Testing the efficacy of coronavirus messaging

Experiment: ‘How to wash your hands’
March 2020
Executive Summary

The Top 3

1. We tested 7 ‘how to wash your hands’ infographics on an online sample of 2,629 UK adults.

2. Designs by the Taiwan CDC, Singapore Ministry of Health, and NHS did best in terms of recall and positive sentiment.

3. To encourage thorough handwashing in the global fight against coronavirus, we recommend bright infographics with the step-by-step procedure prominently displayed without too much accompanying text.
We tested 7 different ‘how to wash your hands’ posters, made by organisations around the world, on an online sample of 2,629 UK adults on 12-17 March 2020.

Participants were randomly assigned to see one type of poster, then asked a series of questions about it.

<table>
<thead>
<tr>
<th>Gender</th>
<th>% female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>51%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>18-24</td>
<td>29%</td>
</tr>
<tr>
<td>25-54</td>
<td>49%</td>
</tr>
<tr>
<td>55+</td>
<td>22%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Region</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>South &amp; East</td>
<td>28%</td>
</tr>
<tr>
<td>North</td>
<td>25%</td>
</tr>
<tr>
<td>Midlands</td>
<td>17%</td>
</tr>
<tr>
<td>Scot/NI/Wales</td>
<td>13%</td>
</tr>
<tr>
<td>London</td>
<td>17%</td>
</tr>
</tbody>
</table>

Median time spent completing survey = 5 min 13s

Also collected data for all respondents on education, income, smoking status, urban/rural, baseline hand washing frequency.
The 7 tested posters

A (NHS)

Hand-washing technique with soap and water

1. Wet hands with water
2. Apply enough soap to cover all hand surfaces
3. Rub hands palm to palm
4. Rub back of each hand with palm of other hand
5. Rub palm to palm with fingers interlaced
6. Rub with base of fingers to opposing palms with fingers interlaced
7. Rub each thumb clasped in opposing hand using a rotational movement
8. Rub tips of fingers in opposite palm in a circular motion
9. Rinse hands with water
10. Use elbow to turn off tap
11. Dry thoroughly with a single use towel
12. Hand washing should take 15-30 seconds

B (WHO)

We removed identifying poster logos and branding for the experiment

9. Wet hands with water
10. Apply enough soap to cover all hand surfaces
11. Rub hands palm to palm
12. Rub back of each hand with palm of other hand
13. Rub palm to palm with fingers interlaced
14. Rub with base of fingers to opposing palms with fingers interlaced
15. Rub each thumb clasped in opposing hand using a rotational movement
16. Rub tips of fingers in opposite palm in a circular motion
17. Rinse hands with water
18. Dry thoroughly with a single use towel
19. Use towel to turn off faucet
20. ...and your hands are safe.

Original poster available here
The 7 tested posters

C  (Singapore Ministry of Health)

D  (Italy Ministry of Health)

E  (Spain Ministry of Health)

Translated into English

**How to wash hands**

1. Wet hands well with water
2. Use enough soap to cover all hand surfaces
3. Rub hands well, palm to palm
4. Rub the left palm over the back of the right hand, interlacing fingers
5. Rub the back of the fingers against the palm of the opposite hand, keeping your fingers tight against each other
6. Rub hands palm to palm back and forth, interlacing the fingers at right hand to the ones of the left hand
7. Rub the right thumb keeping it tight in the left hand palm, and vice-versa
8. Rub the left hand palm rotating the right hand fingers back and forth, keeping them tight together and vice-versa
9. Rub the wrist rotating right hand fingers back and forth, keeping them tight together to the left wrist, and repeat for the right wrist
10. Rinse hands thoroughly with water
11. Dry hands thoroughly with a disposable towel
12. Use the disposable towel to turn off the tap
The 7 tested posters

**F**
(Taiwan CDC)

Translated into English

**G**
(South Korea CDC)
## Key findings I

1. Participants were randomly assigned to see one type of poster, then asked these questions.
2. Shading indicates top 2 highest scores on each question.
3. The 3 key steps reported in the first row are those explicitly mentioned in all 7 posters.
4. Red boxes highlight overall top performers.

<table>
<thead>
<tr>
<th>Finding</th>
<th>NHS</th>
<th>WHO</th>
<th>Sing. (MOH)</th>
<th>Italy (MOH)</th>
<th>Spain (MOH)</th>
<th>Taiwan (CDC)</th>
<th>Korea (CDC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>recalled all 3 key hand washing steps</td>
<td>66%</td>
<td>62%</td>
<td>62%</td>
<td>59%</td>
<td>61%</td>
<td>67%</td>
<td>61%</td>
</tr>
<tr>
<td>(palm to palm, interlaced fingers, thumbs)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>recalled ‘wash palm to palm’</td>
<td>79%</td>
<td>84%</td>
<td>83%</td>
<td>80%</td>
<td>83%</td>
<td>86%</td>
<td>80%</td>
</tr>
<tr>
<td>recalled ‘wash interlaced fingers’</td>
<td>80%</td>
<td>80%</td>
<td>76%</td>
<td>79%</td>
<td>77%</td>
<td>81%</td>
<td>76%</td>
</tr>
<tr>
<td>recalled ‘wash thumbs’</td>
<td>79%</td>
<td>73%</td>
<td>78%</td>
<td>72%</td>
<td>74%</td>
<td>77%</td>
<td>77%</td>
</tr>
<tr>
<td>recalled ‘wash wrists’</td>
<td>67%</td>
<td>56%</td>
<td>72%</td>
<td>62%</td>
<td>54%</td>
<td>54%</td>
<td>57%</td>
</tr>
<tr>
<td>recalled ‘wash fingernails’</td>
<td>68%</td>
<td>66%</td>
<td>79%</td>
<td>69%</td>
<td>68%</td>
<td>68%</td>
<td>71%</td>
</tr>
</tbody>
</table>
## Key findings II

<table>
<thead>
<tr>
<th>Finding</th>
<th>NHS</th>
<th>WHO</th>
<th>Sing. (MOH)</th>
<th>Italy (MOH)</th>
<th>Spain (MOH)</th>
<th>Taiwan (CDC)</th>
<th>Korea (CDC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>% saying they <strong>better understand how to thoroughly wash hands</strong> after seeing poster</td>
<td>91%</td>
<td>93%</td>
<td>94%</td>
<td>91%</td>
<td>93%</td>
<td>94%</td>
<td>94%</td>
</tr>
<tr>
<td># times per day people intend to thoroughly wash hands after seeing poster</td>
<td>8.1</td>
<td>8.5</td>
<td>8.7</td>
<td>8.3</td>
<td>8.2</td>
<td>8.5</td>
<td>8.6</td>
</tr>
</tbody>
</table>

1 Participants were randomly assigned to see one type of poster, then asked these questions
2 Shading indicates top 2 highest scores on each question
3 Values for ‘# times per day’ are top coded at 95th percentile
4 Red boxes highlight overall top performers
## Key findings III

<table>
<thead>
<tr>
<th>Finding</th>
<th>NHS</th>
<th>WHO</th>
<th>Sing. (MOH)</th>
<th>Italy (MOH)</th>
<th>Spain (MOH)</th>
<th>Taiwan (CDC)</th>
<th>Korea (CDC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>% saying poster is ‘somewhat/very’ effective at explaining how to thoroughly wash hands</td>
<td>88%</td>
<td>86%</td>
<td>88%</td>
<td>73%</td>
<td>89%</td>
<td>89%</td>
<td>83%</td>
</tr>
</tbody>
</table>

1 For this question, participants were shown all 7 posters together and were asked to rate each one  
2 Shading indicates top 2 highest scores
### Key findings IV

<table>
<thead>
<tr>
<th>% saying the poster...</th>
<th>NHS</th>
<th>WHO</th>
<th>Sing. (MOH)</th>
<th>Italy (MOH)</th>
<th>Spain (MOH)</th>
<th>Taiwan (CDC)</th>
<th>Korea (CDC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>...is easy to understand</td>
<td>87%</td>
<td>88%</td>
<td>96%</td>
<td>81%</td>
<td>87%</td>
<td>92%</td>
<td>93%</td>
</tr>
<tr>
<td>...is credible</td>
<td>86%</td>
<td>88%</td>
<td>92%</td>
<td>81%</td>
<td>82%</td>
<td>87%</td>
<td>89%</td>
</tr>
<tr>
<td>...has ‘the right amount of information’</td>
<td>80%</td>
<td>80%</td>
<td>82%</td>
<td>68%</td>
<td>78%</td>
<td>82%</td>
<td>84%</td>
</tr>
</tbody>
</table>

1 Participants were randomly assigned to see one type of poster, then asked these questions
2 Shading indicates top 2 highest scores on each question
Segmentation analysis
Young men did poorly on recall of the key handwashing steps

% recalling all 3 key handwashing steps
(palm to palm, interlaced fingers, thumbs)

Young men scored 19 pp lower than young women...

...but this difference disappeared among over 55s
A majority of only young and middle aged women knew *not* to wash their hands under continuously running water*

% correctly saying one should *not* wash hands under continuously running water

<table>
<thead>
<tr>
<th>Age</th>
<th>% Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-24</td>
<td>46</td>
</tr>
<tr>
<td>25-54</td>
<td>66</td>
</tr>
<tr>
<td>55+</td>
<td>45</td>
</tr>
</tbody>
</table>
Qualitative findings
Qualitative feedback

Positive feedback

“Simple and clear to follow”

“Perfect”

“Very helpful and easy to understand”

“Clear layout helps to follow the steps”

“Very informative for all ages”

“Everyone should see this”

Free-text feedback was 67% positive / 33% negative (based on feedback from 138 participants)

Constructive feedback

“It should say how long to wash hands for”

“It’s too busy and diagram heavy- the design should be clearer”

“Needs more description on how to close taps without touching them”
Qualitative feedback

Positive feedback

“Very clear and informative”

“good sensible, easy to understand advice. should be posted everywhere.”

“Good poster with a thorough explanation”

“It is very useful and helpful”

“It taught me something new. I always wondered how to turn the tap off without dirtying your hands again”

Free-text feedback was 57% positive / 43% negative (based on feedback from 114 participants)

Constructive feedback

“Too many steps to the point of losing the attention of a random observer”

“Use simpler terminology, eg faucet. Why not say tap?”

“It is awful, instead of telling how to wash hands, it should say what with, how long, hot or cold water”

“Too dull on the eyes, does not catch the attention of many people”
Qualitative feedback

Positive feedback

“Brilliant poster”

“Easy to follow and eye catching”

“It sends the message out clearly”

“Nice to see it in pictures so children can easily understand it”

“Good, informative and easy to understand”

C
(Singapore Ministry of Health)

Free-text feedback was 67% positive / 33% negative (based on feedback from 168 participants)

Constructive feedback

“want to know more about how long I should wash my hands for”

“Too busy. Circles are too small. Top box is far too large in relation to the rest of the poster.”

“It is missing information on the most important times to wash your hands”

“provide information regarding how long to wash for, what type of soap to use and what to use when soap and water are not available.”
Qualitative feedback

Positive feedback

“Very informative and fun”

“Good poster, easy to understand”

“Perfectly structured and easy to understand, can’t fault it”

“Good on the eye and is clear and concise”

Constructive feedback

“Very busy, too many words”

“Too complicated, people will not read it, let alone remember it”

“patronising”

“This advice is for vegetables, not human beings”

Free-text feedback was 52% positive / 48% negative (based on feedback from 179 participants)
**Qualitative feedback**

**Positive feedback**

“Good, clear, well explained instructions”

“very comprehensive and easy to understand”

“very informative and engaging”

“Good diagrams”

**Constructive feedback**

“no idea what a dorsum is, too wordy and lots of places where it could be simplified”

“too much for most people to bother reading”

“should include how long you should wash your hands for and how many times a day”

“Larger text would help”

Free-text feedback was 53% positive / 47% negative (based on feedback from 119 participants)
Qualitative feedback

Positive feedback

“very helpful”

“clear and concise”

“very simple to look at and easy to understand”

“very eye catching”

“useful to show pictures, ideal for schools and doctors surgeries”

“simple and friendly”

Constructive feedback

“should be simpler and to the point”

“very childish and a little patronising”

“don’t think the poster is good at emphasising the right things, why do we need most of the poster taken up by a person at a sink”

“Make the font larger”

Free-text feedback was 68% positive / 32% negative (based on feedback from 150 participants)
Qualitative feedback

Positive feedback

“Very clear and informative”
“Straight to the point”
“Good use of images”
“easy to understand even for children”

“Working in healthcare, this poster is simpler than most handwashing guides and covers enough detail to be effective.”

Constructive feedback

“looks complicated. I think a lot of people won’t read it”
“The font for the six steps is too small”
“Doesn’t make it clear when to wash your hands”
“A lot of wasted space, critical info could be larger”

Free-text feedback was 64% positive / 36% negative (based on feedback from 121 participants)
Get in touch

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