



COVID-19 Vaccine Prioritization Must be Driven by Science

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Dear Editor,

The U.S. Centers for Disease Control and Prevention (CDC) Advisory Committee on Immunization Practices (ACIP) recently voted 13 to one to prioritize the disposition of the COVID-19 vaccine first to healthcare workers and residents at long-term care facilities (LTCFs) (1). ACIP decision is contradictory, as it was guided by the ethical principles to "maximize benefits and minimize harms" while simultaneously citing that "LTCF residents have not been specifically studied" (2). The American Medical Association (AMA) Code of Ethics on allocating limited health care resources states that physicians have a responsibility to contribute their expertise to develop "allocation policies that are fair and safeguard the welfare of patients", and "use an objective, flexible, transparent mechanism to determine which patients will receive the resource(s) when there are not substantial differences among patients who need access to the scarce resource(s)" (3). We, therefore, agree with the dissenting vote made by Dr. Talbot from ACIP that it is incumbent upon physicians to protect the welfare of patients and do no harm, particularly in the absence of data regarding potential side effects (4).

To be fair, the decision met the criteria of objectivity, flexibility and transparency, but we should err and take a more rational and cautious approach in the elderly population. Decisions regarding vaccine disposition must be driven by scientific evidence. Sometimes decisions are made to administer a drug that is considered reasonable and rational even in the absence of data, such as off-labeled or compassionate drug use. Vaccines in the elderly population, such as influenza and herpes zoster, have historically been less effective because of their weaker immunogenic response and thus require either multiple, higher doses and/or use of adjuvants (5). Clinical trials, unless specifically designed, tend not to initially include an elderly population during their initial studies. Failure of these vaccines in the elderly population may portend a "lack of confidence" among the general population and thus an unwillingness to receive the vaccination despite compelling evidence of its efficacy within the general population of otherwise healthy individuals.

We recognize why some members of the ACIP may have voted to support the administration of the vaccine to residents of LTCFs since coronavirus deaths have disproportionately affected this population. It is here that we argue that we should not administer the vaccine to this population until the safety and effectiveness of the data are available. Thus, in the absence of evidence, how could the committee opine about their approach? First, vaccinate all health care workers directly involved in patient care at both hospitals, clinics and LTCFs, followed by everyone else working at those facilities as well as family members visiting an LTCF. This approach maintains high standards of rational and ethical principles of practice while still protecting those at the highest risk. The elderly now represent a sizeable segment of the population. Thus, it is incumbent that further studies should be made regarding vaccinating this population.

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REFERENCES

- Cohen J. CDC advisory panel takes first shot at prioritizing who gets the first shots of COVID-19 vaccines. Available from: URL: https:// www.sciencemag.org/news/2020/12/cdc-advisory-panel-takes-firstshot-prioritizing-who-gets-first-shots-covid-19-vaccines. [CrossRef]
- Dooling K, McClung N, Chamberland M, Marin M, Wallace M, Bell BP, et al. The advisory committee on immunization practices' interim recommendation for allocating initial supplies of COVID-19 vaccine-United States, 2020. CDC 2020; 69(49): 1857–9. [CrossRef]
- 3. [No author]. Chapter 11.1.2 Physician Stewardship of Health Care

Resources. AMA Code of Medical Ethics, 2016. Available from: URL: https://www.ama-assn.org/sites/ama-assn.org/files/corp/media-browser/code-of-medical-ethics-chapter-11.pdf?source=post_page.

- Branswell H. CDC advisory panel's lone dissenter on why longterm care residents shouldn't receive COVID-19 vaccine first. Stat. 2020 Dec 3. Available from: URL: https://www.statnews. com/2020/12/03/cdc-advisory-panels-lone-dissenter-on-whylong-term-care-residents-shouldnt-receive-covid-19-vaccine-first/.
- Saade E, Canaday DH, Davidson HE, Han LF, Gravenstein S. Special considerations for vaccines and the elderly. In: Vaccinations. Poland GA, editor. St. Louis: Elsevier; 2019.p.35–53. [CrossRef]