Prevalence and determinants of influenza vaccination in health care workers

Fanjanirina Rasoloarivalona¹, Pierre Tattevin², Pauline Vernet², Léopoldine Robitaille², Annabelle Guilloux², Thomas Bonnet², Alexandre Pichon², Ronan Garlantezec², Christophe Paris²

¹ Ehesp, Rennes, France, ² CHU de Rennes, Rennes, France

Background: Although yearly influenza immunization is recommended for health care workers (HCW) in France, vaccination coverage as low as 20% has been reported, mostly related to vaccine hesitancy. We aimed to evaluate influenza coverage, and its determinants, in a network of hospitals affiliated to Rennes University Hospital, Western France.

Materials/methods: We conducted a cross-sectional study. A representative sample of approximately 10% of HCW was randomly selected. Data were collected in September 2018 using a short standardized questionnaire during face-to-face interviews. Briefly, the questionnaire collected the following data: i) demographics; ii) influenza vaccination for the 2017/2018 season (yes/no) iii) if vaccination was performed, motivation(s), and context (i.e. general physician, occupational medicine, others); iv) if no vaccination, main reason(s). Finally, the HCW were invited to suggest interventions that would, in their opinion, improve influenza vaccination coverage in HCWs. Univariate analysis of variables associated with vaccination coverage was performed, using chi-2 or Fisher test, as appropriate, with Epi Info 7 and SAS V9.3.

Results: Among the 1,448 HCW selected, 985 (68.0%) agreed to participate. Reported influenza vaccination coverage was 33.5% overall (330/985), with large differences between doctors (105/121, 86.8%), nurses (126/394, 31.7%), technicians (22/85, 25.3%), and nurse assistants (60/234, 17.9%), P<0.00001. Main positive determinants of influenza vaccination were i) patient protection (27.9%); ii) relatives protection (24.4%); iii) self-protection (17.7%). Main negative determinants were i) sub-optimal efficacy of influenza vaccine (40.2%); ii) side effects (23.0%); iii) no time/uneasy access to vaccine (6.6%). Main interventions to improve influenza vaccination coverage were i) better information on benefit/risk; ii) easy access to influenza vaccine (e.g. staff restaurant, mobile vaccination units with day and night shifts); iii) mandatory influenza vaccination for HCW.

Conclusions: Influenza vaccination coverage in HCW was low in this hospital network, especially in nurses, nurse assistant, and technicians, in line with other contemporary studies in France. Better education, more opportunities for vaccination, and/or mandatory influenza vaccination are the three interventions most likely to improve this sobering situation.