

BENEFITS OF A POST-DISCHARGE COMMUNITY PULMONARY CARE PROGRAM FOR HOME-STAY COPD PATIENTS

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INTRODUCTION

COPD patients are known to have frequent hospital admission. In year 2008, the unplanned readmission rate was 25.7% and average length of hospital stay (ALOS) was 6.54 days in TKOH respiratory unit (Tse, 2009). From October 2009 to December 2010, community nurses (CNs) provide a post-discharge community pulmonary care program to empower the home-stay COPD patients on self management of their disease at home.

OBJECTIVES

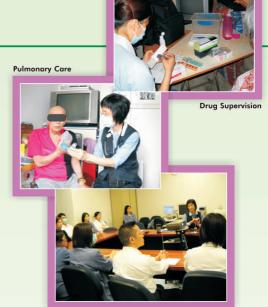
- To empower COPD patients or caregiver on self management of COPD
- To reduce unplanned readmission by 20%

METHODOLOGY

Subjects were COPD patients of TKOH respiratory unit with

- (1) ≥ 3 admissions/year,
- (2) current admission is unplanned readmission,
- (3) history of requiring mechanical ventilation/ NIPPV
- (4) not fit for hospital pulmonary rehabilitation program.

Case managers were assigned for the patients and home visits were provided by CNs over eight weeks. The first home visit was arranged 24 to 48 hours post discharge. According to the current CNS high risk COPD management protocol, the CNs will deliver pulmonary care to the home-stay COPD patients including condition monitoring, health education on knowledge of COPD, medication and oxygen therapy, diet control, dyspnoea management, home environment modifications, psychological and caregiver support. The discharge support multidisciplinary team served as support network. Outcome measures of the program were unplanned readmission rate and self-management ability.



Multi-disciplinary team work

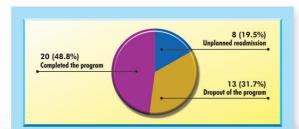
RESULTS

From October 2009 to December 2010, forty-one patients were recruited and 97.5% of participants were males with mean age 75. Twenty (49%) of them have completed the eight-week home visit plan. Eight (19.5%) were having unplanned readmission and thirteen (31%) dropped out of the program because most of them expressed they could manage by themselves.

For the completed cases, totally 171 home visits were provided with average 8.5 visits per patient. Five of them are referred by CNs to the fast tract clinic during the program. All of them had no unplanned readmission and 65% remained at home for more than three month post discharge.

For the drop out cases, 28 home visits were provided with average 2.2 visits per patient. Eight of them agreed follow-up by telephone calls. Following with twenty-nine telephone calls, average 3.6 per patient had made. All drop out cases had no unplanned readmission and 62.5 % remained at home for more than three month after discharge.

For self-management ability, there were 60% improvement on management of dyspnoea, 55% improvement on puff technique, 50% improvement on medication knowledge and 50% improvement on exercise compliance.



	Completed program	Drop out of the program
No. of patient	20	13
No. of H.V.	8.5 visits / patient	2.2 visits / patient
Fast Tract Clinic attacdance	5	0
Tel. Support	0	(3.6 calls / patient)
Unplanned readmission	0	0
Remain at home 3 months after discharge	65%	62.5%

CONCLUSION

The post-discharge community pulmonary care program was effective in reducing unplanned readmission and improving patients' self management for home-stay COPD patients. Further, combination of home visit with community pulmonary care and telephone follow-up also demonstrated positive outcomes for this vulnerable high risk group. Regarding to the findings, the modification of the program can be explored and maintenance program for these home-stay COPD patients should be considered.

