OUTSTANDING FREE PAPERS

Integrated care for frail older people in community: a pilot programme of Tuen Mun Hospital

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Background: Community-dwelling frail older people with multiple comorbidities often require intensive medical and nursing care. However, medical and nursing support for such people is not available. Such service gap leads to low threshold for accident and emergency department (AED) attendance, frequent hospitalisation, and discharge problems. Objective: An on-site, need-based, integrated programme was established to facilitate care for frail older people in the community so as to reduce AED attendance and hospitalisation and relieve caretaker stress. Methods: This geriatrician-led multidisciplinary programme collaborated with community nursing service. Community-dwelling frail older people with supportive family who were bedridden and functionally dependent, in need of intensive medical and nursing care, and with frequent admissions (≥3 in 6 months) or prolonged hospitalisation (≥2 months) were recruited from Tuen Mun Hospital. Regular nursing visits and on-site medical follow-up by geriatricians were provided, as were ad hoc nursing phone consultations within office hours and ad hoc medical on-site or tele-consultations for acute medical problems. More complex interventions could be carried out at home, including subcutaneous fluids infusion, intravenous antibiotics, and wound debridement. Caretakers were empowered to perform procedures such as oropharyngeal suction or use of narcotics in palliative care. Admission to dedicated geriatric wards could be arranged if necessary. Hospitalised patients were co-managed by the hospital team, and early post-discharge support was provided. Medical-social collaboration enabled community support. Conference was held regularly to review progress of each case. Results: From February 2018 to December 2021, 42 women and 18 men (median age, 89 years) with a median Clinical Frailty Scale score of 8 were recruited. 90% had advanced dementia; 30% had deep pressure injuries; and 43% had ≥2 episodes of sepsis within the past 6 months. At least 4.7 nursing visits and 0.8 medical visits were provided per patient-month. In 3 months and 6 months pre- and post-programme, the mean AED attendance per patient decreased from 1.2 to 0.6 (p=0.002) and from 2.0 to 0.9 (p<0.001), respectively, whereas the mean hospitalisation days per patient decreased from 26 to 5.6 (p<0.001) and from 48.6 to 8.1 (p<0.001), respectively. The median Relatives Stress Scale score decreased from 28/60 to 17/60 at 3 months (p<0.001). As of 31 December 2021, 40 (67%) patients were discharged from the programme: 35 died, three moved to residential care homes, and two continued home care without our support. Conclusion: This pilot programme facilitates community care for frail older people so as to reduce AED attendance, hospital stay, and caretaker stress.


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Background: Estimation of renal function is essential in drug dosing, especially in hospitalised older people. Objective: This study aims to evaluate the performance of three estimation equations in terms of bias (defined as difference of estimated creatinine clearance or estimated glomerular filtration rate from measured creatinine clearance [mCrCl]), accuracy (defined as the percentage of estimated values within 30% of mCrCl), and agreement. Factors that affect the absolute bias of each equation and covariates that can improve the estimation equations in prediction of mCrCl were determined. Methods: Chinese patients aged ≥65 years with stable renal function who were admitted to the acute and rehabilitation medical wards of two hospitals in Hong Kong between 14 December 2020 and 31 January 2021 were recruited. The performance of three estimation equations for renal function, namely the Cockcroft-Gault, the Modification of Diet in Renal Disease (MDRD) study, and the Chronic Kidney Disease Epidemiology Collaboration (CKD-EPI) equations, was compared with mCrCl from a 24-hour urine collection as a reference. Results: 71 Chinese patients (54% male) with a mean age of 80.4±8.6 years and a mean body mass index of 22.05±4.08 kg/m² were included. The mean mCrCl was 60.3±28.0 ml/min. The CKD-EPI equation provided the smallest mean absolute bias, highest accuracy, and best agreement with mCrCl. In regression models, mobility status and serum albumin level were not significant covariates that could improve any equations in the prediction of mCrCl. Weight as a covariate was not significant in improving the MDRD study and the CKD-EPI equations in their prediction of mCrCl. Conclusion: The CKD-EPI equation should be used in the estimation of renal function in hospitalised older people with stable renal function.
Mortality and advance care planning acceptance in elderly care home residents with high HARRPE score and potential application for end-of-life care

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Background: Older people living in residential care home for the elderly (RCHE) in Hong Kong usually have multiple comorbidities with unpredictable illness trajectories leading to death and have increasing demand for end-of-life (EOL) care. Repeated admissions prior to death in hospitals are common among these older people. The Hospital Admission Risk Reduction Program for the Elderly (HARRPE) score has been shown to correlate with mortality. Objective: This study aims to compare advance care planning (ACP) acceptance rate and mortality at 180 and 365 days among patients recruited to our EOL programme who were identified by HARRPE score versus clinical referrals. Methods: Among older people aged ≥80 years living in RCHEs between 1 July 2018 and 30 June 2019, those who were referred by clinicians to our EOL programme were compared with those who were identified by a HARRPE score of ≥0.4. Results: Of 113 referred patients and 735 patients identified by the HARRPE score, 102 and 96, respectively, were included in our EOL programme. The mean patient age was 92 years. 71% of patients were female. The ACP acceptance rate was similar in both groups (57% and 51%). The survival probability is higher in those with ACP than in those without (p<0.001). At 180 and 365 days, 52% and 62% of referred patients died, respectively, whereas 48% and 66% of those identified by the HARRPE score died, respectively. The overall mortalities for both groups were similar (log rank test, p=0.801). Conclusion: Older people living in RCHE who were identified by the HARRPE score showed similar ACP acceptance and mortality rate to those who were referred by clinicians. The HARRPE score can supplement clinical referral for timely EOL care.

Changes in pattern of elderly abuse during COVID-19 pandemic in Hong Kong

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Background: During the COVID-19 pandemic, most people needed to work from home and had less social or recreational activities. An increase in the time spent on living with older relatives may result in an increase in elderly abuse. There was up to 83.6% increase in the prevalence of elderly abuse during the pandemic, compared with pre-pandemic period. Objective: This study aims to determine the pattern of elderly abuse in Hong Kong during the COVID-19 pandemic. Methods: Data were retrieved from the Social Welfare Department. 469 cases of elderly abuse in 2020 (during the COVID-19 pandemic) were compared with 3297 cases of elderly abuse between 2014 and 2019 in terms of abuse methods and perpetrators. Results: The number of elderly abuse cases did not increase during the pandemic. Compared with pre-pandemic period, during the pandemic, there was more physical abuse (70.5% vs 65.9%, χ²=3.9638, p=0.046) and more spouses as perpetrators (9.8% vs 16.2%, χ²=12.8614, p=0.0003) and more financial abuse (10.4% vs 8.8%, χ²=3.4815, p=0.036). Conclusions: The pattern of elderly abuse during the COVID-19 pandemic was of more physical abuse and more spouses as perpetrators. Government and healthcare sector should offer more social support during pandemic.

Submitted Free Papers

Implementing geriatric care to older patients with fall-related head injury in a convalescent and rehabilitation hospital

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Background: Integrated orthogeriatric co-care model is the standard of care for older patients with hip fractures. However, there is no such model for fall-related head injuries. Objective: This study aims to examine clinical, functional, and rehabilitation outcomes of older patients who received neurosurgical geriatric co-care (NGC) or neurosurgical care alone after fall-related traumatic head injuries. Methods: We retrospectively reviewed case notes of 39 patients in the pre-NGC group (with 70 admission episodes) and 52 patients in the NGC group (with 73 admission episodes) over an 18-month period. Clinical, functional, and rehabilitation outcomes at the convalescent and rehabilitation hospital were collected. Results: FG was positively associated with enrolment in the NGC model (p=0.011) and serum albumin level on admission (p=0.008) and was negatively associated with the number of accident and emergency department attendance with falls in the past year (p=0.040). The geriatric liaison service resulted in a reduction in the number of transferring back to the acute hospital (32 vs 17, p<0.05), a greater number of geriatric day hospital referrals (p=0.004) and single-discipline allied health clinic referrals (p=0.045), and more community support service referrals upon discharge. Comparing functional independence measure scores on admission and discharge, more patients with NGC could improve their scores from high to moderate disability category and from moderate to low disability category. Conclusion: The NGC model reduces the number of transferring back to acute hospital and improves functional outcomes and post-discharge support for older patients with fall-related head injury.

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Implementation of careful hand feeding in a geriatric convalescence hospital: a retrospective study

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Background: Older patients with advanced irreversible chronic illnesses or end-of-life situation are often put on nasogastric tube feeding. Careful hand feeding (CHF) has been advocated as an alternative. Fung Yiu King Hospital has implemented CHF since February 2017 for patients in end-of-life situation. Objective: This study aims to evaluate the safety of CHF in a geriatric convalescence hospital. Methods: Records of patients aged ≥65 years who had CHF in Fung Yiu King Hospital between February 2017 and November 2021 were retrospectively reviewed. Results: Of 489 patients joined the CHF programme, 43 were excluded owing to incomplete records and the remaining 446 (178 men and 268 women) aged 66 to 109 (mean, 91±7.9) years were included. 341 (76.5%) of them were living in residential care homes prior to admission. 393 (88.1%) of them were severely frail (level 7 or 8 in Rockwood Clinical Frailty Scale). The three most common principal diagnoses were advanced dementia (70%), organ failure (13.7%), and active cancer (9.6%). The most common eating problems leading to CHF were dysphagia (60%), poor feeding (18.6%), and both (21.3%). After CHF, 27 (6%) patients had pneumonia. 228 (49%) of patients had satisfactory or good oral intake. The mean length of stay was 19.3±16 days, and the mean duration of CHF was 14±13.5 days. 175 (39%) patients died during the index admission. Among discharged patients, only 10 (9.5%) of 105 originally home-dwelling older people moved to residential care homes. In multivariate analysis, independent predictors for pneumonia were longer length of stay (odds ratio [OR]=1.024, 95% confidence interval [CI]=1.005-1.043, p=0.014) and poor/very poor intake (OR=1.82, 95% CI=1.112-2.978, p=0.017). Conclusion: CHF seems to be safe in a geriatric step-down hospital. It fosters comfort and dignity of dying patients without significantly increasing their risk of pneumonia or institutionalisation after discharge. More large-scale prospective studies are warranted to determine the benefits of CHF over enteral feeding in both acute and convalescence hospitals.