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Evidence Base for Health Care Strategies to Protect Vulnerable Patients During the COVID-19 Pandemic

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5. Denicoff AM, Ivy SP, Tamashiro TT, et al. Implementing modernized eligibility criteria in US National Cancer Institute clinical trials. *J Natl Cancer Inst*. 2022;114(11):1437-1440. doi:10.1093/jnci/djac152

6. Lawrence WR, McGee-Avila JK, Vo JB, et al. Trends in cancer mortality among Black individuals in the US From 1999 to 2019. *JAMA Oncol*. 2022;8(8):1184-1189. doi:10.1001/jamaoncol.2022.1472

COMMENT & RESPONSE

Evidence Base for Health Care Strategies to Protect Vulnerable Patients During the COVID-19 Pandemic

To the Editor The Editorial by Hoerger and colleagues[1] published recently in *JAMA Oncology* outlined 10 health care strategies to support patients who are vulnerable during the COVID-19 pandemic. We agree that strategies for protection are needed, but these strategies should be evidence based, which the 10 recommendations are not.

Hoerger and colleagues[1] build on 3 previously suggested strategies: ventilation, filtration, and 2-way masking. Currently, to our knowledge, there are no randomized data on filtration systems in reducing COVID-19 transmission, although there are several randomized studies under way.[2,3] Randomized data on the efficacy of masks are limited to 2 studies[4,5] that either reported no benefit or were biased, making it difficult to determine whether the small benefit reported was real or confounded. Neither study tested N95 masks. Moreover, whether masks work for months or years on end has not been assessed. Other interventions—antibody testing, prophylactics, education, or treatments for post-COVID-19 condition—have yet to be tested to determine whether they have benefit.

The authors[1] may contend that there are no downsides to these strategies. Yet there are downsides. Patients with cancer spend a good deal of time and financial resources on medical treatment. Engaging in these suggested strategies would further add to their time burden for medical treatment—time that could be spent enriching their quality of life with family or other meaningful and enjoyable activities. This additional time burden could be justified, however, if an evidence-based approach supported that these strategies lead to better patient outcomes. Because no randomized studies have been conducted, the time may be spent in vain. The financial aspect is an additional downside. There have been substantial financial contributions to implement these strategies,[1] which means that financial resources, which are limited, are being used to implement non-evidence-based strategies, when that money could have been used to conduct trials to generate evidence.

We should not be complacent to accept recommendations based on intuition or basic laboratory or observational data, or because they are "imaginative," as it has been 3 years since the COVID-19 pandemic began. Rather, we should expect that recommendations are based on high-quality randomized clinical trial data with demonstrable efficacy.

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1. Hoerger M, Gerhart J, Swartz MC. Variability in COVID-19 vaccine response among people with cancer: what health care strategy best protects the vulnerable? *JAMA Oncol*. 2023;9(2):177-179. doi:10.1001/jamaoncol.2022.5874

2. Baldachin: ceiling HEPA-filtration to prevent nosocomial transmission of COVID-19. ClinicalTrials.gov Identifier: NCT05648097. Updated December 22, 2022. Accessed December 26, 2022. https://clinicaltrials.gov/ct2/show/NCT05648097

3. Cluster-randomized trial of air filtration and ventilation to reduce Covid19 spread in homes. ClinicalTrials.gov identifier: NCT05777720. Updated March 21, 2023. Accessed May 3, 2023. https://clinicaltrials.gov/ct2/show/NCT05777720

4. Bundgaard H, Bundgaard JS, Raaschou-Pedersen DET, et al. Effectiveness of adding a mask recommendation to other public health measures to prevent SARS-CoV-2 infection in Danish mask wearers: a randomized controlled trial. *Ann Intern Med*. 2021;174(3):335-343. doi:10.7326/M20-6817

5. Abaluck J, Kwong LH, Styczynski A, et al. Impact of community masking on COVID-19: a cluster-randomized trial in Bangladesh. *Science*. 2022;375(6577):eabi9069. doi:10.1126/science.abi9069

In Reply People with cancer experience an increased risk of SARS-CoV-2 vaccine nonresponse and infection, treatment delays from active infection, COVID-19 hospitalization, post-COVID-19 condition (long COVID), and COVID-19 mortality.[1-3] Accordingly, in our Editorial,[1] we encouraged cancer centers to provide more comprehensive pandemic support, suggested 10 evidence-based recommendations, and offered volunteer assistance.

We appreciate Haslam and Prasad's comments on this evidence base. Foremost, our recommendations[1] focused on patient education about COVID-19, transmission, and mitigation. Haslam and Prasad questioned the importance of educational interventions. Patient education has been the cornerstone of patient-centered oncology for more than 50 years,[4] the foundation of several journals, and an umbrella intervention found to be efficacious in meta-analyses. Education and outreach about high-quality (N95) masking, for example, can be highly successful.[5] Second, Haslam and Prasad asked about N95 efficacy. The National Institute for Occupational Safety and Health establishes and monitors N95 efficacy. The approval process demands years, involves testing N95s to ensure efficacy in blocking greater than 95% of particles that are substantially smaller than virus-laden respiratory aerosol particles, and includes product audits annually and site audits every 2 years to monitor sustained efficacy, inspect materials, and validate quality-control procedures. Third, Haslam and Prasad expressed curiosity about HEPA. HEPA filters undergo rigorous efficacy validation and monitoring tests to ensure they remove more than 99.97% of the small and most-penetrating 0.3-micron airborne particles, reducing airborne doses of dust, dirt, pollen, smoke, bacteria, and virus-laden aerosol particles. We