Review of: "A population-based model for rationing COVID-19 vaccine"

Jyoti Devkota[1]

1 Kathmandu University

Potential competing interests: No potential competing interests to declare.

In this paper, a mathematical model for Vulnerability Within Groups has been developed. Mathematical techniques of Odd Ratio and Binary Regression has been used. Here an evidence based and data based approach has been developed for prioritized vaccination of COVID-19. This model of Vulnerability for prioritized vaccination aims to optimize the vaccination process. It aims to limit the spread of disease and alleviate health service burden. A databased approach to model development has been used in this paper.

This paper is not well written. Many sections in this paper are ambiguous and difficult to understand. For example, terminologies like hypermobility, temporal hyper morbidity and ICD are rampantly used. But the meaning and significance is not explained. Odd ratio is analyzed in great detail. But the results are simply transplanted in this paper. Further, the conclusions made are not properly justified.

I suggest that the discussion section should be rewritten. The hypothesis developed in this paper should be properly justified in the discussion section. This justification should be in a pointwise manner. The use of mathematical and technical jargon should be minimized in this explanation