How Respiratory Nurse Clinic helps patients with respiratory diseases in a district hospital in Hong Kong

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Introduction
Respiratory disease was the most common cause of mortality and hospitalization in Hong Kong in 2005. Respiratory diseases accounted for 15.9% of all hospital discharges and 6.0% of all inpatient bed-days. “Keep people healthy” to reduce demand by shifting the focus toward prevention and early intervention, and by developing alternative options that could prevent avoidable hospitalization and control certain symptoms of respiratory patients. Respiratory Nurse Clinic (RNC) could be an option meet the challenge.

Objectives
To establish a Respiratory Nurse Clinic in order to reduce avoidable healthcare utilization and have better symptoms control for patients with respiratory diseases To review the service of the Respiratory Nurse Clinic

Methodology
The RNC has been established since 2009 and was accredited in 2011 to provide a series of disease-specific capacity enhancement programs. The clinic was run by five experienced respiratory nurses with average of 18.6 years of working experience, recognized specialty training and overseas training. The four main sessions of RNC for disease specific program are COPD/Asthma, Continuous Positive Airway Pressure titration, Home mechanical ventilator and specialty respiratory services. The key components of the RNC include patient registry, individualized care plan, different consultation sessions, 24-hour hotline, case management and annual vaccination program.

Result
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The RNC provided 720 to 760 attendances a year. In the session of COPD/Asthma, the first 300 COPD patients with mean age of 75.03 +/- 7.47 were analyzed for their healthcare utilization for three months before and after joining the clinic. It was statistically significant that the emergency department attendance, unplanned admission and length of stay were reduced by 33.55% (p<0.001), 45.69% (p<0.001) and 44.66% (p<0.001) respectively. The mean Modified Borg Scale was reduced from 2.99 to 2.14 (p<0.001). In the CPAP titration session, the first thirty-three patients were reviewed after three months. Twenty-three of them continued the CPAP treatment with good compliance. They all expressed their sleep quality had improved and satisfied with the empowerment program. Their Epworth sleepiness score was improved from 12.2 to 8.2. Conclusion

Respiratory Nurse Clinic conducted by a team of recognized and experienced respiratory specialty nurse could help to reduce avoidable healthcare utilization and have better symptoms control for respiratory diseases.