Flu vaccination during COVID-19 pandemic: a lesson from an Italian teaching hospital Floriana D'Ambrosio

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Influenza is an acute viral respiratory infection that causes significant morbidity and mortality worldwide, with indirect costs considerably exceeding direct costs on patients and society. Flu vaccination is one of the major strategies for preventing it, especially among healthcare workers (HCWs), to

avoid onward transmission to patients and colleagues. The aim of this research is to analyze the flu vaccination coverage rate among HCWs and to study which factors conditioned their adherence. The observational study was conducted in an Italian teaching hospital located in Rome (Italy) and data were collected from October to December 2020. A total of 6,568 HCWs was included considering physicians, nurses and other HCWs as job categories. Age class, gender and job category variables were analyzed. Statistically significant differences among groups were tested through $\chi 2$ test. Univariate analyses and a multivariate logistic regression (p < 0.05) were performed to assess differences in flu vaccination adherence. The flu vaccination coverage rate was 60.94%. Considering the job categories, physicians reached the highest coverage (76.09%) followed by others HCWs (64.25%) and nurses (49.09%). According to the logistic regression, belonging to 20-40 age class was significantly associated with higher flu vaccination adherence, as well as being nurses (OR 0.26, 95% CI 0.22-0.31) or other HCWs (OR 0.48, 95% CI 0.40-0.58). Findings showed an encouraging vaccination coverage rate among HCWs. Deeper knowledge of the value of vaccination among younger HCWs could be probably a reason for higher adherence as well as the wrong perception of being at low risk of illness or transmitting infections may explains job categories differences. Especially when considering the disrupting impact of the SARS-CoV-2 pandemic, an improved attitude towards flu vaccination would reduce stress on hospitals and preserve scarce medical resources.

Key messages:

- Reaching high coverage rates for flu vaccination could save healthcare resources.
- It is crucial to preserve this positive trend for the future years by spreading the message to all the involved stakeholders.