Beyond the Mask: Science, Tradition, and Respect in Medicine

In medicine, where science drives decision-making, it is easy to assume that certain practices are beyond question. Even something as fundamental as wearing a mask in clinical and surgical settings, however, warrants critical analysis. Is it truly saving lives and preventing infections, or are we relying on tradition without sufficient scientific evidence?

A conversation with a surgeon colleague challenged my assumptions. Like many, I believed masks were essential for infection control in surgery, but my colleague, a seasoned ophthalmologist, suggested that, even during cataract surgery, mask use might lack robust scientific support.[1-4] He cited studies showing that masks could inadvertently increase infection risk by releasing bacteria-laden skin cells into the sterile field. This made me rethink long-held beliefs.

The COVID-19 pandemic sparked a debate on mask use, both inside and outside of the OR. During this time, the prevalence of periocular infections, such as blepharitis and chalazion, increased, often in association with prolonged mask use. This raised questions about whether masks, meant to protect, might sometimes cause harm.

On the other hand, the effectiveness of N95 masks in reducing infectious transmission is well documented. Does this justify a one-size-fits-all approach across medical settings?

A more common consideration is the standard surgical masks worn in the OR. Surgeons often wear the same mask for multiple procedures throughout the day. Does the first patient face a different level of risk than the last? Should we change masks after each case to ensure maximum infection control, or is reusing the same mask acceptable? During the COVID-19 pandemic, when personal protective equipment was in short supply, many health care workers became accustomed to wearing the same mask for extended periods—even for days. Were these practices safe? What are the long-term effects of such practices? Should we prioritize sustainability by reusing masks, or does this practice increase infection risk? Balancing infection control with environmental considerations presents a complex ethical dilemma, especially as sustainability becomes more critical.

As I debated these issues with my colleague, I assumed we could agree that masks prevent infection, especially because he had worn one for more than 30 years. To my surprise, he said, "There's no definitive evidence showing it's beneficial." When I asked why he continues to wear one, he pointed out that masks serve a symbolic role—signifying cleanliness, respect for the sterile field, and the seriousness with which we approach patient care.

This editorial is not an argument for or against masks but rather a call to examine the evidence behind our practices continuously. As medical professionals, we must challenge what we know, test our assumptions, and avoid falling into dogmatic thinking. Although science must guide our actions, we must also recognize the complexities of human behavior, the influence of tradition, and the role symbols play in shaping our practice.

In myth-busting, we may discover that some beliefs are more subjective than they initially seem. Wearing masks may or may not save lives in the way we assume, but the practice serves an important function. We should rigorously pursue scientific methods and data to support the use of this and other medical devices. ■

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