently needs addressing.

In public places, the studies revealed that handwashing facilities frequently do not exist or are non-functional, and this will require substantial financing and appropriate management models to rectify and facilitate good hand hygiene outside the home, particularly now that lockdown has been eased in most countries.

▲ Cover photo:
Encouraging handwashing
through the COVID-19 response.
India. March 2020

Contents



Introduction	4
Discussion of key findings	7
Recommendations	21
References	24
Annex - sampling framework	25
Acknowledgements	27

► Our partner NRSP - National Rural Support Programme has installed handwashing stations in eight union councils of Hyderabad. The present situation asks for more cautious behaviour and regular handwashing with soap for 20 seconds as part of the COVID-19 response. Pakistan. June 2020



Introduction



Background

COVID-19 transmission is thought to be largely through infected respiratory droplets (e.g. from coughs, sneezes and exhalation) getting into another person's eyes, nose or mouth. This may occur directly if someone is near to an infected person. It may also occur indirectly when an infected person transfers their respiratory droplets through hand-to-hand contact, or infected respiratory droplets land on a surface that is touched by another person who then touches their face.

“While the relative contributions of inhalation and contact to transmission [of COVID-19] are unclear, the necessity of hand hygiene to disease control is unquestionable.”¹

In response to the pandemic, WaterAid and other organisations have been working with governments to promote handwashing with soap on an unprecedented scale through mass and social media campaigns and other channels. Handwashing messages have been adapted to incorporate critical times associated with COVID-19 transmission. However, there is a need for real-time information on how messages are received and understood, what factors may be driving behaviour change, and what barriers may prevent good hand hygiene being adopted in different contexts.

Scope and purpose of the research

WaterAid undertook rapid assessments of handwashing promotion in four countries: Bangladesh, India, Nepal and Pakistan. The purpose was to collect real-time information on the reach and effectiveness of these campaigns, with a focus on those who are hardest to reach and in more vulnerable settings. The aim was not to evaluate WaterAid's own work, but rather to assess national campaigns in order to provide feedback to inform and guide ongoing hygiene responses.

This regional synthesis highlights the key findings of the rapid assessment, presenting common trends and differences, and puts forward a series of recommendations for actors involved in hygiene behaviour change, along with WaterAid programmes.

Research objectives

The assessment focused on four key areas:

Communication channels	Content analysis	Motivation	Barriers
What messages have people received relating to handwashing practice (since the COVID-19 pandemic began) and from where?	How are these messages understood? Insights into the authenticity, relevance, usefulness and contextualisation of the content for different target audiences.	Why? What factors may have caused people to change their hand hygiene?	Why not? What is the current practice in different socio-economic situations? What factors limit people's ability to adopt good hand hygiene at home, institutions and in public places?

Research method

The research was conducted between 13 May and 12 June 2020. At the time of data collection a strict lockdown was still in place in Bangladesh and Nepal; in Pakistan and India the nationwide lockdown had shifted to regional and local lockdowns in hotspot areas.

The study comprised of household interviews based on a structured questionnaire, supplemented by key informant interviews. In Bangladesh, Nepal and Pakistan external agencies were contracted to carry out the research through telephone interviews (with additional social media users using a web-based survey in Bangladesh). In India, WaterAid undertook the research itself with its local partnersⁱ and interviews were conducted in person by partner staff. This was possible as partners already had staff and local community volunteers in the selected villages and urban slums able to conduct the interviews, and areas were chosen that were not under strict lockdown and were safe to access in terms of the number of COVID-19 cases at the time.

For the household interviews, a common questionnaire template was developed and used by all teams, with slight adjustments where necessary according to the context. Given the need for rapid and timely insights, relatively small sample sizes were used ranging from 111 to 797 per country. In Pakistan, this was a nationwide survey covering all provinces without any bias towards particular communities or socio-economic groups; in the other countries, respondents were purposively sampled from areas where WaterAid is working and certain vulnerable groups selected. In addition, eight to 15 key informants from local government, partners, community leaders and health workers were interviewed in each country.

A summary of the sampling framework is provided in the Annex, and full details are contained in the individual country research reports^{2,3,4,5}.

ⁱ Lok Shakti Samaj Sevi (Chhattisgarh); CARD, NIWCYD, and Aarambh (Madhya Pradesh); Pragati Jubak Sangha (Odisha); Vatsalya Foundation and Vigyan Foundation (Uttar Pradesh); PGVS (Bihar) and SVYM (Karnataka).



Participation in the interviews was entirely voluntary, and although it was not possible to sign a consent form for telephone interviews, details of this were read out. At the end of the interview key messages were provided relating to COVID-19 preventative measures and referral arrangements in the country.

Limitations

This was a rapid assessment to try and provide indicative results and point the way to areas where further, more rigorous research may be needed. However, the following limitations are noted and should be considered when interpreting the results:

- Sampling:
 - The small sample size means findings may not be generalisable to larger populations.
 - Some vulnerable groups, for example people with disabilities, were not well represented.
 - No children were interviewed and very few respondents were over 60 years of age. The views of children and the elderly were therefore not directly represented, so findings may not be relevant for designing interventions for these groups.
 - In Pakistan it was culturally very difficult for a stranger to interview a woman on the telephone, so only 6% of respondents were female. (In Bangladesh, India and Nepal the proportion of female respondents was 34%, 67% and 42% respectively).
- The survey is measuring hygiene knowledge and self-reported behaviour change, which is often much higher than actual hygiene practice (as demonstrated, for example, in a 2013 study in Bangladesh⁶).
- Interviews were conducted by telephone (except in India) rather than face-to-face, and at a time when respondents may have been under considerable stress due to the pandemic. This may have made rapport-building difficult, which can limit open responses and result in missed non-verbal cues, thus reducing the quality of data collected.
- There was limited time for training of the enumerators and piloting the questionnaire. Although every effort was made to ensure the quality of the data, it was difficult to check if questions were being asked in a consistent way by different enumerators.

Despite limitations in the research method, the value of the assessment is that it was undertaken during the first months of the pandemic, capturing people's experiences of immediate COVID-19 response hygiene campaigns as they were happening. Therefore, the assessment provides findings that have a legitimacy in their own right, and which could not be captured as effectively retrospectively.

Discussion of key findings

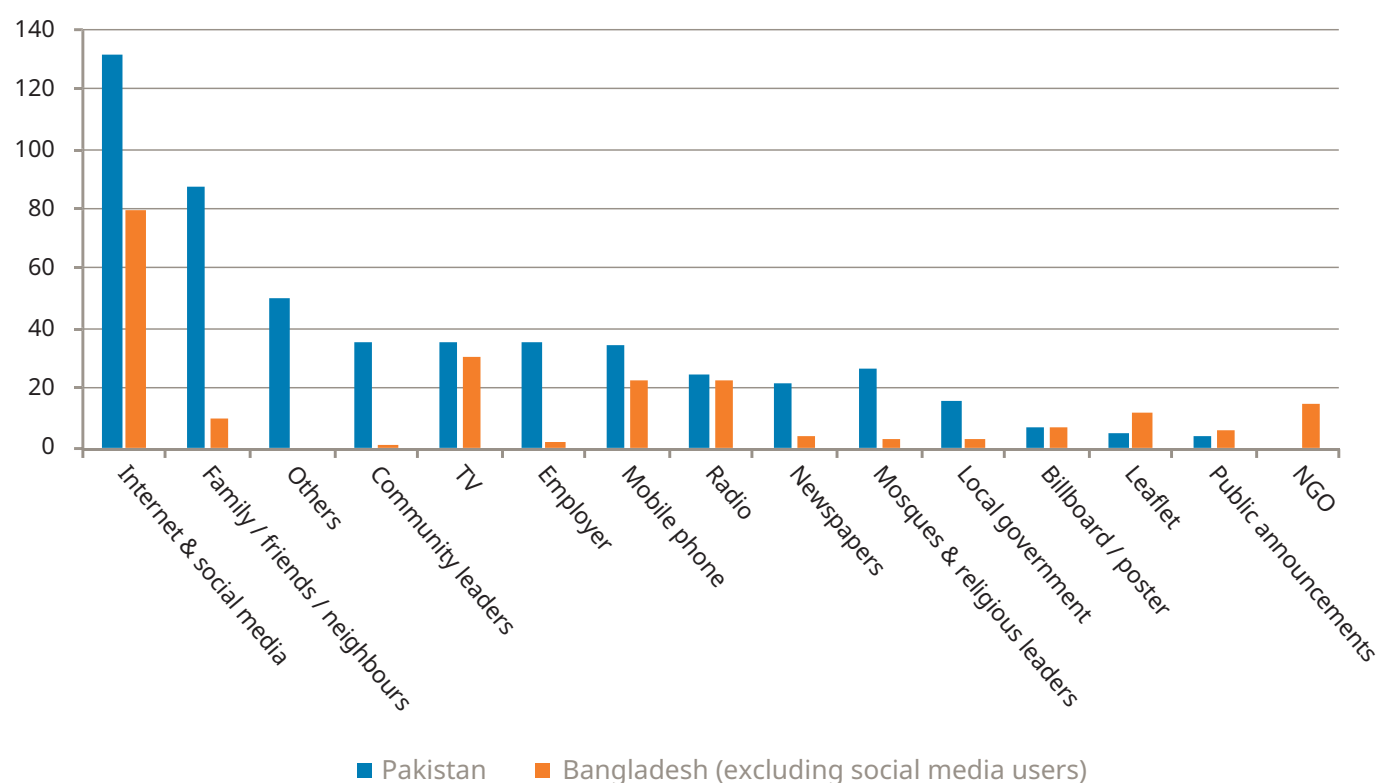
A regional synthesis of the key findings is presented against each of the research questions. This synthesis aims to draw out common findings across the four countries, while highlighting any notable exceptions and taking account of differences in the research methodology applied. Individual country research reports should be consulted for more details.

Communication channels

Key finding 1: Overall reach of mass media campaigns on handwashing was very high. The majority reported receiving messages about handwashing in the past 15 days, multiple times and from a wide range of sources.

The intensity of the campaign and variety of communication channels is illustrated in Figure 1 for Pakistan and Bangladesh.

Figure 1 - Average number of handwashing related messages received from different sources in the past 15 days (per respondent)

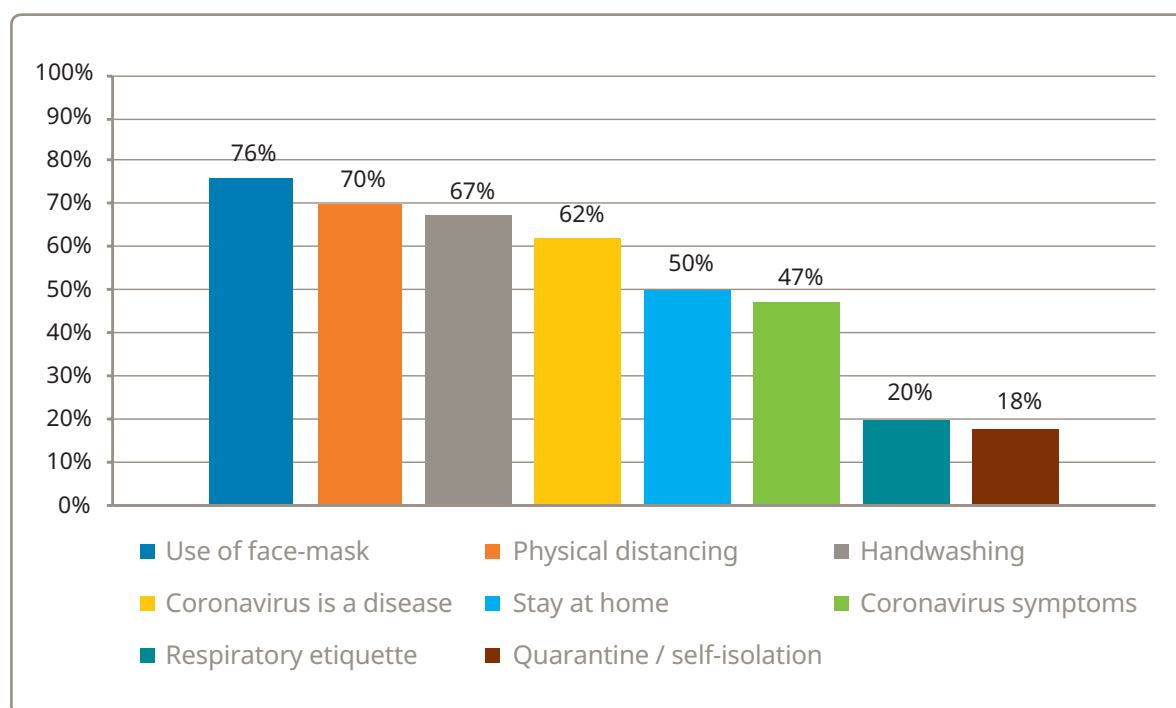




In Nepal, Pakistan and Bangladesh, the proportion of people reporting recalling a recent message on handwashing promotion was very high – the average figures (across all respondents) were 99%, 98% and 87% respectively. Similar results were found when looking at disaggregated data for vulnerable groups. This is a very encouraging result, though it is noted that this could over-report the reachⁱⁱ since some people may not want to admit they had not seen or heard any messaging (it was based on a potentially leading question: “have you seen or heard any messages about washing your hands in the past 15 days?”).

In India an open question was asked instead: “In the past one month (in April-May 2020), what messages related to Coronavirus/COVID-19 disease have you heard or read?” Multiple answers were possible, and this is likely to provide a more accurate representation. In India, the proportion of people recalling a message relating to handwashing was 67%. Use of masks, physical distancing and handwashing were the top three messages reported (see Figure 2 below). This shows that although the reach of the campaign on handwashing was high, there was still a notable gap with a third who had either not seen or heard (or who had forgotten) the handwashing messages.

Figure 2 - COVID-related messages received in India in the past month (percentage of respondents who reported receiving key messages)

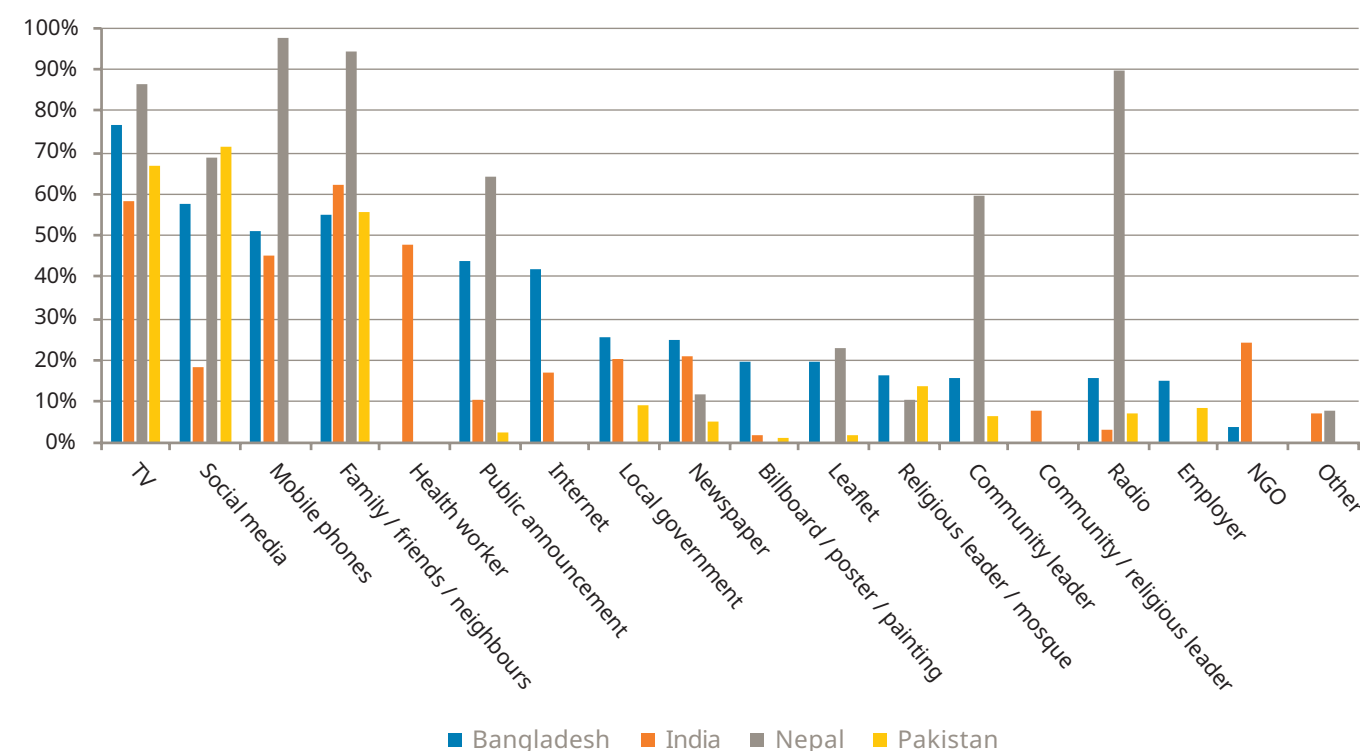


ⁱⁱ It is also possible that the reach (defined as the number of people who are exposed to a behaviour change material, message or campaign) could be even higher, since some respondents may have seen or heard the message but then forgotten it. However, a short recall period was chosen to minimise this effect, and with the frequency of messages indicated in Figure 1 it is likely to be a small difference.

The results are likely to be highly sensitive to the timing of the research, since certain messages may have been promoted more intensely at different times of the response. Also, this only considered reach and clarity (see Key finding 3); further work is needed to look at whether communications from different channels were trusted, effective and triggered behaviour change.

Key finding 2: The main sources of information on handwashing were television, social media, family/friends/neighbours, and mobile phones. Only a small proportion received information from radio (with the notable exception of Nepal) and from printed media (newspapers, leaflets, billboards).

Figure 3 - Percentage of respondents reporting receiving handwashing messages from different sources



Main sources of information

In all countries, a high percentage of people reported receiving messages via TV including amongst selected vulnerable, marginalised groups. For example, the proportion reporting messages received from TV was: 74%, 70% and 86% in certain marginalised communities in Nepal (Thami, Dalit and Sailungⁱⁱⁱ respectively) and 80% in urban slums in Bangladesh. TV ownership is obviously very high across the region and this was explicitly checked in India, where 63% of overall respondents had a television at home (almost the same as smartphone ownership, 61%).

ⁱⁱⁱ The Thami is an ethnic minority group from Dolakha District. Sailung is a remote rural area within the same district, and the Dalit are widely recognised as one of the most marginalised groups (castes) in Nepal. In this case the Dalit community interviewed were from Lahan Municipality (Terai region).

The results for social media were a lot more mixed. In Pakistan, where respondents were mostly male, this was the most frequently cited source of information overall but dropped to third in importance amongst lower income groups. In other countries, exposure to messages through social media was much lower amongst some groups, e.g. only 6.5% in Bangladesh's urban slums. In India, 43% of respondents reported not using social media.

“Technology should be used in an appropriate manner. But let's not be blind to the digital divide. The digital divide can deepen the social divide.”

[Key informant, national NGO in India]

Mobile phones were a common source of information in the region with information received by text messages or caller-ring back tone (CRBT). Given that many people also access social media and internet via their phone (reported separately), the importance of phones for mass media campaigns is even more significant.

A fourth channel scoring highly in all four countries was messages received from family/friends/neighbours. This underlines the importance of communication between peers who are (presumably) a highly-trusted source and who also provide two-way dialogue to question and discuss messages being promoted. At the same time, it could result in some instances in the spread of inaccurate information or rumours.

Channels not widely used

Messages received by radio were low in all countries except Nepal. In Nepal, key informants emphasised its importance because radios are affordable to most of the population and can be used to disseminate messages in the local language.

With the exception of India, a low percentage received messages from health workers - but since this research was undertaken during the lockdown period, this may now have changed. Many key informants in Nepal noted the importance of face-to-face promotion through community health volunteers; in Bangladesh 20% recommended door-to-door campaigns; and in India 44% said they would like to receive messages from health workers in future^{iv}.

A low percentage received messages from religious leaders, which may also be because it was difficult or impossible to attend places of worship during lockdown. But in Pakistan and Bangladesh key informants noted that religious leaders can have a significant influence on people's behaviour, and their role could be encouraged more in the next phase of the response. A key informant in Pakistan noted that some clerics spread false rumours relating to COVID-19, which is another justification for reaching out to them to provide accurate information.

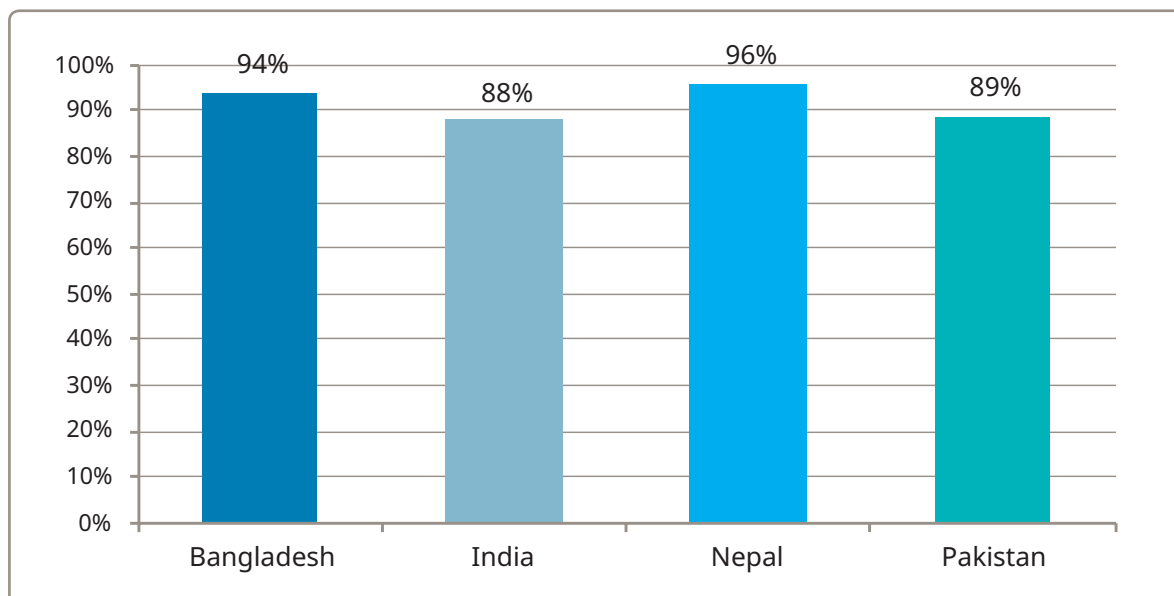


^{iv} In India, respondents were asked how or from whom would you like to receive messages on handwashing in the future. Multiple answers were possible. 349 (44%) mentioned health workers (either ASHAs (Accredited Social Health Activists), or *anganwadis* who work in early child-care centres) as one of their answers.

Content analysis

Key finding 3: The vast majority of respondents reported handwashing messages were clear.

Figure 4 - Percentage of respondents reporting handwashing messages were clear



It is possible that this could be over-reported, as some respondents may not want to admit they didn't fully understand, and comprehension of the message was not verified during the interview (the question asked was simply: *"in your opinion was the message(s) clear?"*). However, it is insightful to look at the reasons given by a minority on why messages were only partly clear or confusing. Reasons included: too many different messages, illiteracy, font was too small, blind/partially-sighted, too busy to read/listen, or message didn't seem relevant. While this may be a small proportion of the respondents in this survey, if a similar proportion applies nationwide in each country it would represent a large number of people. Furthermore, those who found messages only partly clear included some of the most marginalised, who may also be more vulnerable to infection. Therefore, it is important to address this feedback in designing future mass media campaigns. As people return to work post-lockdown, being *"too busy to read or listen"* could become a more common problem.

Further work is needed to look at accessible communications for people with different types of disabilities, and communications targeted at children. In Nepal, for example, a sign language interpreter is used for all messages broadcast by the Ministry of Health and Population, via television and internet. However, a representative from the Association of People with Disability noted that in general messages are not always clear, and braille and sign language are not widely used.

Appealing aspects of messaging (India):

- Simple language: **45%**
- Use of video: **42%**
- Clear messaging: **36%**
- Use of pictures: **35%**
- Use of songs/jingles: **34%**

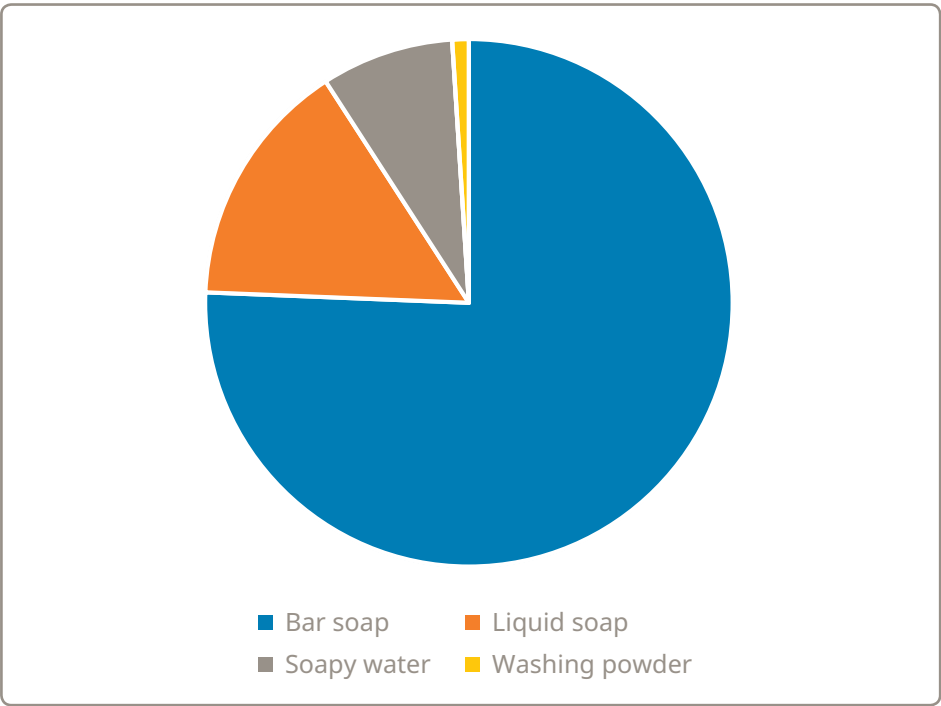
Key finding 4: Knowledge on washing hands using both soap and water, and for at least 20 seconds was very high.

These aspects of handwashing practice have been clearly communicated, or knowledge was already high pre-COVID. In response to the question: *“what do you use to wash your hands at home?”*, nearly all respondents reported *“soap and water”* (99% Bangladesh; 92% India; 96% Nepal; 84% Pakistan). In Pakistan, where the result was a little lower, most of the other respondents (11%) reported using sanitiser gel, so the proportion reporting *“water only”* or *“with water and ash”* was very low (4% and 0.4% respectively).

In response to the question: *“any other information you can provide about how you should wash your hands?”* most respondents (with the exception of Pakistan*) reported *“for 20 seconds or more”* as one of their answers (89% Bangladesh; 74% India; 80% Nepal; 42% Pakistan).

Additional information was collected on the type of soap used, and Figure 5 shows the results for India as an example. While a bar of soap remains the most common product, a significant number reported using liquid soap (which has become an aspirational product because of successful advertising). However, this is highly variable according to location and socio-economic status. For example, in Nepal, liquid soap was used by 16% of respondents overall, but only one person out of 97 respondents in Dolakha District (Thami & Sailung) reported using it.

Figure 5 - Type of soap used for handwashing at home (India)

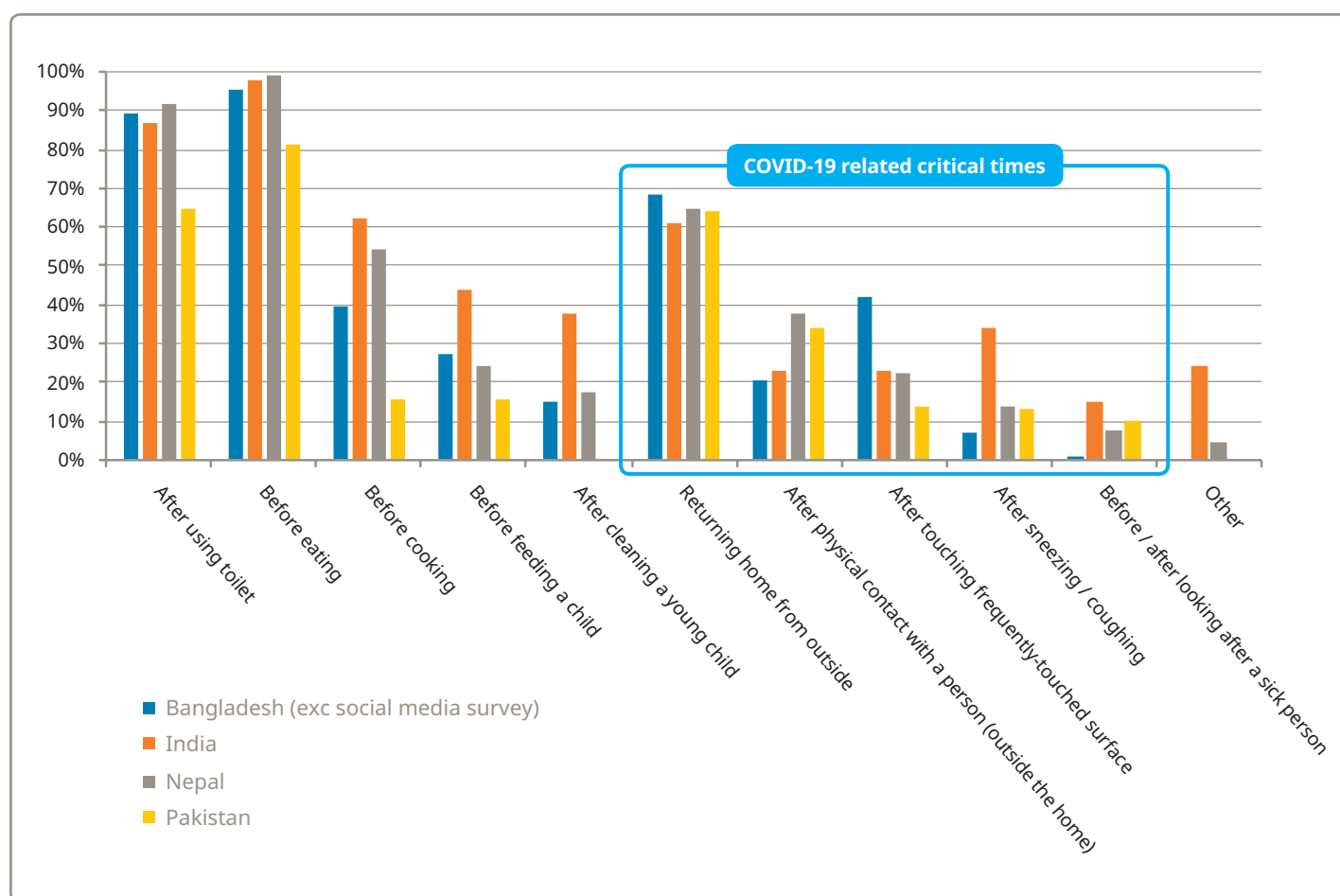


*In Pakistan, only one answer was recorded to this question rather than multiple responses, which may account for the lower percentage. Also, a later question in the survey asked: “How long do you wash your hands for?” and 75% of respondents in Pakistan replied for 20 seconds or longer, indicating that awareness of this message may be higher when prompted.

Key finding 5: There are significant gaps in knowledge of the critical times for handwashing. With the COVID-19 pandemic the “critical times” for handwashing have doubled from five to about ten, which makes it a complex behaviour to convey in a short message.

Existing key times for handwashing are mainly aimed at protecting against faecal-oral transmission of pathogens. The two key times which scored highly were “before eating” and “after using the toilet”, followed by “before cooking”. Knowledge on handwashing in relation to child-care (before feeding, and after cleaning child faeces) was low. These results were quite consistent across all four countries – see Figure 6 below. This is compared with existing data from the Bangladesh National Hygiene Survey 2018⁷ in Table 1, which indicates^{vi} that either there has been a rapid increase in knowledge in recent months, or that self-reported knowledge is over-estimated.

Figure 6 - Percentage of respondents reporting critical times for handwashing



^{vi} It is acknowledged that the sample size is vastly different and the National Survey applied a much more rigorous methodology, so this is only an indicative comparison.

Table 1 - Knowledge of critical times for handwashing in Bangladesh
- comparison with the National Hygiene Survey (2018⁷)

Indicators	National Survey	Rapid assessment
Before preparing food/ serving	36%	63%
Before eating	40%	94%
Before feeding the baby	15%	57%
After defecation	55%	90%
After cleaning the child's anus	9%	45%

Figure 6 also shows data for the new critical handwashing times, related to protection against COVID-19 transmission. Quite a high percentage of respondents were aware of the need to wash hands after returning home from outside which could be considered a success; but other times (contact with a sick person; touching frequently touched surfaces; after sneezing/coughing) were much lower and indicate more work needs to be done on this.

That said, there are some qualifications to these behaviours. Firstly, regarding handwashing after coughing/sneezing the hygiene behaviour being promoted is more about respiratory hygiene (covering your face with your elbow or a tissue) and now wearing a face mask. Handwashing practice related to putting on and taking off a mask was not even covered in the survey, as scientific advice on mask use was not widely agreed or promoted at the time. Secondly, frequently-touched surfaces are difficult to define. In some public places cross-contamination risk can be minimised (e.g. contactless taps for handwashing facilities); but in other cases (e.g. door handles) regular disinfection is probably the best strategy as it is not realistic to wash your hands every time you open a door.

In summary, handwashing with soap has become a relatively complex behaviour to promote, and key times may be poorly understood without accompanying support, for example training by community health workers. A new C-diagram has been proposed⁸ to explain COVID transmission, supplementing the long-standing F-diagram for diseases transmitted by faecal-oral pathways, but this may need further refinement and is beyond the scope of most mass media campaigns.

“Key moments for hand hygiene around respiratory viruses will be distinct. Ensuring convenient and accessible handwashing stations in kitchens and near toilets may improve hand hygiene for key moments for faecal contact, but are inadequate for the challenges posed by respiratory viruses where more attention may be needed on entering or leaving the household, public places after high-touch surface contact or after coughing or sneezing.”¹

Motivation

Key finding 6: Current behaviour change is being driven by fear of COVID-19. This may be very effective in the short-term, but is unlikely to lead to sustained behaviour change after the number of cases and risk (or perceived risk) is reduced.



During the COVID-19 pandemic, most respondents reported making changes to their handwashing behaviour at home ^{vii} (95% Bangladesh; 76% India; 97% Nepal; 86% Pakistan). Fear of COVID-19 was the primary motivating factor, as shown in Table 2.

Table 2 - Reasons for changing handwashing behaviour

Reason (multiple answers possible)	Bangladesh ^{viii}	India	Nepal	Pakistan
Fear – protect myself	92% (91%)	77% / 69% ^{ix}	99%	85%
Protect family/loved one	71% (34%)	39%	47%	55%
Cleanliness	63% (37%)	37%	59%	28%
Following instructions	36% (11%)	15%	14%	23%
Conformity/respect	14% (0%)	5%	2%	3%
Handwashing facilities available	25% (10%)	5%	10%	5%

This is not a surprising result, but an important point. How do we change this into sustained behaviour change? After fear, the highest reported motivations for handwashing were protecting family and loved ones, and desire for cleanliness. These may have longer term relevance, and hygiene promotion campaign packages will need adjusting to trigger these (and other) motives.

Key informant interviews in Nepal highlighted two other relevant points. One is the resistance to change amongst the elderly population, who are one of the groups most vulnerable to COVID-19.

“Until today, we did not wash our hands with soap and nothing happened. Why should we wash our hands with soap and water at this age? We don’t need to make our hands look beautiful by washing hands with soap.”

[Nepal, elderly person]

^{vii} A similar question was asked for handwashing in public places and institutions. In India, for example, the proportion of respondents reporting changing their handwashing practice in public places, at work, and at facilities (institutions) was 50%, 45% and 46% respectively. However, access outside the home was limited during the lockdown period, so these results may not present the complete picture.

^{viii} Bangladesh data in brackets is for the 111 rural and urban slum respondents only. These are more in line with findings from the other countries. The high number of social media users (239) included in the overall result for Bangladesh significantly changes the figures here.

^{ix} Two separate answers were recorded in India – fear of Coronavirus (77%) and need to protect self from Coronavirus (69%).

Another respondent in Nepal shared a story of how her husband’s behaviour changed due to drinking alcohol, causing him to forget/ignore practices such as social distancing and handwashing. This would be worth following-up to see whether this issue is widespread and needs to be addressed in future hygiene promotion efforts with specific target groups.

Barriers to handwashing

Key finding 7: A significant proportion of some marginalised/vulnerable groups reported challenges washing their hands with soap and water at home.

Overall, the number of people reporting factors that prevent (or make it difficult) to wash hands at home was quite low (11% Bangladesh; 15% India; 17% Nepal; 11% Pakistan). However, as Figure 7 indicates, this was much higher amongst some marginalised/vulnerable groups.

Figure 7 - Percentage of respondents reporting barriers to handwashing at home (select marginalised / vulnerable groups)

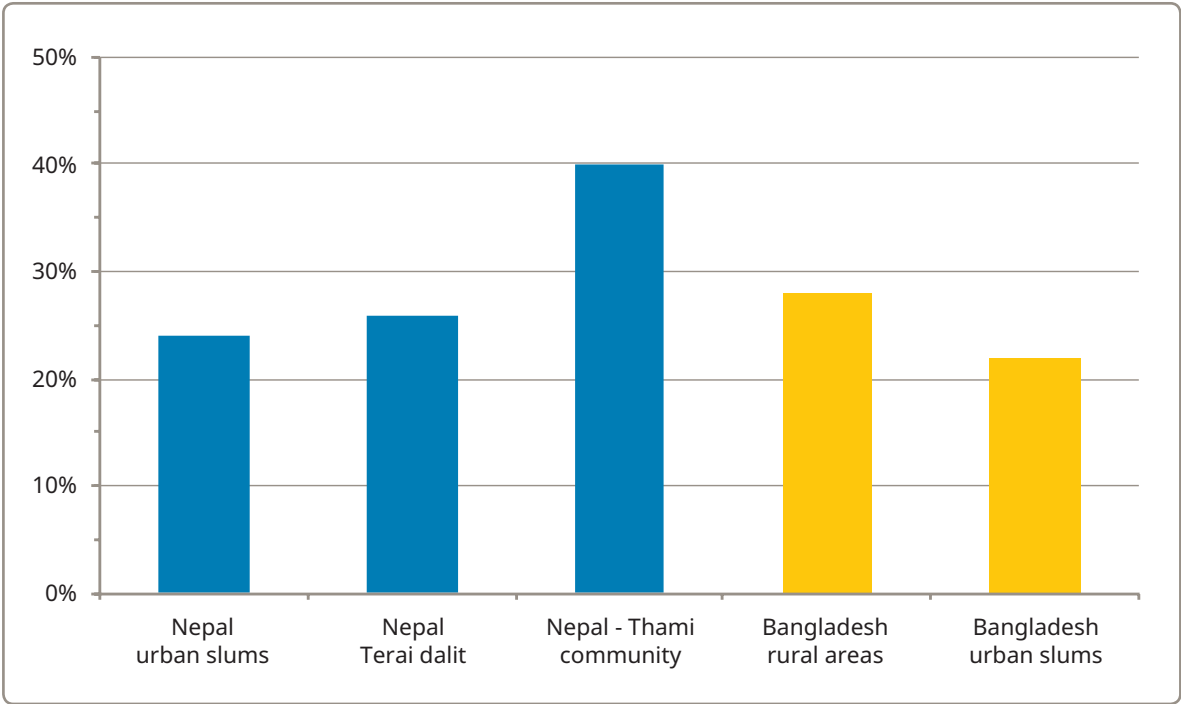


Table 3 (below) indicates the type of barriers that people face to handwashing at home. In Bangladesh, Nepal and Pakistan the prevailing factor reported was soap being too expensive (sometimes leading to it being prioritised for uses other than handwashing) or not available. Availability of soap may have since improved (post-lockdown) as supply chains recover and people have more regular access to shops. However, the problem of affordability is likely to continue or even get worse, as the pandemic has created widespread unemployment and economic hardship.

“Buying soaps is not the priority of poor people who are struggling for their daily dinner.”

[Key informant, Sailung, Nepal]

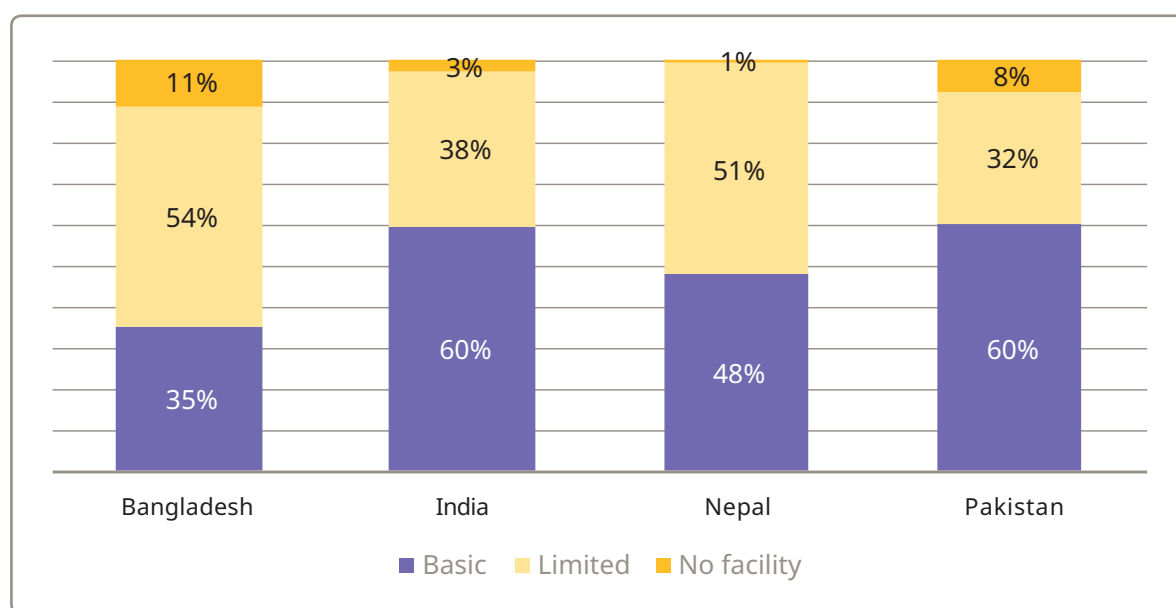
Issues relating to water supply (reliability, cost, no piped water connection) also featured regularly. For comparison, existing UNICEF/WHO Joint Monitoring Programme (JMP) data is presented below (Figure 8) showing the high proportion of households who have a handwashing facility on the premises, but without soap and water (defined as limited service level). These are national averages. A World Bank study in Pakistan⁹ found that 46% of the rural and 83% of the urban population has access to basic handwashing facilities; but amongst the poorest households this drops to just 17%.

Table 3 - Barriers to handwashing faced by respondents at home

Multiple answers possible. This is the percentage of those facing challenges, not the percentage of all respondents.

Type of barriers	Bangladesh	India	Nepal	Pakistan
Soap not available	44%	26%	60%	63%
Soap too expensive	39%	21%	62%	66%
Soap prioritised for other purposes	14%	8%	10%	43%
Water not available/reliable	28%	15%	18%	40%
Water too expensive	14%	-	11%	35%
Water prioritised for other uses	8%	-	6%	18%
No piped water supply	14%	24%	5%	12%
Water is dirty	-	-	6%	4%
No device for washing hands	6%	-	10%	3%
Handwashing device is broken	-	-	-	2%
No place for washing hands ^x	-	51%	-	-
Other	3%	11%	2%	2%

Figure 8 - JMP service levels for hygiene, 2017 ¹⁰



The survey also looked at the type of water source/device people used for washing their hands at home, in order to see whether this could constitute an additional barrier. Table 4 below shows that a high proportion are washing their hands at the tubewell or from a bucket without a tap. This may not be seen as a “barrier” since it is a long-established norm, but it can compromise the ability to wash both hands together thoroughly with soap and flowing water.

Table 4 - Source of water for handwashing at home ^{xi}

For Bangladesh, India and Pakistan multiple answers were possible so the total is greater than 100%

Q: when washing your hands [at home] what water do you use?	Bangladesh	India	Nepal	Pakistan
Piped water supply with tap	57%	33%	38%	72%
Stored water with tap	39%	12%	28%	
Stored water without tap	19%	54%	5%	33%
Directly from the handpump/tubewell	29%	23%	28%	34%
Other	3%	3%	1%	20%

^{*} In India the most common barrier was no place for washing hands. This represents a combination of factors – people may associate handwashing space with a sink with water connection which is not always available; in other crowded homes there may simply not be enough space or inadequate drainage provision.

^{xi} Table 4 shows average numbers from all respondents. The percentage with piped water to their home is much lower in certain communities, e.g. only 17% from rural respondents in Bangladesh.

Key finding 8: In many public places and institutions there are either no handwashing facilities, or they are non-functional.



The number of respondents reporting barriers to handwashing outside the home was roughly twice that of those facing barriers at home. The exact numbers may not be accurate given that access outside the home was restricted during the period of the survey, but the range of places where people reported barriers is insightful (Table 5, below). Barriers to handwashing existed in locations such as communal/public toilets, schools and healthcare facilities where handwashing facilities should have been in place pre-COVID. This is backed up by external data, for example the 2018 National Hygiene Survey in Bangladesh⁷ found that almost 15% of schools did not have water and soap available inside or near the toilets.

It is less surprising, though still an urgent issue to address, that barriers to handwashing exist in places such as markets, public waterpoints and public transport hubs, where there is now renewed focus due to the pandemic^{xii} since there are a lot of frequently-touched surfaces in these locations and often over-crowding, presenting a high risk to both workers and users/visitors.

Table 5 - Public places and buildings where people reported challenges in handwashing

Multiple answers possible. This is the percentage of those facing challenges, not the percentage of all respondents

Public places and buildings where barriers to handwashing exist	Bangladesh	India	Nepal	Pakistan
Communal/public toilets	48%	27% / 31% ^{xiii}	14%	11%
Public water points	33%	31% (rural)	12%	16%
Market	87%	77% (urban)	16%	12%
Public transport	59%	28% (rural)	6%	8%
Schools (most shut at time of survey)	15%	-	3%	1%
Healthcare facilities	20%	-	4%	5%
Others	-	40% (work)	1%	1%

^{xii} WHO issued a recommendation to all member states on 1 April 2020 that they should provide universal access to public hand hygiene stations and make their use obligatory on entering and leaving any public or private commercial building and any public transport facility; and improve access to hand hygiene and practices in health care facilities¹¹.

^{xiii} Data for India: 27% in public toilets (urban areas) and 31% in community toilets (rural areas).

Table 6 (below) shows the reasons given for challenges in handwashing in public places and buildings – a significant proportion reported handwashing facilities were not fully functional (broken, no water, no soap) or difficult to access, which raises concerns about the sustainability of such facilities.

Table 6 - Barriers to handwashing faced by respondents outside the home

Multiple answers possible. This is the percentage of those facing challenges, not the percentage of all respondents

Reasons	Nepal	Pakistan	India
No handwashing facility	71%	30%	69%
Handwashing facility broken	29%	27%	-
Handwashing facility difficult to access	15%	24%	26%
Handwashing facility difficult to use	15%	16%	-
Handwashing facility unclean	26%	16%	15%
Queue is too long	2%	7%	-
Handwashing facility too close – fear of COVID-19	1%	2%	-
Water not available	43%	15%	76%
Soap not available	39%	15%	75%



► To combat the spread of coronavirus, WaterAid Pakistan have installed four handwashing stations at various locations in Muzaffargarh, Punjab, with over 5,000 estimated daily users. April 2020



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Recommendations

Designing and implementing hygiene campaigns

- 1. Further evidence (e.g. formative research) is needed on the psychological, social, economic and environmental drivers of COVID-19 related hygiene behaviours for different target groups, in order to design effective campaigns that target a wider range of population groups than usual, and effectively promote multiple behaviours.** This survey was limited to handwashing behaviour only and did not cover other hygiene behaviours being promoted for protection from COVID-19 such as physical distancing, surface cleaning and use of face masks. One of the conclusions from a review of the Ebola response in Liberia was that even during an emergency situation educating populations about the health risks and benefits of different behaviours is not enough, and rapid research methods are needed to explore behavioural determinants¹².
- 2. Mass media campaigns need to be combined with face-to-face communications as soon as safely possible to reinforce messaging and reach those who may be left behind** – e.g. through community health workers, schools and religious leaders. TV and mobile phones are effective for reaching large populations in the South Asia region, but respondents wished to receive messages directly from trusted individuals^{xiv}. Also, handwashing behaviour is a relatively complex behaviour to promote, with an increasing number of critical times during the COVID pandemic and the importance of correct handwashing practice, which is difficult to adequately communicate through mass media. Investment in building the capacity of hygiene promotion cadres within local level institutions will enable rapid response to future outbreaks.

“Organisations that invested in strengthening local institutions and community engagement are seeing the results now. The efforts really paid off during the pandemic response”

[Key informant from national NGO, India]

^{xiv} A briefing paper from DFID¹³ noted that “during Ebola it was local community organisations and local (not central) governments that convinced people to change behaviours. The level of trust in ‘authority’ turned out to be the most valuable commodity.”

- 3. It is essential to develop hygiene campaigns that target the most marginalised, who may not be reached by mass media, digital or social media campaigns, and those who are most vulnerable to COVID-19, including people with disabilities, the elderly, young children and those living in remote or hard-to-reach areas.** Messages need to be adapted to accessible formats and demonstrate behaviours that are achievable (e.g. for people with limited resources, in high density areas or with different impairments). Communication styles and media need to be appropriate to different ages so that they reach, are understood and motivate behaviour change across different groups, particularly the most vulnerable. People representing different marginalised or vulnerable groups must be involved in the design of such campaigns.
- 4. To ensure that messaging continues to have an impact, it is necessary to incorporate a wider range of motivational triggers to influence behaviour beyond the immediate pandemic outbreak and response.** Communication needs to switch from using fear of the virus to using other motivations that showed a high response such as nurture (caring for loved ones) and pride/disgust (desire for cleanliness).
- 5. Evidence generation on the impact of behaviour change campaigns and advocacy for continued resourcing and implementation of hygiene campaigns must be prioritised to ensure progress made to change behaviour is not rolled back.** The World Health Organization (WHO) currently expects that the COVID-19 pandemic may take two years to pass¹⁴. Campaigns will be required to extend and sustain hygiene practice, particularly amongst those most at risk. Handwashing with soap also continues to be one of the most cost-effective public health measures to prevent other respiratory and diarrhoeal diseases. Yet learning from previous pandemics such as Ebola shows that resourcing of large-scale hygiene behaviour change is often withdrawn after the peak of the crisis passes, resulting in rapid slippage in behaviour.



◀ Handwashing facility.
COVID-19 response.
Bangladesh. April 2020



Access to hygiene supplies, facilities and essential water and sanitation services



6. Access to sustainable and accessible handwashing facilities in households, schools, health centres, work and public places needs to be accelerated, accompanied by innovation in non-touch handwashing facilities. Although the proportion of the population in South Asia without access to handwashing facilities with soap and water has decreased from 59.5% (1990) to 37.2% (2019) ¹⁵, COVID-19 has highlighted that a step-change is needed to urgently address the remaining gap. Though many temporary handwashing facilities have been installed in public places and institutions during the COVID-19 response, plans for sustaining and upgrading facilities may be lacking.

7. Increase the availability and affordability of soap. In the South Asia region soapy water may be an acceptable, low-cost alternative to bar soap or liquid soap. Using marketing techniques to promote soapy water should be considered to raise awareness and demand.

“There is a strong argument for providing free soap to all poor and low-income families during the active phase pandemics, either through supply-side subsidy (i.e. public funding of distribution to reduce cost) or demand side (through providing poor families funds to purchase soap).” ¹

8. Efforts to change hygiene behaviour must be supported by improved availability and reliability of water to achieve sustained and universal handwashing practice. Lack of a reliable water supply at home and in public places was identified by many respondents, and studies¹ show that reliance on off-premise water sources affects the sufficiency of water for handwashing and a strong case can therefore be made to prioritise provision of piped water supplies. The COVID-19 pandemic therefore requires an integrated WASH (water, sanitation and hygiene) response, rather than focusing on hygiene alone.



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Annex – sampling framework

Table 7 - Summary of sampling for household interviews

Country	Data collection period (2020)	Number of interviews	Sampling
Total		2128	
Bangladesh	13-22 May	350	Telephone interview - 62 rural (Meherpur and Tahirpur) - 49 urban slums (Dhaka and Khulna) Social media – 239 respondents
India	28 May-12 June	797	677 rural from 22 Gram Panchayats across six states (Uttar Pradesh, Bihar, Chhattisgarh, Odisha, Madhya Pradesh, Karnataka). 120 urban (Lucknow and Bhopal cities)
Nepal	15-20 May	380	130 Lahan Municipality, Siraha Select marginalised/vulnerable groups - 50 Terai Dalits (Lahan, Siraha) - 50 Thami (Kalinchowk, Dolakha) - 50 hard-to-reach rural (Sailung, Dolakha) - 50 urban slum (Kathmandu Valley) - 50 people with disabilities
Pakistan	19 May-2 June	601	All provinces: - 200 Punjab - 131 Sindh - 70 Balochistan - 105 Khyber Pakhtunkhwa - 25 Gilgit Baltistan - 40 Azad Jammu & Kashmir - 30 Islamabad

Table 8 - Summary of key informant interviews

Country	Number	Organisations consulted
Total	48	-
Bangladesh	15	Health workers (Meherpur and Tahirpur)
India	12	6 WaterAid partners plus 6 NGOs
Nepal	8	Community-Based Organisations, community leaders, female community health volunteer, local government, NGO partner
Pakistan	13	Local government, partner organisations, research centre



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▲ Prince (4) washes his hands after using the toilet at his house in Shyama Prasad Mukherjee Camp, New Delhi, India. 13 March 2020

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We are determined to make clean water, decent toilets and good hygiene normal for everyone, everywhere within a generation.

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27 / An assessment of handwashing promotion in South Asia during COVID-19
September 2020