

Session: OS095 Late-breaker: News in vaccine research

Category: Other

23 April 2017, 17:31 - 17:42
OS0486H

Effective Strategies to Increase Influenza Vaccination of Healthcare Workers in Saudi Arabia

Bassel Molaeb^{*1}

¹*Al-Moosa Specialist Hospital; Infection Prevention and Control*

Background: Influenza vaccination is recommended by the World Health Organization (WHO) and Saudi Ministry of Health for healthcare workers (HCWs), however, coverage has been historically low. Influenza vaccination is the most effective method for reducing the risk of flu and absenteeism in HCWs as well as the risk of respiratory illness and mortality in their patients. This paper discusses the most effective strategies applied in a tertiary care hospital in Saudi Arabia to raise influenza vaccine coverage (IVC) rates in HCWs and the effect on sick leave (SL) rate due to influenza-like illnesses (ILI) during three flu seasons.

Material/methods: We retrospectively reviewed and analyzed IVC rates during the flu seasons from October 2014 to February 2017 through which several interventions were progressively implemented. The impact of influenza vaccination on SL rate due to ILI was compared between vaccinated and unvaccinated HCWs during flu seasons. SL rate due to ILI was calculated by dividing the total number of such SL by the number of SL during the flu seasons.

Results: With the use of multiple progressive interventions, the overall IVC rate increased from 45% in 2014-2015 season to 96% in 2016-2017 season (significant increase of 51% with p -value <0.05). In 2014-2015 season, IVC rate reached 45% following provision of free non-mandatory vaccine and easy access to it (on-site vaccination), providing educational activities, and requesting signed declination statement (form of vaccine refusal). In 2015-2016 season, IVC rate jumped up to 83% (significant increase of 38% with p -value <0.05) due to additional combination of interventions including limiting barriers to vaccine (perception of vaccine inefficacy, fear of side effects and misperception of influenza illness risks) and actively promoting for flu vaccine. During the 2016-2017 season, flu vaccine was made mandatory and the IVC rate dramatically increased to 96% (significant increase of 13% with p -

value<0.05). Throughout the three flu seasons, the increase in IVC rate was associated with 19% reduction (p-value<0.05) in SL rate due to ILI between vaccinated and unvaccinated HCWs.

Conclusions: Our findings confirm the importance of a comprehensive approach using combined interventions that have cumulative effect resulting in increased IVC rate. A mandatory influenza vaccination program for HCWs is feasible and results in extremely high vaccination rates. Influenza vaccination of HCWs is significantly associated with a fewer number of SL due to ILI. Long-term well-designed programs are the key to sustainable improvement in IVC rate, leading to improved patient safety outcome.

Sick Leave (SL) due to ILI in Vaccinated and Unvaccinated HCW

Flu Season	SL due to ILI in Unvaccinated HCW	SL due to ILI in Vaccinated HCW	Total SL
2014-2015	40	20	143
2015-2016	157	51	520
2016-2017	173	52	624
Total	370 (29%)	123 (10%)	1287

Influenza Vaccine Coverage Rate from October 2014 – February 2017

