

non-communicable (41.6% vs. 24.4%, $p=0.002$). The major predictors for pain were the use of physical restraint (OR=3.1), presence of physical aggression (OR=2.55), male sex (OR=2) and poor MMSE (OR=0.94). **Conclusions:** Pain is highly prevalent among moderate to severe dementia nursing home residents and is associated with the use of restraints. However, only half of these subjects have been prescribed with analgesics. Improvement in caregiver's knowledge of pain assessment with provision of adequate treatment is necessary for caring of these groups of dementia subjects.

A community study on burden and depressive symptoms among carers of demented relatives

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Background: Most mild to moderate demented patients are cared at home. Studies have shown that carers face increased stress and are prone to depression. In order to understand their needs, a collaboration study between District Board, Community Rehabilitation Network and local hospitals was done. **Objective:** (1) To understand care needs of demented patients and their carers in the family. (2) To assess difficulties faced by carers and evaluate their stress. (3) To find out which factors may aggravate or relieve carer stress. **Method:** The study was performed by interviewing 100 carers by questionnaire. Three main themes were studied: (1) presence of depression by Center for Epidemiological Studies Depression Scale (CES-D), (2) caregiver burden by Zarit Burden Interview (ZBI), patients' memory and behavioural problems by Revised Memory and Behaviour Problems Checklist (RMBPC), patient ADL performance, and (3) carer coping abilities by Brief COPE and perceived social support by Multidimensional Scale of Perceived Social Support (MSPSS). **Results:** 49% of patients are in moderate to severe stage, with moderate to high ADL dependency level (mean ADL score: 62.4, with 40% of patients scoring 60 or below). On average carers spent 13.8 hours per day on their relative. 24% of carers have rated self-perceived health status as poor or very poor. 36% have little or no knowledge about the dementia illness. Regarding carer depression, 49% had CES-D score in the moderately and severely depressed range. Caregiver

burden was high with ZBI score of 38.2 (>24 being highly associated with depression). Memory and behavioural symptoms were common with mean RMBPC 38.2. Carer coping abilities as measured by Brief COPE was 24.6. Perceived social support as measured by MSPSS was 56.2. Carer depression was found to be correlated with cognitive and behaviour problems as well as carer burden; whereas it was negatively correlated with social support. After multiple linear regression analysis, caregiver burden was the most significant factor contributing to caregiver depression ($\beta=0.55$, $T=5.43$, $p<0.001$). **Conclusions:** This cohort of carers, having spent long hours caring for their demented relatives had limited knowledge, poor perceived health and emotional problems. They had high burden and showed signs of depression. Caregiver depression was found to be associated with a higher level of burden.

SUBMITTED FREE PAPERS

Obese and overweight men survive longer than the normal-weight and stably underweight men: a six-year prospective study in 3322 older persons

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Background: Whether being underweight or having rapid weight loss was associated with excess mortality in old age remains controversial. Furthermore, the advantageous effect of being overweight can alternatively be explained by the biased comparison to the sicker persons who are rapidly losing weight. **Objective:** We examined whether the advantageous effect of being overweight persisted after exclusion of rapid weight-losers. **Method:** 4000 community-dwelling men and women older than 64 years were recruited. Their baseline BMIs were categorized into four groups: <18.5 (underweight), 18.5-22.99 (normal weight), 23-24.99 (overweight), ≥ 25 (obese), according to the Asia-Pacific definition. Those having weight loss of >10% or early death in the first two years were excluded. They were followed up for 6 years and their mortality status was ascertained by the Hong Kong Death Registry. The mortality rate was compared across the 4 groups with adjustment for age, smoking status, history cancer, COPD, stroke heart disease, hypertension, and diabetes mellitus. **Results:** 1692 men and 1630 women were analyzed after exclusion of the rapid weight-losers or early deaths. The mortality across the 4 groups in ascending BMI was: 13.1%, 10.5%, 7.0%, and 6.5% in men (p -for-trend <0.01); 5.8%, 2.2%, 3.5%, and 3.3% in women (p -for-trend >0.05). **Conclusions:** In older men, being stably underweight was associated with excess mortality. The advantageous effect of overweight and obesity in older men cannot be