

## Community-based approaches are most effective in promoting changes in hygiene practices, but sustainability is a challenge



Photo: Belgian Red Cross

*Promoting handwashing and sanitation behaviour change in a community can increase handwashing with soap and latrine use*

### What is the aim of this review?

This Campbell Systematic Review examines the effectiveness of different approaches for promoting handwashing and sanitation behaviour change, and factors affecting implementation, in low and middle-income countries. The review summarises evidence from 42 impact evaluations, and from 28 qualitative studies.

Community-based approaches to promote handwashing and sanitation efforts seem to work better than social marketing, messaging and interventions based on psychosocial theory. Programs combining hygiene and sanitation measures appears to have a larger impact than either one alone.

### What is this review about?

Diarrhoeal diseases are very common causes of death in low and middle-income countries. Improved sanitation and hygiene reduce diarrhoea, but adoption remains a challenge.

This review assesses the evidence for two questions: (1) how effective are different approaches to promote handwashing and sanitation behaviour change; and (2) what factors influence the implementation of these approaches?

### What studies are included?

Studies of effectiveness had to be impact evaluations using an experimental or quasi-experimental design and analytical observational studies. Implementation studies used qualitative designs.

Forty-two quantitative studies and 28 qualitative studies met the inclusion criteria. The quantitative studies were conducted in LMICs worldwide, with the majority of the studies in South Asia and Sub-Saharan Africa.

### What are the main findings of this review?

**Community-based approaches** which include a sanitation component can increase handwashing with soap at key times; use of latrines and safe disposal of faeces; and reduce the frequency of open defecation. **Social marketing** seems less effective. The approach mainly shows an effect on sanitation outcomes when interventions combine handwashing and sanitation components.

**Sanitation and hygiene** messaging with a focus on handwashing with soap has an effect after the intervention has ended, but there is little impact on sanitation outcomes. However, these effects



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### How up-to-date is this review?

The review authors searched for studies published until March 2016; this Campbell Systematic Review was published in May 2017.

### What is the Campbell Collaboration?

The Campbell Collaboration is an international, voluntary, non-profit research network that publishes systematic reviews. We summarise and evaluate the quality of evidence about programmes in the social and behavioural sciences. Our aim is to help people make better choices and better policy decisions.

### About this summary

This summary was prepared by Howard White based on the Campbell Systematic Review 2017:7 'Approaches to Promote Handwashing and Sanitation Behaviour Change in Low- and Middle-income Countries: A Mixed Method Systematic Review' by Emmy De Buck, Hans Van Remoortel, Karin Hannes, Thashlin Govender, Selvan Naidoo, Bert Avau, Axel Vande veegaete, Alfred Musekiwa, Vittoria Lutje, Margaret Cargo, Hans-Joachim Mosler, Philippe Vandekerckhove, Taryn Young (DOI 10.4073/csr.2017.7). Copy-editing and layout was done by Tanya Kristiansen (Campbell Collaboration). Financial support from the American Institutes for Research for the production of this summary is gratefully acknowledged.



are not sustainable in the long term. Using **elements of psychosocial theory** in a small-scale handwashing promotion intervention, or adding theory-based elements such as infrastructure promotion or public commitment to an existing promotional approach, seem promising for handwashing with soap.

None of the approaches described have consistent effects on behavioural factors such as knowledge, skills and attitude. There are no consistent effects on health.

### What factors affect implementation?

Implementation is affected by length of the intervention; visit frequency; use of short communication messages; availability of training materials; kindness, respect, status and accessibility of the implementer; recipient awareness about costs and benefits and their access to infrastructure and social capital.

For **community-based approaches**, involvement of the community, enthusiasm of community leaders, having a sense of ownership, the implementer being part of the community, gender of the implementer, trust, income generating activities, clear communication and developing a culture of cooperation facilitated implementation.

For **sanitation and hygiene messaging**, text messages should be short and culturally appropriate, passive teaching methods in schools and reminders should be frequent and over a long period. Barriers include illiteracy and a lack of interest and involvement from the family in case of a school intervention. For the **social marketing approach** barriers were mainly about the use of sanitation loans such as lack of communication to latrine business owners about which area to cover, loan processing times and sanitation loans not reaching poor people.

### What do the findings in this review mean?

Promotional approaches aimed at handwashing and sanitation behaviour change can be effective in terms of handwashing with soap, latrine use, safe faeces disposal and open defecation. A combination of different promotional elements is probably the most effective strategy. Identifying and tackling the different barriers and facilitators that influence the implementation of these promotional approaches can increase effectiveness.

An important implication for research is that there is a need for a more uniform method of measuring and reporting on handwashing, latrine use, safe faeces disposal, and open defecation.