Implementation of an Adult Pneumococcal Disease and Influenza Vaccination Program in a Community Hospital

Pneumococcal disease (PD) and influenza are common respiratory diseases preventable with vaccination. Their burden of healthcare in Singapore is substantial, with pneumonia the 2nd most common cause of mortality and up to 3500 people with flu-like symptoms per week.1,2 Both types of vaccines have been shown to be cost effective and reduce hospitalization and mortality.3-4

Despite the benefits, vaccination rates remain low, both nationally and within the hospital.5-6 We thus identified a need to develop a screening and administration program to improve rates in our hospital.

Aims

• Develop and implement a structured protocol for screening, ordering and administration of pneumococcal (PV) and influenza vaccines of adult patients in St. Andrew’s Community Hospital.

• Evaluate the impact of this protocol on vaccination rates.

• Determine and evaluate reasons for the rejection of vaccination from both patients and healthcare providers.

• Monitor the incidences and types of adverse drug reactions (ADRs).

Survey - Barriers to Vaccinations

A survey was done with healthcare professionals and patients in the hospital to determine the barriers to vaccination. The top 3 barriers were:

1. Lack of awareness of the vaccines for both healthcare professionals and patients.
2. Lack of standardised protocol and confusion to vaccination schedule.
3. Increased workload for healthcare professionals.

Interventions to Mitigate Barriers

• Conducted talks for doctors, nurses and pharmacists on vaccines and workflow before implementation of program to create awareness.

• Devised standardised screening and monitoring form using guidelines from the Advisory Committee on Immunisation Practices (ACIP) and the National Adult Immunisation Schedule (NAIS).5,6

• Devised standardized workflow for pharmacists, doctors and nurses to streamline workload. Created a stamp to minimise documentation in case notes.

Conclusion and Future Directions

• This structured program has allowed our patients to be offered appropriate vaccines during their stay in the ward with vaccine education and ADR monitoring, consequently leading to reduced hospitalization and mortality. Reasons for declining the vaccines, if any, were documented to allow evaluation on how to improve the acceptance rates and hopefully achieve herd immunity.

• Following the success of this program, other vaccines such as varicella vaccine may be included as well.

References: