

Hand hygiene for healthcare workers: did we need COVID-19 to raise awareness of proper disinfection practice?

Hand hygiene is a critical healthcare intervention for controlling care-related infections, but adherence by healthcare workers is often disregarded. In 2005 the World Health Organization launched the 'Clean Care is Safer Care' campaign to promote and encourage hand hygiene.¹

Proper hand hygiene should therefore be an issue considered central to the daily practice of a healthcare professional. However, several studies have shown that there has been an increase in the use of hand sanitisers in conjunction with the crucial phases of the COVID-19 pandemic.² In fact, of the healthcare interventions effective in containing COVID-19, in addition to the use of personal protective equipment, hand hygiene represents the most basic one in both healthcare workers and the general population.

While an exponential increase in the use of alcohol-based sanitisers could be expected in the general population, the same did not seem to us to be possible for healthcare professionals who should already be aware of the proper use of these products.

To better estimate the impact of the COVID-19 pandemic on this issue, we analysed the rate of usage of both commercial and galenic hand sanitisers

in two major hospitals in Northern Italy between January and October 2020 in comparison with the same period in 2019. The average monthly usage increase in litres was +105%, ranging from -2% pre-pandemic to +170% in March.

This trend accurately reflects the increase in intensive care admissions, which represents an important indicator for healthcare setting. The percentage increase in the use of hand sanitisers is positively correlated to the number of admissions ($R=0.65$ for the entire period, a value that rises to $R=0.75$ if January is excluded).

In order to better explain how the increase in hand sanitiser use in a hospital setting follows the trend in the general population, we extracted data from Google Trends on the topic 'hand sanitizer' for the predicted periods.³ For 2019, Google Trends reports two peaks in searches; in 2020 the trend closely tracks hand sanitiser consumption at the two benchmark hospitals (see figure 1).

The use of online search systems such as Google Trends is often underestimated in healthcare, mainly due to the lack of validation.⁴ However, in analyses such as ours, it can represent added value to be able to target awareness campaigns on topics of common interest to all healthcare professionals.

In fact, the data that emerged from our analysis will be useful for us in taking new actions to raise awareness, as recommended in the literature. Even in critical wards such as intensive care units,

continuous retraining of operators in the use of hand sanitiser is required to ensure an adequate standard.⁵ From this point of view, we have to consider the COVID-19 pandemic as an event that has taught us a lot, including the proper management of disinfection.

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Contributors Both authors contributed equally to the planning, conduct and reporting of the work described.

Funding None declared.

Competing interests None declared.

Patient consent for publication Not required.

Provenance and peer review Not commissioned; internally peer reviewed.

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To cite Mengato D, Di Spazio L. *Eur J Hosp Pharm* Epub ahead of print: [please include Day Month Year]. doi:10.1136/ejhp-pharm-2021-002812

Eur J Hosp Pharm 2021;0:1.
doi:10.1136/ejhp-pharm-2021-002812

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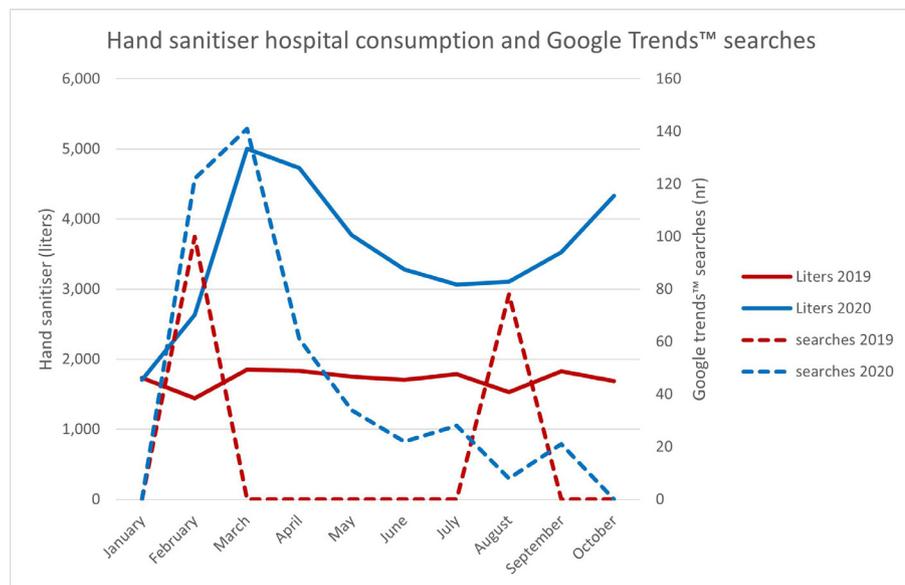


Figure 1 Trend in the use of hand sanitiser in two major hospitals in Northern Italy and Google Trends searches on the topic 'hand sanitizer' for the period between January and October 2020 in comparison with the same time interval in 2019.