The impact of the fluid Management Program in HKWC on Reduction of Symptoms and Admissions in Palliative Patients

Chan KY(1), Sham MK(1), Yap Desmond (2)
(1) Palliative Medical Unit, Grantham Hospital
(2) Department of Medicine, University of Hong Kong

Keywords:
Palliative care

Introduction
Up to 30-40% of Advanced Heart Failure (AHF) and End Stage Renal Failure (ESRF) patients who opted for conservative treatment had repeated admission due to fluid overload. These episodes of fluid overload were usually related to their poor compliance and knowledge deficiency on fluids. The Appropriateness, Self-efficacy, Adherence and Compliance (ASAC) program is a new psycho-educational program launched to enhance fluid and drug compliance in AHF or ESRF patients who opted for palliative care (PC) in HKWC.

Objectives
To study the impact of the program on symptoms, body weight, number of hospital admissions.

Methodology
This program was implemented in palliative clinic from January 2013. The PC nurse identified those AHF and ESRF patients with symptoms related to fluid overload in PC clinic by Edmonton symptom assessment score (ESAS). Patients were assessed for fluid intake pattern and any maladaptive coping. The patients and families were given educational pamphlets for fluid and diet intake. Several important interventions were given as follows:

1. Appropriateness- the fluid amount was limited in a stepwise approach after discussion with patient.
2. Self-efficacy was maintained through body weight and diary measurement of fluid intake at home.
3. Adherence to medications was checked during follow-up.
4. Patients with poor compliance were monitored more closely in clinic or by home care nurse, and those with significant edema were admitted for intravenous diuretic treatment.

The patient symptom score, total (ESAS) burden, body weight and 6 month acute hospital admission (AHA) were compared before and after psycho-education interventions by paired T-test.
**Result**
1. From 1/2013 to 12/2016, a total of 286 (63 % AHF) patients were identified with symptoms related to fluid overload. The mean age of the patients included were 83.4 (53-98) years old. About 56 % were female.
2. After 6 months of the interventions, 52 % of patients received intensified PC clinic follow-up, 68 % had home care visit and 11 % required direct PC unit admission for fluid overload.
3. Body weight decreased by a mean of 3.8 kg at 3 months and of 3.2 kg at 6 months.
4. Symptom scores of edema, sleep and wellbeing were significantly reduced at 6 months.
5. Post 6-month AHA (due to fluid overload) rate was reduced significantly (2.4(1-9) vs 1.1(0-7), P<0.05)).
This report showed that program was effective to reduce symptoms and admissions due to fluid overload in PC patients with AHF and ESRF.