

Letter to the Editor

Use of performance feedback to increase healthcare worker hand-hygiene behaviour

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On behalf of the FIT study team

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Madam,

In their critique of the CleanYourHandsCampaign, Gould et al. suggest that behaviour change in feedback interventions occurs as a direct result of being observed and not as a result of feedback itself.¹ We argue that this suggestion is misinformed.

First, within behavioural science, studies have shown that individuals habituate to external stimuli over time.² The phenomenon of habituation describes a decrease in behavioural response after repeated exposure to an external stimulus. Thus, hand-hygiene behaviour (the response) should decrease as a result of repeated exposure to an observer (the stimulus). In other words, although some change in hand-hygiene behaviour can be accounted for by appeal to the reactive effects of observation, it is unlikely that this accounts for all of it.

Second, feedback is a complex behaviour-change technique. A body of empirically supported theory demonstrates behaviour to be goal-directed and feedback-controlled.³⁻⁵ Feedback informs the individual of any discrepancy between one's behavioural goal e to clean hands after patient contact e and actual behaviour, whether hands were cleaned after patient contact. Adjustments are made in response to this information, enabling the individual better to steer behaviour on track to successful goal attainment. Accurate, up-to-date feedback must be given in order to enable the individual to adjust his/her behaviour accordingly. In addition, feedback should be given (1) regularly, (2) in specific relation to the behaviour one is trying to change, i.e. hand-hygiene behaviour and not, for example, consumable usage, (3) as soon as possible after behaviour has been observed, (4) in comparison with a self or group-set target, e.g. 'I aim to use alcohol hand rub after glove use', and (5) in relation to a self or group-set action plan, e.g. 'I will wear my personal hand rub dispenser in a more visual location on my uniform to make it easier for me to remember to use it after glove use'.

Gould et al. state that the effects of feedback interventions are rarely maintained. This is unsurprising considering that once an intervention has ceased, access to accurate, up-to-date feedback is no longer available, thus impeding detection of behavioural discrepancies and subsequent behavioural adjustments. Thus, feedback is not ineffective, but it must be applied properly as informed by behavioural science theory in order for it to be effective.

Third, Gould et al. criticize the 'resource-intensive' and 'time-consuming' nature of feedback interventions. As far as we are aware, there is no existing economic evaluation to support this claim within the NHS setting. An economic evaluation would include both the estimates of the costs of resources needed to conduct the feedback and estimates of the value of any behavioural change that might be attributed to the feedback. Neither is available at present.

In summary, we have argued that Gould et al.'s comments regarding feedback are misinformed. Feedback is an effective technique to the extent that it is applied properly. We argue that feedback interventions targeted at increasing hand-hygiene behaviour would benefit from drawing upon behavioural science theory to maximize feedback effectiveness. In addition, conclusions regarding economic impact within the NHS must be founded upon scientific and not anecdotal evidence. The Feedback Intervention Trial (FIT) is funded by the Patient Safety Research Programme and is comprised of a consortium of Royal Free & University College Medical School, University College London, the Health Protection Agency, the London School of Hygiene and Tropical Medicine, University College Hospital and Mid Essex Hospitals. The primary aim of this research is to develop and implement a behavioural science theory intervention to increase hand-hygiene behaviour at 16 NHS hospitals in England and Wales.⁶ Feedback will be delivered in accordance with the above principles, in addition to an economic evaluation. It is hoped that this will represent a huge step toward furthering our understanding and subsequent use of this technique within the hospital infection control arena.

References

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