

Letter to the Editor

Low use of annual influenza vaccination in Pakistan among patients with heart failure and COPD

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Extract

Influenza vaccination is usually recommended as a clinical protocol for heart failure (HF) and chronic obstructive pulmonary disease (COPD) patients, primarily because they are at increased risk of infection, prolonged hospitalization, and death. However, despite international guidelines for annual immunization, vaccine coverage in Pakistan is unsatisfactory. International scientific evidence has reported that influenza vaccination is effective at reducing exacerbation, hospital admissions, and mortality among HF and COPD patients. However, in Pakistan, low influenza vaccine coverage is a result of limited vaccine awareness among patients as well as healthcare providers, vaccine hesitancy, patients' financial constraints, and the absence of structured influenza vaccination programs by the government for such groups, all of which contribute to increases in preventable morbidity and mortality and add pressure on the healthcare delivery system of the country. Improving vaccination coverage would require a coordinated and intersectoral approach across the country.

Keywords

Vaccination; Community Healthcare; Heart Failure; Preventive Medicine; Chronic Obstructive Pulmonary Disease; Influenza; Pakistan

Dear Editor,

Influenza vaccination is among the fundamentals of preventive medical care, especially for patients with chronic diseases such as heart failure (HF) and chronic obstructive pulmonary disease (COPD), who are at increased risk of intensive complications of influenza, hospitalization, and death. Despite global directives regarding the importance of annual influenza vaccinations in such vulnerable populations, the rate of influenza vaccine uptake is very low in Pakistan [1].

Scientific studies across the globe have validated the use of influenza vaccination in HF and COPD patients to improve exacerbations, hospitalization, and mortality [2,3]. However, recent scientific studies have shown that the prevalence of influenza vaccination among these high-risk groups is significantly inadequate in low- to middle-income countries such as Pakistan. A lack of awareness among patients as well as healthcare providers, vaccination hesitancy, cost barriers, and a lack of structured vaccination programs are major contributors to inadequate vaccination coverage [4]. This disparity in preventive healthcare services has grave health implications for society, as the burden of already strained healthcare facilities in Pakistan and the failure to prevent seasonal influenza infections among such a high-risk population are associated with the failure to improve health outcomes and to decrease healthcare expenditures [5].

Interventions at multiple levels in the healthcare system are essential and are needed to improve the situation, including but not limited to training healthcare professionals to prescribe influenza vaccination to HF and COPD patients. Misinformation and misconception regarding influenza vaccination may be countered through increasing awareness among people and patients and highlighting the advantages of the use of an influenza vaccine to make it more acceptable for treatment. In addition, the vaccine initiatives funded by the government play an effective role in disease management and infection prevention.

In conclusion, the coverage of influenza vaccination among heart failure and COPD patients is a serious public health issue in Pakistan, and there is an urgent need to increase the awareness, acceptance and coverage of the influenza vaccine to safeguard high-risk population groups and improve public health indicators.

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References

- [1] Jamil B, Ahmed R, Bashir U, Luxmi S, Kulsoom S, Ashraf S, et al. Consensus statements for influenza awareness, prevention, and vaccination in Pakistan. *J Infect Dev Ctries*. 2024;18(4):609-17. <https://doi.org/10.3855/jidc.18064>
- [2] Chang HC, Liu SF, Li YC, Kuo HC, Tsai YC, Chen MH. The effectiveness of influenza vaccination on chronic obstructive pulmonary disease with different severities of airflow obstruction. *Biomedicines*. 2021;9(9):1175. <https://doi.org/10.3390/biomedicines9091175>
- [3] Papagiannis D, Kourek C, Briasoulis A, Fradelos EC, Papagianni ED, Papadimopoulos I, et al. Pneumococcal and influenza vaccination coverage in patients with heart failure: a systematic review. *J Clin Med*. 2024;13(11):3029. <https://doi.org/10.3390/jcm13113029>
- [4] Stratoberdha D, Gobis B, Ziemczonek A, Yuen J, Giang A, Zed PJ. Barriers to adult vaccination in Canada: a qualitative systematic review. *Can Pharm J*. 2022;155(4):206-18. <https://doi.org/10.1177/17151635221090212>
- [5] Salman M, Badar N, Ikram A, Nisar N, Farooq U. Estimation of seasonal influenza disease burden using sentinel site data in Pakistan 2017–2019: a cross-sectional study. *Influenza Other Respir Viruses*. 2023;17(3):e13125. <https://doi.org/10.1111/irv.13125>