

Influenza vaccine adverse event and effect on acceptability in pediatric residents

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Influenza vaccination of HCP has documented benefits both on patient's outcomes and absenteeism and decrease in influenza infection in HCP and result in financial savings to sponsoring health institutions. Despite its shown benefits, the vaccination coverage is lower in the HCP than the expected levels. In this study we surveyed the attitudes of pediatric residents regarding influenza immunization and adverse local and systemic reactions. We also observed the effect of influenza vaccination of all residents at same period on the operation of the hospital.

Methods: Eighty pediatric residents working in Hacettepe University Faculty of Medicine, Ihsan Dogramaci Children's Hospital were included in this study. The trivalent inactivated influenza vaccine is applied between 3rd-4th weeks of September, by the same nurse. A questionnaire and follow-up form was given to them. The form consisted of the patient's data including recordings of temperature for 7 days, side effects including local, systemic and severe adverse events and effect of side effects to resident to decision on vaccination for the next year.

Results: Fluarix was given to 45 female and 35 male pediatric residents with ages ranging from 20 to 26 years (mean 24.89± 0.39). The vaccine was applied to right arm in 16 HCP and left arm in 64 arms (opposite of preferred hand). In our resident, 33.7% of them thought that the vaccine was unnecessary and vaccine coverage was only 12% in the previous year. Also more than half of them (67.5%) did not plan influenza vaccination before this study. 13 (16%) of the pediatric residents had soreness at the vaccination site lasting 2.3 days averagely and 7 (8%) of vaccinated residents had other local reactions without any interference with everyday activity. In our study group, 16 (20%) had flu-like symptoms (subfebrile fever, myalgia and malaise). In our study 33.8 % of the vaccinated residents acclaimed that they would not prefer influenza vaccination for the next year. Overall side effects (including soreness, erythema at the vaccination side and systemic reactions) of influenza vaccination is 36.5% (n=29). While 20 of the 29 (68.9 %) HCP vaccinated who experienced side effects after vaccination did not want to receive the vaccine next year because of side effects, this was 13% (7 over 51) in the group without side effects and the main reason for them was cost of vaccination.

Discussion: All the reported side effects were relatively minor and short lived, and there was no effect on the hospital operation. After this we would like to recommend influenza vaccination campaign for HCP by employers, but we have to plan to take steps to improve the acceptability of influenza vaccine by HCP.

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