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# WHO Year of the Nurse and Midwife: More clean and educated hands for all

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## Abstract

For the last 10 years, the World Health Organization has been celebrating World Hand Hygiene Day on the 5th of May, bringing together the global healthcare ecosystem to celebrate hand hygiene. This day was created to raise awareness about the importance of hand hygiene in healthcare settings, as well as to focus on a specific annual topic to be highlighted to a global audience. The World Health Assembly designated 2020 as the Year of the Nurse and Midwife, and the slogan of this year's 5th of May was "Nurses and Midwives: Clean Care is in Your Hands". This 5th of May helped us to highlight the need for increased staffing and hand hygiene training. In this paper we aimed to raise awareness about the global impact linked to adherence to proper hand hygiene practices by nurses and midwives.

## Keywords

Infection prevention and control, infection control, hand hygiene, nurses, midwives, World Health Organization, healthcare-associated infection

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## Introduction

Nurses and midwives are the largest group of healthcare workers (HCWs) and the group that have the most contact with patients. It is important to bring global attention to the work that this group of HCWs do and highlight the challenges they face while advocating for improved conditions. Much of the needed change is related to the scarcity of labour. The gap is so big that the World Health Organization (WHO) estimates the world needs 9 million more nurses and midwives if it is to achieve universal health coverage by 2030 (WHO, 2020). This "lack of hands" can have lethal consequences, as understaffing and too high of a workload have been proven to be inhibiting factors in good hand hygiene compliance (Harbarth et al, 1999). The goal of this year's Hand Hygiene Day is to make people realize the importance of the work of nurses and midwives and bring more sense of urgency to the challenges they face.

As nearly half of the global healthcare workforce and the group in closest daily contact to patients, it is not difficult to understand how any incremental improvement in hand hygiene compliance by nurses and midwives has a tremendous effect on healthcare-associated infections (HAIs) and therefore the potential to improve patient outcomes and save

hundreds of thousands of lives every year across the world (Girou et al, 2006; WHO, 2013). It also identifies some of the existing systemic and staffing barriers to hand hygiene compliance within this group of HCWs and tries to help decision makers understand how crucial it is to address issues concerning inadequate staffing levels.

## Facing yet another inconvenient truth

HAIs are one of the most important risk factors in healthcare facilities, affecting hundreds of millions of patients

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around the world every year (WHO, 2011). With hand hygiene being the most effective way to prevent those infections, we need to ensure we move well above the current estimates that 61% of HCWs are not adhering to best hand washing practices (WHO, 2016).

Nurses and midwives are the largest group of HCWs, making up about 50% of the workforce (WHO, 2013). Given their frequent contact with patients, they are also one of the most relevant target groups concerning hand hygiene. While working to analyse this issue, we came across an inconvenient truth: the tremendous lack of nurses and midwives is likely reducing current hand hygiene adherence rates. The understaffing inherent to this group, which has been increasing year after year in many countries around the world, often forces nurses and midwives to work long hours in very stressful situations and this has been proven to negatively affect hand hygiene compliance (Manomenidis et al, 2017). The recent COVID-19 pandemic has demonstrated this is a truly global issue calling for a systemic change.

This effect on compliance has serious consequences, especially when it comes to the areas of the hospital where we find more vulnerable patients. Studies indicate that a shortage of nursing staff in intensive care units has a negative effect on hand hygiene and an increase in mortality rate (McArdle et al, 2006). Hospital-wide studies have shown that understaffing (less than 80% of the median staffing level) also increases HAI rates (Shang et al, 2019).

The issue of understaffing is more relevant now than ever before; especially in a period of ageing populations, with inverted population pyramids becoming the norm in developed countries (Carayon and Gurses, 2008). As an example of the high vacancy rates amongst this group, at the National Health Service in England there are more than 41,000 registered nursing posts reported vacant, which translates to more than one in 10 (Buchan et al., 2019).

With stress comes staff burnout and a prioritisation of the *urgent* over the *important*, which can lead to staff cutting corners and cause hand hygiene adherence to suffer. One study showed how the shortage of personnel and heavy workloads made hand hygiene less important to staff because more time and energy were needed to take care of the extra patients (McArdle et al, 2006).

Likewise, education and training around hand hygiene are areas that suffer, which has an impact on hand hygiene compliance. A study revealed how just by implementing very basic training on hand hygiene amongst HCWs, the knowledge of hand hygiene improves during the intervention and good hand hygiene compliance levels are maintained for an extended period of time (Phan et al, 2018). Other existing research shows how two of the main barriers to maintaining good hand hygiene amongst healthcare staff are linked to education in the form of a lack of scientific information and the perception that priority is not given to

hand hygiene, either at an institutional or individual level (Diwan et al, 2016).

## Solution

We advocate for “**more clean and more educated hands for all**”. **More hands** means addressing existing staffing issues and hiring enough nurses and midwives so they have all they need to do their jobs optimally. This extends further than hand hygiene and includes all essential infection prevention and control measures. More hands also means fewer shortcuts and more focus and staff doing what they are supposed to do at all times. Research shows those issues of shortage of personnel and excessive workload affecting hand hygiene compliance among nurses are common themes across the globe (Erasmus et al, 2010).

**More educated hands** means not only a higher adherence to hand hygiene guidelines and consequent increase in adherence, but also a better trained workforce with a higher awareness of the importance of hand hygiene. When HCWs have a high level of internalisation of the issues and the solution they perform better, which can in turn lead to higher advocacy. This is in line with one of the aims of WHO, which is to ensure the right hand hygiene techniques are used at the right time. According to the WHO recommendations, the five moments of hand hygiene include: before touching a patient, before clean/aseptic procedures, after body fluid exposure/risk, after touching a patient and after touching patient surroundings (Erasmus et al, 2010). The WHO multimodal hand hygiene improvement strategy has also been proposed to promote hand hygiene using five core components consisting of: system change, including availability of alcohol-based hand rub at the point of patient care and/or access to a safe, continuous water supply and soap and towels; training and education of healthcare professionals; monitoring of hand hygiene practices and performance feedback; reminders in the workplace; and the creation of a hand hygiene safety culture with the participation of both individual HCWs and senior hospital managers (WHO, 2009).

Giving the appropriate and deserved value to hand hygiene as part of their curriculum and responsibility and championing the effect that its good practice has on patient safety helps the professions of nursing and midwifery gain both value and recognition. When the value of a job increases in society, it can also translate into better remuneration for a group of HCWs that are often both overworked and underpaid.

Since the conception of the WHO's World Hand Hygiene Day, it has been clear that time constraints (which, as mentioned earlier, are partly related to understaffing) are one of the major factors to overcome. A taskforce at the Hospital University of Geneva, led by Professor Didier Pittet, started studying this topic more than 25 years ago, focused on not only the importance of hand hygiene but also on the factors

that could make it more effective, accessible and quicker to perform (Pittet et al, 2000). Partly because of that, the use of alcohol-based hand rub (which does not require water and can be used quickly) is now ubiquitous in healthcare settings.

## Significant barriers

Data show the effect of staff shortages and time pressure on hand hygiene adherence is significant and has become a real burden for the nursing and midwifery profession as a whole and ultimately has an impact on patient safety (Lang et al, 2004). One study published in the *British Journal of Nursing* has demonstrated how workload factors impact staff adherence to hand hygiene guidelines, even in situations of healthcare staff with a very high level of professional training around hand hygiene (Knoll et al, 2010).

Not only does the global nursing shortage increase the workload of nurses and decrease the available time for infection-prevention precautions, it also pinpoints the impact of another popular trend linked to labour shortage: the increase in temporary and agency nurses. Although “they provide an important role in filling gaps in staffing, they also create a problem of unfamiliarity with specific hospital and unit infection prevention practices” (Cronin et al, 2008). This vicious circle of pressure on the healthcare system affects the quality and frequency of hand hygiene and has a negative impact on HAIs. As a result, it puts patients at increased risk (Cronin et al, 2008).

## Conclusion

This specific problem will not be easily addressed with words, even when they come from a global authority such as the WHO. This is especially true when there are political and economic challenges to overcome.

Are there any more valuable roles in our society than those that help save lives? Midwives and nurses are pivotal in delivering patient care and preventing negative health outcomes for patients and need to be safeguarded as one of our most precious assets. Investing in nurses and midwives is good value for money and can result in a triple return of improved health outcomes, global health security and inclusive economic growth (United Nations, 2016).

Because of the strength of the message and encouragement from the global reach of WHO, we are calling attention to the need for more hands and more educated hands in the nursing and midwives sector. The WHO has reported that HAIs not only have an impact on mortality, but also create an economic burden to the system in the form of prolonged hospitalisation, ineffective treatments and increased operational costs. Trying to fix other issues in the healthcare system without fixing the shortage of nurses and midwives will likely be futile. We ask political leaders and all those agents of change in the healthcare provision system

to not let the urgent matters distract them from the important ones.

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## Peer review statement

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