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## **A**BSTRACT

## Influenza vaccination among Health Care Workers at a Regional University Adult Acute-Care Hospital in Genoa, Liguria, Italy: results from a project promoting awareness and active offer during the period 2005-2011

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Seasonal influenza is a major public health problem causing, each year, an increase in hospitalizations due to complications and, consequently, a not negligible number of deaths [1].

Influenza vaccination is the primary tool for the prevention of the disease and, as stated in the Ministerial Circular "Prevention and control of influenza" [2], health-care personnel is regularly included among the categories for which the vaccination is recommended: this group is exposed to high risk both of individual infection and of nosocomial transmission [3].

The compliance of the health-care personnel to immunization is crucial for achieving high Vaccination Coverage (VC) rates in order to contain the virus circulation and to reduce work absenteeism, particularly during epidemics, the period of greatest demand for assistance by the community.

Despite the recommendations by the World Health Organization [4] and the Ministry of Health, compliance of health care workers to influenza vaccination is still insufficient in Italy: this has become clearly evident during the 2009-2010 pandemic season (VC  $\approx$  15%).

Since 2005-2006 season the San Martino University Hospital of Genoa has been developing a project aimed to increase VC rates among the health-care workers: this has been carried out through an informative campaign (by leaflets at points of punching; direct solicitation during the routine preventive medicine visit; letters sent to all medical directors, nursing administrators and quality managers of each department explaining how and why the vaccine is recommended) and by active offer of vaccination. Moreover hospital has given the opportunity for health-care workers to be vaccinated not only at the outpatient clinics devoted to this (Hygiene

Unit) but also directly in the departments they belong to, by previous reques of the necessary number of vaccine doses by fax to the Hygiene Unit clinic.

Overall 6000 health-care workers have been immunized against seasonal influenza from 2005/2006 to 2010/2011 seasons, with VC rates of 56% in 2005/2006 (result probably due to psychological conditioning related to the risk of avian influenza), 20%, 24%, 30% and 34% in the four following seasons and of 20% during the last year.

Moreover, since the beginning of the project, there has been a gradual and steady growth in the number of vaccinations given directly in the hospital departments (from 38% in 2005/2006 to 60% in 2010/2011) with a parallel reduction of the doses administered at the Hygiene Unit outpatient clinic.

Although a gradual increase in VC rates was registered at our hospital, the overall results are disappointing: in particular, the rate of about 20% for the seasonal flu vaccination in the last year, as well as the low coverage ( $\approx 15\%$ ) observed for the monovalent H1N1v pandemic vaccine in 2009-2010 season.

These results are certainly linked to the low risk, perceived by health-care workers, of both seasonal and pandemic influenza. Insufficient knowledge of the clinical impact of influenza epidemics and the lack of a prevention culture among health care workers, together with doubts about the safety and efficacy of vaccines, are some of the key factors that may have had a negative impact on the compliance [5]. It is necessary to continue working to change the approach of health-care personnel with these issues. In our experience, the active offer of vaccine directly into hospital departments could be one of the useful measues to increase VC rates.

## References

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