Seasonal influenza vaccination programme for hemodialysis patients
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Keywords:
influenza
vaccination
renal failure
hemodialysis

Introduction
Seasonal influenza may cause secondary complications which translate into significant morbidity and mortality, loss of workdays, emergency room attendances and hospitalization. The Government Vaccination Programme (GVP) includes free seasonal influenza vaccination to high-risk population every year with increased coverage in 2016-2017. Yet, the vaccination rate was only 14% in the local population and less than 45% even in health care workers. Our retrospective audit reviewed only 13.3% of our hemodialysis (HD) patients received the 2015/16 seasonal influenza vaccine.

Objectives
Previous policy precluded patients receiving vaccination on the same day of HD due to concern about coagulopathy. Nevertheless, many patients were reluctant to attend the out-patient clinic to receive vaccination after 5-6 hours of HD. Mobile team service might not be cost-effective since our patients finish their HD at different time of a day. We aimed to boost up the seasonal influenza vaccination rate among patients on long-term HD.

Methodology
We recruited all patients receiving long-term HD from 3 November 2016 to receive vaxigrip®, which is a trivalent vaccine recommended for the Northern hemisphere that contains inactivated influenza A/California/7/2009 (H1N1)PDM09–like virus, an A/Hong Kong/4801/2014 (H3N2)–like virus, and a B/Brisbane/60/2008–like virus. [3] To facilitate proper prescription and dispensing of medications, all HD patients were admitted as in-patient day cases. While patients were receiving HD treatment, 4-5 patients were briefed on the indications, risks and benefits of vaccination by a nephrologist whom also obtained verbal consent individually. The process was documented in a standard form and the Clinical Management System (CMS). Pharmacy communicated with ward staff closely with proper dispensing, handling, delivery of the vaccine through a vaccine specific cold chain delivery schedule.
Nurses administer the vaccine subcutaneously immediately after the HD session and observed for complication. Interim evaluation was performed at the end of December 2016. Re-evaluation and patient satisfaction survey will be performed later.

Result
A total of 45 patients (male:female=25:20; mean age ± standard deviation=58.8±13.6) were recruited. By the end of December 2016, 39 had received the vaccine (38 at the HD unit and 1 at the old age home, overall vaccination rate=86.7%). Two patients were medically contraindicated for influenza vaccination and three had been admitted to other hospitals and not available for interview. Only one patient firmly refused vaccination. The vaccine was well tolerated with only one case of minor local skin adverse reaction. With staff engagement, team work and workflow modification, we were able to boost the seasonal influenza vaccination rate from 13.3% to 86.7% among HD patients.