

FREE PAPER SESSION I

HEALTH

Geriatric Nurse Facilitating Early Discharge of OAH Patients Admitted to Medical Wards - Continuity of Care from Hospital to OAH

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Background: In QEH, OAH patients accounted for 18% (n=8222) of all medical admission, and 22% of total LOS in all medical wards (data from CDARS Jan – Dec 2007). These admissions contributed significant workload to ward staffs especially during peak season of admission. OAH patients are frail elderly with multiple medical problems. On the other hand, un-necessary prolonged hospitalizations create potential risk to this group of patients, e.g. hospital acquired pneumonia, decubitus ulcer. **Aim:** Nurse initiated screening to facilitate discharge of aged-home patients in our department especially in peak season. **Workflow:** 1. During peak season of hospital admission, Geriatric nurse screened all OAH patients in two cohort wards (G2, G5). In four admission wards (E4, E5, E6, E7), those OAH patients under KCC CGAT (QEH + KH) were screened. 2. Stable patients with potential for early discharge were selected and assessed. 3. Geriatric nurse performed comprehensive geriatric assessment to identify patients' need and provide important information to assist immediate care of OAH patients in wards. 4. Jointed round with Geriatrician – provided recommendation to physician in-charge on discharge planning. 5. Provide early post-discharge back up to needy OAH patients – communicate with corresponding CGAT to provide prompt response. **Results:** In Mar & Apr 08, Geriatric nurse performed screening in 35 working days, 528 OAH patients were screened. Among those screened, 114 patients were found to have stable condition for early discharge. Recommendations were given to physician in-charge. 64% (73/114) were successfully discharged in same / next day of assessment. 76% (87/114) were discharged within 3 days of assessment. Among those discharged, 65% didn't have discharge plan yet or planning for further convalescent care in Kowloon / Buddhist hospital. **Conclusion:** Geriatric Nurse screening in acute medical wards can facilitate early discharge of OAH patients; avoid un-necessary transfer to convalescent hospitals; and maintaining continuity of care from hospital to OAH

An Exploratory Study in Participation in Outdoor Activities of Chinese Elderly People with Chronic Obstructive Pulmonary Disease in Hong Kong

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Purpose: This study investigated the factors that influenced "participation in outdoor activities" of Chinese elderly people with Chronic Obstructive Pulmonary Disease (COPD) in Hong Kong. It was to compare the difference between subjects with COPD receiving long-term oxygen therapy (LTOT) and those without receiving LTOT in "participation in outdoor activities". It also investigated quality of life (QOL) of the subjects. **Method:** Subjects were recruited from Medical and Geriatric wards in Shatin Hospital from February to April 2003. One group (32 subjects) was Chinese elderly people with COPD receiving LTOT; another group (32 subjects) was those without receiving LTOT. Correlation between "exercise endurance", "exertional dyspnoea", "anxiety", "depression", "self-efficacy to go outdoors", "monthly income" and "frequency of going outdoors" were analyzed and their difference were compared. **Results:** "Frequency of going outdoors" of the subjects in LTOT group was statistically significant less than those in non-LTOT group (t= -5.981, p=.000). In LTOT group, "frequency of going outdoors" was positively correlated with "self-efficacy to go outdoors" (r= .781, p= .000) "exercise endurance" (r= .718, p= .000) and "monthly income" (r= .399, p= .024), and negatively correlated with

"depression" (r= - .448, p= .010). In non-LTOT group, "frequency of going outdoors" was positively correlated with "self-efficacy to go outdoors" (r= .477, p= .006) and "exercise endurance" (r= .350, p= .050), and negatively correlated with "depression" (r= - .432, p= .013), and "exertional dyspnoea" (r= - .376, p= .034). In subjective QOL scale, subjects in LTOT group had statistically lower score in "my health condition" (t= -2.741, p= .008), "my leisure life" (t= -3.406, p= .001), "my optimism in life" (t= -2.414, p= .019) and "my life satisfaction" (t= -3.038, p= .004). **Discussion:** Depression, financial status and self-efficacy should be addressed to enhance QOL of this group of elderly people.

The Nutritional Status of the Non-Socially Isolated and the Perceived Socially Isolated in Hong Kong

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Purpose: Subnormal nutritional status or malnutrition is particularly prevalent among the elderly, resulting in increased risk of illness and impacting morbidity, mortality and quality of life. A cross sectional study was conducted on 2 groups of community-dwelling elderly, non-socially isolated (NSI) and perceived socially isolated (PSI) who were recruited from social centres for senior citizens of Salvation Army and the NGO's hidden elderly registry respectively. This study aimed to estimate prevalence of subnormal nutritional status among NSI and PSI elders. Secondary objectives were to explore factors associated with subnormal nutritional status. **Methods:** A total of 178 subjects aged 65 or above and passed the time and change test (cognitive impairment test) were interviewed. Chinese Nutrition Screen (CNS) was used to identify nutritional status of elderly at a cutoff score of 21. **Results:** The study showed that prevalence of subnormal nutritional status among PSI and NSI was 40% and 6.9% respectively, giving an overall prevalence of 13.5%. Chi square test showed that age, marital status, regular physical exercise, receiving CSSA or OAA, frequency of meeting friends, number of meal eaten with companion and perceived social support showed significantly associated with elderly nutritional status. Using the logistic regression model, it was found that being PSI (OR=0.007, 95% CI: 0.00-0.338, p=0.012) and perceiving sufficient social support (OR=0.034, 95% CI: 0.002-0.46, p=0.011) were protective factors towards subnormal nutritional status while not receiving CSSA (OR=26.7, 95% CI: 1.36-524, p=0.031) was a risk factor. **Discussion:** It appeared that apparent nutrition risk among PSI was confounded by psychological and social factors. Future assessment for risk of malnutrition should include these components.

Self-management Chronic Pain Program for Community Dwelling Elderly Suffering from Musculoskeletal Pain

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Introduction: A self-management Chronic Pain Program was designed for local elderly for promoting their self-management skills and perception of pain in order to alleviate the adverse impact to their daily lives. The aim of this study is to investigate whether this self-management Chronic Pain Program can reduce pain intensity and enhances the everyday functioning of life. **Method:** All the subjects had been suffered from musculoskeletal pain (knee pain, shoulder & neck pain, low back pain and leg pain) for three months or more were recruited to participate in this 6-day pain management program from community units of SAGE by consecutive sampling. Chinese version of Brief Pain Inventory (C-BPI) was used to measure pain intensity and interferes to everyday functioning of life. **Results:** A total of 323 older persons (44 men; mean age 75 and 279 women; mean age 76) were recruited. About 40% (n = 129) of the elderly suffered from chronic pain for more than 6 years. Total of 47% of the

elderly suffered from chronic pain for 4 to 5 years. Before the programme, walking (41.5%) and climbing stairs (37.8%) are the top two stimulate factors of pain in the list, followed by standing and doing household working with 26.3% and 22.9% respectively. The interference of pain at its worst in the last 24 hours, ($p < 0.000$), pain at its least in the last 24 hours ($p = 0.013$) and pain on average ($p = 0.000$) in older adults were reduced significantly after they completed the program. For the influence of pain on daily life, there was significant reduction on Mood, Relation with other people, Sleep and Enjoyment of life about 40% after the intervention. Meanwhile, Walking ability and Normal work dropped 30%. **Conclusion:** This program can help older adults with chronic pain problems to reduce pain level and interferences of pain to their daily life significantly. It is recommended that other community elderly centres can conduct the same program in order to help more elderly who suffers chronic pain to manage their pain problems more effectively and competently.

Factors Associated with Healthy Longevity – A Report from the Study of Oldest-Old and Centenarians in Hong Kong

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Abstract: Very little is known about the health status of the oldest old and its changes over time. This is due to the fact that most of the results of epidemiological or demographic studies stop at the age of 85 with a final value supplied globally for all the persons aged “85 years or more” while today in Hong Kong the majority of women and nearly one third of men die after 85 years. A rapid and persistent decline in fertility and in mortality gives rise, in due course, to unprecedented numbers of oldest-old and an increase in its proportion. The average annual growth rate of the Hong Kong oldest-old is expected to continue around 8%, more than 2 times the growth rate of the entire elderly population aged 60 and older. The number of centenarians was also exploding about four-folds from 289 in 1981 to 1,510 in 2006 for both genders. The population of the oldest-old and centenarians will grow faster than any other age group in Hong Kong, and they are much more likely to need help in daily living than the younger elderly, and they are the most difficult and expensive part of the care-giving services for the elderly. Our project, the first centenarian study in Hong Kong, aims to provide a better understanding of the determinants of healthy longevity, and to discover psycho-social, behavioral, and environmental factors that may have an influence on the healthy longevity among the oldest-old. A standardized sampling method is applied in accordance with the proportion of elderly people by 18 Geographical Constituency Area. Twenty of cognitively and physically intact oldest-old and centenarians are recruited and interviewed in the collaboration with the Hong Kong Council of Social Service as a pilot study. This paper presents a basic statistical analysis of the profile of the health status of Hong Kong oldest-old and centenarians.

FREE PAPER SESSION II

COMMUNITY CARE

Effectiveness of the Tele-diabetes Education Pilot Program

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Purpose of the Study: To enhance senior diabetics’ knowledge in diabetes and strengthen their ability in managing the disease, the study aims at building a health education program through telephone and evaluates its effectiveness in achieving these objectives. **Method:** Phase I (Aug 2008 - Feb 2009): A team of 10 tele-health promoters were recruited from volunteers and current ER hotline staff. They received trainings on diabetes-related medical advice, general health education and telephone interviewing skills. As the structured 8-weeks health-education program, each tele-health promoter will be assigned with 10 samples to carry out the program accordingly. Questionnaires will be answered by samples

before and after the program to compare any significant differences in their self-care knowledge. Phase 2 (Mar 2009 - Oct 2009): A similar study was carried out in experimental design, comparing two groups of samples with or without joining the Health Education Program. A team of 30 tele-health promoters, having received trainings from registered nurses on relevant health education and communication skills, started up the 4-weeks program for 10 samples each. **Sample Size:** Phase 1 – 100 samples, by convenient sampling; Phase 2 – 600 samples, half as experimental group joining the Program, the other half as control group not joining the Program. **Results:** From Phase 1 result, there were significant differences found in many measurements of health knowledge among the 100 samples after completing the Program. Analysis of Phase 2 result is in process. A complete report will be expected by November.

Benefits to the Rehabilitation of Elders Using Enhanced Home and Community Care Services over Time

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Introduction: A package of enhanced home and community services for elders typically included services of personal care, nursing care, rehabilitation exercise, escort, home care, meal delivery, and group activity. The benefits of these services collectively and individually over time is of concern in the present study. Such benefits refer to the positive effects of the use of the services over time. **Methods:** Based on a project of enhanced home and community services, the study collected data from 180 older service users and their family caregivers twice, from late 2008 to early 2009. The data covered the elder’s physical and cognitive functioning, perceptions of service performance and quality, and service satisfaction, and the caregiver’s perceptions of service performance and quality, relief of strain, and role taking. Specifically, the caregiver’s role taking means paying attention to, discussing with others about, and having adequate skills for eldercare. Those data on physical and cognitive functioning came from assessment by occupational therapists and allied professionals. **Results:** A number of significant findings, after controlling for a corpus of background characteristics in the analysis, are as follows. First, use of the services as a whole over time had a positive effect of the caregiver’s role taking. Second, use of the nursing care service over time engendered positive effects on the elder’s functioning in daily life activity and perceived service performance. Third, use of the rehabilitation exercise service over time showed a positive effect on the elder’s satisfaction with the services. Fourth, use of the escort service over time generated a positive effect on the elder’s perceived service quality. **Conclusion:** These findings demonstrated the benefits of the services to the elder’s physical functioning and the caregiver’s role taking when using the services over time.

A Community Model for Care of Older Persons with Diabetes Mellitus: A Randomized Controlled Trial - a CADENZA Initiated Research

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Background: High prevalence of diabetes mellitus (DM) in older population creates huge burden on healthcare services. While services for people with DM were mainly provided by hospitals and clinics, a new model of care should be developed in the community setting in order to tailor for the needs of older diabetics and further support their long-term management. This study is funded by The Hong Kong Jockey Club Charities Trust under the “CADENZA: A Jockey Club Initiative for Seniors” Project. **Methods:** A randomized controlled trial was conducted since January 2008. An 8-week programme, comprising educational talks, self management strategies, and group exercises, was conducted in various community elderly centres by 1-2 trained research assistants. Adults aged 50 or above, with confirmed diagnosis of DM and medication interventions were recruited from the elderly centres. The changes of outcomes between the intervention

and control groups were compared at the end of the programme. **Results:** Until now, 83 intervention and 80 control group participants completed follow-up evaluation. Interim results showed that the intervention group participants had significant improvements in HbA1c, systolic and diastolic blood pressure, DM-related knowledge, diabetes quality of life (satisfaction, impact and worry), and mental health. When compared with those in the control group, the intervention group participants had significant improvements in DM-related knowledge, satisfaction in DM control, and mental health. The focus group interviews revealed that the programme encouraged a positive attitude toward DM self-management, equipped them with knowledge and skills, and built supportive social network among the participants. **Conclusion:** The community-based DM programme was accepted by the older people with DM and had a potential to improve their knowledge, quality of life and psychological well-being. The concept of this new model of care could be widely disseminated across healthcare and social sectors.

Provision of Life and Death Support Services in Integrated Home Care Services

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Introduction: In Hong Kong, a majority of the service users of Integrated Home Care Services is elderly singleton with chronic and/or multiple illness. Dying and death is usually a taboo for open discussion with them because of their great fear toward this subject. In order to help the elderly users to develop a positive mindset during the later stage of their life, Caritas Integrated Home Care Services Team – Tsz Wan Shan launched some Life and Death support services since 2006. The purpose of Life and Death Education is to enable people to face and manage issues surrounding death more effectively (Durlak & Riesenber 1991). It is to empower people to know their limitations, and to rethink their beliefs about life, so that they can live fearlessly even under the shadow of death (Attig, 1992). Thus, they can plan actively and live the rest of their lives to the fullest. **Method:** Upon thorough discussion with all fellow workers of the Team, all of them (17 staff) joined the support team on voluntary basis. Afterwards, a series of life and death training sessions were provided to them to equip them with necessary knowledge and skills. **Results:** A total number of 23 elderly users were provided with such support services up till then. The team members engaged deeply in the life review and reconciliation work required with the elderly users in their dying process. Such engagement established a strong connection between workers and elderly users, and facilitated whole-person development and growth for both of them. The elderly users could enjoy dignity and assurance of life in their final step of life. **Conclusion:** As holistic service, we believe that all life should be respected and that the final step of life also has value and are worth attention. In reviewing the spiritual caring process, workers indeed need to understand how to show loving care, and this kind of concern includes acceptance and approval, so as to connect people's profound inner world, and responds to the intrinsic need of their life from the spiritual and psychological level.

Cultural Sensitivity of Health Care Services and the Needs of Chinese Older People in the UK

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Purpose: The paper studies the cultural sensitivity of health care services in the UK; and explores how the services could become more responsive to the diverse needs of older people of Chinese origin. It sheds light on health care services for people from different cultural backgrounds in Hong Kong. **Method:** Three analytical tasks are carried out. The first is to discuss the range of strategies adopted by Chinese people in general and Chinese older people in particular to promote their health. The second is to study Chinese people's heritage of exploring different methods to organize their health in response to foreign culture. The third is to discuss ways of strengthening the favourable conditions for the provision of diverse health care services.

Results: Chinese Older people in the UK have diverse migration histories, cultural backgrounds and attitudes to both traditional and Western health care practices. Three methods could be considered for improving the cultural sensitivity of health care services. These include using a 'culturagram' to assess the health needs of people from different cultural backgrounds; assessing the effectiveness of health care services with reference to the critical social science paradigm; and building expectations on the roles of people from different cultural backgrounds in improving the healthcare services based on Titterton's new welfare paradigm. **Discussion:** To make health care services more responsive to the needs of people from different cultural backgrounds, there is a need to enhance the understanding of their diverse histories, cultural beliefs and attitudes to health care services among health care professionals.

FREE PAPER SESSION III

MENTAL HEALTH

Promoting a Holistic Care Approach for Elderly People with Dementia in Hong Kong

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Introduction: This year, 26000 elderly people live in government sub-vented institutional places for elderly people; around 3700 (14.23%) of these are elderly people with dementia (Sing Tao Daily, October 9, 2009). Quality of care for the elderly with dementia in institutional settings becomes an issue of concern as the demand for residential care for elderly people with dementia increases. **Method:** This study incorporated a quantitative survey, Stage I, and an experimental design, Stage II. For Stage I, in 2007 a total of 639 formal care staff members working directly with older people with dementia in 27 government sub-vented and 36 private homes in Hong Kong completed self-administered questionnaires on their difficulties in handling disturbed behaviors and their perception of burnout. In 2008, for Stage II, a Holistic Care Approach program of staff training was developed. Data was collected in two Care and Attention Homes. Eight weeks of Holistic Care Approach of training was provided for an intervention group with 11 care staff members while no training was provided for a comparison group. **Results:** Firstly, there was a correlation between the levels of work burnout experienced by care staff members and their perceptions of "difficult to handle behaviors" exhibited by older people with dementia. Secondly, lack of organizational support was found to be the key determinant of staff burnout but provision of training courses and support for care staff members strengthened their sense of personal accomplishment. Thirdly, care staff who had undertaken the Holistic Care Approach training experienced an increased sense of personal accomplishment at work. **Conclusion:** When care staff members receive Holistic Care Approach training this strengthens their caring practices, benefiting those with dementia, and increases the sense of personal accomplishment in the staff members, increasing their work satisfaction. Thus the quality of care provided in institutions gains in varied dimensions. It is recommended that residential care institutions adopt a Holistic Approach to staff education and training.

The Development of Chinese Version 'Hong Kong Quality of Life for the Visually Impaired Elderly Scale' (HKQoLVIES) '香港視障長者生活質素量表'

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Introduction: The Hong Kong Society for the Blind (HKSB) has collaborated with the Asia-Pacific Institute of Ageing Studies (APIAS) of Lingnan University to launch a two-year project in investigating the quality of life (QoL) for visually impaired elderly residing in residential homes and in the community since June 2008. **Method:** The ultimate objectives of the study were to first develop an inventory for measuring the QoL of the population with visual impairment, and secondly to calibrate a crude benchmark for the same. Focused groups (7) were organized to modify the items developed by the WHOQOL(Old) group, and an initial battery of 43 items (excluding personal data) were then developed for

further psychometric tests (i.e. reliability and validity). A sample of 580 cases selected from the community (n=246) and elderly homes (n=334) was successfully interviewed (face-to-face). **Results:** The elderly were in the age range of 55 to 99 years old (M=76). The HKQoLVIES contains a total of 43 items, which were grouped into 6 domains – (1) Health; (2) Subjective Well-being; (3) Family and Community Support; (4) Living conditions; (5) Finance; and (6) Interpersonal Relationship. Reliability of the tool was also tested. The mean score of HKQoLVIES ranges from 62.62 to 74.83 for visually impaired elderly in residential setting and 68.09 to 75.25 for those living in the community – indicating that there is not much differences between lives in homes and in community. The overall HKQoLVIES has a reliability of 0.6457 (α) and its 6 domains ranging from 0.369 (finance x 3 items) to 0.7688 (Family and Community Support x 9 items). The 6 domains were significantly correlated with the total construct (i.e. QoL). The Pearson correlation coefficients(r) ranged from the weakest 0.269(Finance) and the strongest at 0.395 (Health). **Conclusion:** In general, the study has indicated a reliable and valid QoL instrument specially developed for people with visual impairment – the first of its kind and is named ‘Hong Kong Quality of Life for the Visually Impaired Elderly Scale’ (HKQoLVIES). The full scale is reliable with a Cronbach’s alpha of 0.6457. It is ready to be administered in residential homes and in community for the said targets. The first benchmark, though established from a purposive sample, was comparable to the general older population living in community (means being around 63-75). Such a benchmark could serve as a baseline score for service improvements in the future. **Acknowledgement:** The study was conducted by the Research Team, Asia Pacific Institute of Ageing Studies (APIAS), Lingnan University, with Alfred C. M. CHAN as the Principal Investigator, Phoebe P.Y. Tang (Research Coordinator), Wing-yin LI (Project Assistant) and the Research and Development Team of the Hong Kong Society for the Blind, led by Doreen S. P. MUI with members: Lily L.M. CHEUNG, Ken K.W. CHEUNG, Armstrong T.S. CHIU, King YEUNG and Thomas P.T. NG

Another Kind of Active Ageing: Challenges and Survival of the Scavengers in Hong Kong

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Abstract: Traditional Chinese families respect senior citizens. Taking care of senior family members is a kind of virtue as well as an obligation. However, in a city state like Hong Kong where people value more about economic achievements than social care, the study done by these authors found that some senior citizens are collecting used papers and other waste materials in the streets for survival. It is initially a poverty issue, or a social deprivation. But the researchers also found that the scavengers see their engagement as a sign of independence, which reflects their strengths and wish to remain active and productive. The pilot study began in late 2006, when around 20 individual cases were interviewed. Then, a survey was launched. In early 2008, a total of 358 individual scavengers were identified. The findings also reflect a gender challenge. More female scavengers are living in poverty or in declining quality of life due to lack of networks, or access to service information, as well as a strong resistance to the social labeling associated with the use of public services. They work hard to earn a modest living, but inevitably they are challenged by male competitors and exploited by merchants in recycling business. The primary concern is to identify this group of citizens marginalized by main society, alienated from formal services, as they may be the typical ‘hidden senior citizens’ in the society. It is recommended that reaching-out strategies must be planned and implemented in order to identify these citizens and render assistance to their alternative kind of active ageing. More efforts from the government must be initiated to minimize the labeling effect of using government or public services. Local food bank is an essential resource for their survival in tough times. In the long run, the authors sincerely recommend a general review of the current social security system.

Knowledge of Dementia among Undergraduates in the Health and Social Care Professions in Hong Kong

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Introduction: The need of quality dementia care is increasing and there is a widespread concern whether pre-licensure health and social care professionals receive adequate training before serving the dementia population. To address this concern, the aim of the study was to evaluate the knowledge of dementia among undergraduates in the health and social care professions in Hong Kong, and their competence in working with the dementia sufferers. **Method:** The survey was conducted between April and September 2009. Questionnaire that consisted of modified versions of the Alzheimer’s disease Knowledge Test (ADK) and the General Self-Efficacy Scale (GSE) was used to collect data. 342 final year undergraduates from 4 different health and social care disciplines (including Medical, Occupational Therapy, Nursing and Social Work) were approached. 242 questionnaires were returned on-site or by mail, yielding the response rate of 71%. **Results:** The overall ADK score of the sample was 7.43 out of 20, showing a generally poor knowledge of dementia, especially in the areas of treatment, symptoms and diagnosis, behavioural management, and access to community resources. Although medical students are better at symptoms and diagnosis than at behavioural management, the reverse is true of nursing and occupational therapy students. The social work students attained the lowest dementia-caregiving self-efficacy (DSE) and had the least hours of dementia education. The results also showed that DSE, hours of dementia education, and knowledge of dementia were positively correlated with each other. **Conclusion:** Adequate provision of dementia education to the future professionals maybe achieved by increasing the hours of teaching dementia and their DSE. To enhance their DSE, the health and social care students are recommended to gain more exposure to dementia care via placements and internships. Ultimately, the sufferers of dementia are able to receive care plans effectively and have early access to medical and social support services.

The Effectiveness of Day Care for Dementia People and their Family Caregivers – the JCCPA Experience

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Introduction: The effectiveness of a self financed dementia specific day care service in promoting quality of life (QOL) of demented people and in reducing family caregiver burden was prospectively examined. **Method:** Ninety older people with dementia, who were newly admitted to JCCPA between January 2006 and December 2007, were assessed at baseline, 6th and 12th month. The family caregivers were followed up at 12th month only. Primary outcomes included the Personal Well-being Index – Intellectual Disability (PWI-ID) of the dementia clients, and the Zarit Burden Scale (ZBI) of the caregivers. Secondary outcomes of dementia clients included the Chinese Mini-Mental State Exam (MMSE), Cohen-Mansfield Agitation Inventory (CMAI), Lawton Instrumental Activities of Daily Living Scale (IADL), Modified Barthel Index (BI), Modified Functional Ambulation Category (MFAC), Berg’s Balance Scale, and Mini Nutritional Assessment (MNA). **Results:** 51 participants (57%) discontinued day care service during the study period, nearly half of them within 3 days. The commonest reasons were unwillingness to come (N=15), alternative care arrangement (N=10), and old age home admission (N= 6). PWI-ID of dementia clients was satisfactory at baseline and did not significantly change at 6th and 12th month, indicating that their QOL was maintained. ZBI of family caregivers decreased significantly at 12th month (t(31)=3.41, p=.002). MMSE did not change significantly, and nutritional status (MNA) improved at 6th month (t(46)=4.18, p<.001). However, daily living ability and mobility declined at 12th month (IADL (t(34)=2.66, p=.012; BI (t(33)=2.78, p=.009), MFAC (Z=2.95, p=.003)), and behavioral problems increased at 6th month (CMAI (t(37)=-2.12, p=.041). **Conclusion:** Dementia specific day care was effective in reducing family caregiver burden and in maintaining the quality of life, cognitive status

and nutritional status of the demented clients. However, behavioral problems did not improve significantly, and mobility and self care ability continued to decline.

FREE PAPER SESSION IV

LONG TERM CARE

Factors Predicting Nosocomial Pneumonia in Long-term Care Residents: A Two-year Prospective Study

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Introduction: Pneumonia is the most common infectious disease in chronic care facilities. We aim to identify the predictive factors of nosocomial pneumonia in infirmary patients and see whether they are potentially reversible. **Method:** In this prospective cohort study, 250 patients from a long-term care hospital in Hong Kong were followed for two years and the main outcome measure was pneumonia. Information on patients' demographics, medical co-morbidities, mental status, nutritional status, disability level, clinical data, laboratory results, medications and social support was collected at baseline. Univariate and multiple Cox proportional hazard regression were used to identify predictors of pneumonia. **Results:** Fifty patients (20%) had at least one pneumonia episode over the two-year period. Among the patients developing pneumonia, 27 (54%) passed away. In univariate analysis, the following factors predicted pneumonia: older age ($p=.000$), severe limb contracture ($p=.015$), being bedbound ($p=.000$), anaemia ($p=.000$), lower sodium level in blood ($p=.021$), lower body weight ($p=.045$), incontinence ($p=.004$), lower Norton and ADL score ($p=.000$), previous stroke ($p=.000$), dementia ($p=.000$), history of CNS infection ($p=.006$), carcinoma of colon ($p=.024$), cognitive impairment ($p=.000$), poor orientation ($p=.000$) and inability to communicate ($p=.000$). Multivariate analysis revealed the following predictors of pneumonia: older age ($p=.018$), being bedbound ($p=.001$), anaemia ($p=.005$) and previous stroke ($p=.002$). **Conclusion:** The potentially reversible factors found in this study are being bedbound and anaemia. Further studies are warrant to see whether potential interventions such as sitting program or nutritional program may help to reduce the risk of pneumonia in long term care residents.

A Multidisciplinary Nutritional Intervention Program using C-MUST as the Screening Tool is Effective to Improve the Nutrition of Infirmary Patients

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Introduction: To evaluate the effectiveness of a multidisciplinary nutritional intervention program using the 'Malnutrition Universal Screening Tool' for Chinese Adult (C-MUST) as the screening tool to improve the nutrition of infirmary patients. **Method:** All residents from a local infirmary hospital are screened by C-MUST at baseline in December 08 and every 6-monthly. It is a five-step malnutrition screening tool based on the body mass index, percentage weight loss in the past 3-6 months and acute diseases effect. Patients are categorized into three groups according to the final scores: 0 = low, 1 = medium and > 2 = high risk of malnutrition. A multidisciplinary team assessment was initiated when the score is >1, which included medical work up to exclude underlying reversible medical illnesses, nursing assessment for resident's oral intake and swallowing, and dietitian's nutrition therapy. For patients with score of > 1, their C-MUST scores after six month intervention were compared with their baseline scores to see any improvement. **Results:** A total of 183 residents were screened. At baseline, 28 patients were found at high risk of malnutrition with C-MUST score > 2. After the multidisciplinary nutritional interventions, at six months post intervention, there was significant improvement in the C-MUST scores of those patients with high malnutrition risk ($p=0.001$). Ten out of the 28 (36%) patients showed

improvement in their C-MUST scores, while seven (25%) of them were no longer at risk (C-MUST score =0). Among patients with malnutrition risk at baseline, those improved after 6-month intervention showed a significant weight gain compared with those who did not improve ($p=0.003$). Other demographic parameters such as age, gender, medical co-morbidities and disability status do not differ significantly between the two groups. **Conclusion:** The implementation of a multidisciplinary nutritional intervention program with an evidence-based screening tool with early detection may effectively improve the nutritional status of infirmary patients.

Fall Incidences of Residents at Four Care & Attention Homes for the Aged Blind

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Introduction: Fall is one of the most disabling accidents in the elderly population. Fall rate of community dwelling elderly aged 65 and above can be up to 35% in one year (Blake, 1988). In a nursing home environment, the fall rate increased dramatically to 60% (Fuller, 2000). Fall accident has a high mortality rate (70% of accidental deaths in persons aged 75 and above), and is often associated with significant morbidity such as decline in mobility and ADLs. It also posts significant economic burden on the society. Understanding the risk factors and causes of fall among visually impaired elderly can aid us in formulating strategy to prevent it. This in turn results in better care as well as better quality of life for the elderly. **Method:** Data on fall accidents of the visually impaired residents was collected by reviewing the fall incidence reports filed in 2006 and 2007 at the four Homes for the Aged Blind operated by The Hong Kong Society for the Blind. **Results:** During the two-year survey period (2006-2007), 153 residents were reported to suffer 302 fall incidences. This represented 34% of all our residents. Each resident had an average of 2 falls during the surveyed period. Place of fall: 59.3% of fall occurred at bed side (179/302), 14.2% occurred in the toilet, 8.6% occurred in the dining hall, 5.3% occurred in the bathroom. These four locations accounted for 87.4% of all falls. Cause of fall: Leg weakness (63.2%), lost balance (17.7%), slippery floor (7.7%), dizziness (7.7%). These four reported causes accounted for 96.3% of all fall. **Conclusion:** 59.3% of fall occurred at bed side while 63.2% of residents fell due to leg weakness. The use of monitoring device and exercise training may reduce the fall incidence of aged blind elderly residents. In addition, removal of environmental hazard (obstacle and slippery floor) and adjustment of medication may further reduce the risk of fall. Further research is needed to investigate the effect of these strategies.

Pain Management for Older Persons Living in Nursing Homes: A System Approach

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Purpose: To enhance pain management in nursing homes via an integrated pain management programme for staff and residents. **Methods & Procedure:** A quasi-experimental pretest and posttest control group design was used. Nursing staff and residents from nursing homes were invited to join the 8-week Integrated Pain Management Programme (experimental group), while nursing staff and residents in other nursing homes were treated as the control group, receiving regular care yet without the 8-week Integrated Pain Management Programme (IPMP). Relevant data were collected from nursing staff and residents in both groups before and upon completion of the IPMP. The IPMP was an 8-week programme for nursing staff, with contents including pain assessment, drug knowledge and the use of non-drug strategies for older persons in pain. Likewise, residents were invited to join the gardening therapy and physical exercise classes, which included planting and care of plants, as well as muscle strengthening and stretching exercises, balance, acupressure and massage. **Results:** There were 48 older persons in the experimental group and 42 in the control group. No significant differences were found in their demographic data, including education level, sleep

quality, bowel habits, past and present health conditions, pain conditions and psychological well-being parameters ($p > 0.05$) at the baseline. Upon completion of the IPMP, nursing staff in the experimental group showed a significant improvement in their knowledge of and attitudes to pain management ($p < 0.05$). Likewise, residents in the experimental group reported significantly lower pain scores and used more non-drug strategies for pain relief as compared with the control group ($p < 0.05$). The non-drug strategies included heat therapy, cold therapy, listening to music, resting in bed, tropical medication application, and deep breathing. Psychological wellbeing parameters including happiness, loneliness, life satisfaction and geriatric depression had significantly improved among residents in the experimental group ($p < 0.05$). **Discussion:** The integrated pain management programme proved to be effective in enhancing the knowledge and attitudes of nursing staff, as well as reducing pain conditions and enhancing psychological wellbeing for older persons in the nursing homes.

Evaluating the Effectiveness of a Holistic Palliative Care Service for Residents in Elderly Home

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Introduction: It was noticed that the palliative needs of the elders residing in elderly homes were often not properly recognized and attended to during their final stage of life. The study aimed at evaluating the effectiveness of providing intensive end-of-life care services for the residents of three elderly homes of Tung Wah Group of Hospitals Shuen Wan Complex for the Elderly (SWCE). **Methods:** 15 residents of SWCE were selected for a 2-year intensive palliative care support programme. Collaboration with Bradbury Hospice and Shatin Hospital was established on the implementation of the project. Intervention rendered included symptom control, counseling, weekly doctor/nurse visit, launching Spiritual Enhancement Programme (SEP) and conducting Anticipatory Grief (AG) Workshop. Initial and final assessment had been conducted for these residents and quantitative measurement tools adopted comprised McGill Quality of Life (QOL) Scale-Hong Kong version covering physical, psychological, social support, existential and sexual domains; Geriatric Depression Scale (GDS) measuring the depression status of the focus group; and Pain Scale measuring pain score on various symptoms. Data was analyzed and compared for any significant difference in QOL, depression status and pain before and after intervention. Qualitative data was collected and analyzed using Interpretative Phenomenological Analysis (IPA). **Results:** The domains of McGill QOL, GDS-4 and Pain Scale had been grossly improved. The mean of QOL rose from 6.29 to 7.57 ($p = 0.022$) while the mean of GDS-4 decreased from 2 to 1 ($p = 0.033$) between the initial and final assessment. For the Pain Scale, the mean dropped from 7.4 to 2.7 ($p = 0.014$) indicating overall symptom improvement of the residents. **Discussion:** Evidence showed that Palliative Care Approach could relieve suffering and improve quality of life of residents and their families facing the crisis and problems associated with life-threatening disease. Inter-disciplinary team approach was proven to be effective to address the physical, psychosocial and spiritual needs of residents and their families. The findings thus suggested that palliative care should be promoted and integrated in the services of elderly homes and should be provided in a broader perspective and in a proactive manner.

POSTER PRESENTATIONS

Psychometric Properties of the Chinese General Self-Efficacy Scale (CGSE) among Soon-to-be-aged Adults

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Introduction: Soon-to-be-aged (STBA) adults are in their transitional stage from adulthood to their later life and are facing tremendous and a wide range of variety of stressful situations due to work or retirement. Understanding STBA adults' broad optimistic self-beliefs helps to structure health promotion interventions that motivate them to better

equip themselves for the transition. The Chinese version of the General Self-Efficacy (CGSE) scale has been tested and shown to be valid for use among adolescents and adults from clinical populations but yet no study on community-dwelling Chinese STBA samples. This aim of the study is to examine the psychometric properties of the Chinese General Self-Efficacy Scale and gender invariance in the factor structure of the scale.

Method: A convenient sample of Chinese STBA adults ($n = 695$) surveyed in 28 non-government organizations in Hong Kong from March to May 2005. Confirmatory factor analysis was used to test the factor structure and gender invariance of the scale. **Results:** There was an acceptable internal consistency of the CGSE scale. The proposed factor structure of the CGSE scale provided an excellent fit to the overall data. The factor structure was held equally well for males and females, and that both genders demonstrated an equivalent pattern of factor loadings. **Conclusion:** The CGSE scale is a reliable and valid scale and both genders responded to the scale using the same underlying framework and metric; thus should be used with confidence in non-clinical Chinese STBA adult samples.

The Implementation of User Participation -The First Carer Association in Hong Kong

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The Salvation Army Carer Service

Introduction: User Participation originated from the consumerism with the freedom of choice (Clode, Parker & Etherington, 1987) and the Welfare Rights Movement (Piven & Cloward, 1977). It emphasized on an organizing and continuous movement which relied on the users' collective participation, so as to achieve a structural change and improvement in the quality of life. **History:** The Salvation Army Carer Association was the first and only Carer Association in Hong Kong at present. In 1988, the Salvation Army started the Carer Service in the territory. The Salvation Army Carer Service assisted the carers in forming mutual support group with the intention to strengthen their sense of mutual help and support. The carers came to realize that they faced the common problems in caring for their elderly. During 1996-2000, the carers voiced out their pressing needs and suggestions to the Government officials and the Legislative Council members in formalizing the Carer Service so as to support them in taking care of their elderly. In 2000, the Government finally established the first Carer Centre in Hong Kong. In order to consolidate this successful experience, the carers organized the concern group on social issues concerning the elderly and the carers, and it paved the way for the formation of the Carer Association. With the active participation of the carers, the Carer Association was established on Jan. 11, 2003. The Carer Association had 405 members currently. **Objectives of the Carer Association:** 1. To advocate the rights of the carers and their elderly. 2. To form the alliances of the carers in order to voice out their collective needs and demands. 3. To raise the awareness of the public in recognizing the needs and rights of the carers and their elderly. **Recent Development:** Throughout these few years, the Carer Association focused on issues concerning the rights of the carers and their elderly, including the Barrier-free Community, Long-term Care, Health Care Financing and the Carer Financial Support. The Carer Association started to fight for the financial support for the carers, including the Carer Allowance and the Carer Voucher (to purchase the community supportive services with a means-test). They also advocated the employers to implement measures for their employees, for instance carer leave, flexible working hours and job re-allocation for their employees who looked after their elderly. On Jan. 10, 2009, the Carer Association submitted "A Declaration of Carer Allowances" to the Legislative Council members. From Jan. to Aug., 2009, The Carer Association organized 9 educational activities with 313 attended, and 16 service units liaised in Hong Kong. In this initial phase, 89% indicated that they agreed to strike for the financial support and job related measures for the carers. It indicated that they considered these measures were important for them to take up the caring role. **Future Development:** A

study would be conducted in search of the carers and the public opinions. It would be an area worth studying and would be one of the focuses of the Carer Association.

Residents' Health Profile in a Yunnan Village: Way towards a Better Health Condition and Healthcare System in Rural China for all Ages

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Introduction: The World Health Organization (WHO) has re-addressed the indispensability of Primary Health Care (PHC) reform in its Report 2008 to cope with the volatile health needs of the world. Echoing the call by United Nations on Human Rights, the PRC government has recently proposed a series of health-specific policies and actions in its rural regions, in an attempt to improve the health conditions of the residents and pertinent services and systems. A comprehensive health profile will provide an evidence for decision-makers to assess the residents' health needs and to monitor the service outputs. This study is launched in a rural village in Yunnan, namely "Gezhangla Village" to create a community health profile by employing on-site interviews to the villagers, and thus enhance the PHC systems to give all ages of villager a healthier life. **Method:** The indicators of the instruments were mostly extracted from the World Health Survey by WHO with the examination of the on-site pilot test and face validation by the steering group, including healthcare professionals/practitioners and rural-study expert. The population targeted the adult aged 18 or above and the total number of successful sample was 172 (who aged 60+ = 24, in which F = 15 and M = 9). A full health profile was constructed according to the dataset with an aid of participatory observation regarding the living environment, lifestyle, sanitation and hygiene. **Results:** The discovery unveiled that the villagers were able to obtain basic physiological needs whereas their belief of health was still simple and old-fashioned, as well as insufficient health awareness. Lack of formal health education and promotion hindered them from improving their health conditions, the villagers needed to attain proper PHC outside the village, but access was mostly restricted by long distance, long time taken and pricey services. Data also indicated that sex and age were significant factors to the general health state of the villagers. The women and elderly were at higher risks of health hazards attributed to their inequitable social status and the dual roles played (farmer and housekeeper) of the former and respectively, the unhealthy living style and absence of care of the latter. **Conclusion:** In conclusion, specific health education and promotion will be the long-term actions to resolve the problems, covering everyone from the young to the elderly. The health profile also acts as the directives for the government to draw up and implement relevant policies, particularly towards PHC.

Case Illustration: Practice Experience of Engaging and Empowering Elders in Chronic Disease Self-Management Programme (CDSMP)

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Introduction: The CADENZA Community Project: Chronic Disease Self-Management Programme (CDSMP) is one of the Community Projects under "CADENZA: A Jockey Club Initiative for Seniors", funded by The Hong Kong Jockey Club Charities Trust. It aims at promoting self-management to improve aging population health and mobilizing elder lay-elders as a major force of the self-management movement. This paper will review the factors contributing to positive outcomes in this locally-adapted model. **Method:** CDSMP is a 6-week workshop, each lasting 2.5 hours and led by 2-3 leaders. Course topics cover coping strategies such as action plan and brainstorming, and health education including emotional management, healthy eating, medication usage and physical exercise. 54 elders with chronic diseases were recruited and trained to be elder lay-leaders for delivering the programme to 500 elder members. The

leaders also developed a buddy system to provide phone support and organize reunions for members. **Results:** Despite no formal training in a health related discipline, elder lay-leaders demonstrated a role model to make positive influence on their members. After the programme, elder participants showed that their self-efficacy and health status were improved by i) Experience Mastery: gaining better and pragmatic approach to deal with their stress, pain and interpersonal relationship through demonstration and experiential learning; ii) Modeling: acquiring more health information from sharing and problem-solving activities; iii) Reinterpretation of Symptoms: initiating solution talks to change their beliefs about the illnesses and iv) Social Persuasion: trying new action plans with the support given by their peer leaders and members. **Conclusion:** CDSMP has empowered both participants and leaders to master self-management skills, strengthen self-confidence and improve psychosocial support. The promising results proved that elder lay-leaders were capable to deliver the programme to their peers. Training larger numbers of lay-leaders would be a cost-effective way for promoting CDSMP and health education in the community.

Acceptable Health Promoting Group Exercise for Community-dwelling Elderly Adopting an Evidence-based Falls Management Exercise (FaME) Protocol

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Introduction: Low uptake and adherence to falls prevention or rehabilitation programmes run in hospital have been widely observed. The common barriers included having difficulty in transportation to the hospital or having no companion and having low motivation for participating in the programmes. To minimize the barriers for participation, a group exercise programme was developed based on the FaME (Falls Management Exercise) protocol and tried out in a local community centre to test its feasibility and acceptability to the community-dwelling elderly. **Method:** The FaME was composed of 36-week balance and strength retraining weekly group led by exercise instructors in combination with home exercise programme. It included some specific falls management strategies such as dynamic balance, bone loading, gait, reaction and coordination training, and functional floor exercises. A total of three classes which recruited 24 participants were held in the community centre. Pre- and post-assessments were conducted to measure any difference in some physical tests (i.e. TUGT, BBS, 6MWT) among the participants before and after joining the programme. Their attendance and feedback to the programme were also documented. **Results:** The drop-out rate for all the three classes was 16.7% and the average attendance rate for the remaining participants (mean age = 72.4; 19 women and 1 man) was 87%. In addition to objective and subjective improvement in physical functions such as improved muscle strength, flexibility, balance, walking stability and reduced joints pain, the participants enjoyed performing the exercise in a group and valued the social interactions and support among them. Some of them even requested to re-attend the same programme. **Conclusions:** The FaME appears to be a feasible and acceptable group exercise programme to the community-dwelling elderly with a low drop-out rate compared with existing rehabilitation programmes and it may be incorporated in the routine of a community centre as a regular health promoting activity. Further study on a larger sample in a randomized control trial is needed to evaluate its effectiveness on falls prevention for the local elderly population.

Effects of 7-Week Community-Based Multi-Dimensional Program on Functional Mobility and Subjective Health Status in Older Adults: A Pilot Feasibility Study

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Introduction: Maintaining health among successful agers and preventing

or delaying chronic disease morbidity is a major goal of our public health system. Physical activity and exercise has been shown to benefit on chronic conditions prevalent among older adults e.g. diabetes mellitus, high blood pressure, and improve balance and reduce risks of falls. Nutrition education and counseling is also necessary in assisting older people to understand the latest information and apply it to their individual situations. The purpose of this study is to investigate feasibility and effects of a 7-week community-based multi-dimensional program with exercises and nutrition education on older adults in Hong Kong. **Methods:** Twelve-three healthy elderly subjects (6 males and 17 females; age, 74.68 + 8.39 years) were recruited through convenience sampling in a local community centre for community-dwelling older adults. Each subject was required to attend a 1.5-hour intervention session per week for 7 weeks. Each session consists of 1-hour nutrition education and counseling conducted by dietitian, and 20 minutes exercises program conducted by physiotherapist. The exercise program was designed to improve mobility, strength and balance in older adults. In addition, all subjects were required to perform a standardized 30-minutes daily home exercise program assigned by physiotherapist within 7-week intervention period. Functional mobility of older adults was measured by timed Up & Go test (TUG), and subjective health status was measured by Short Form -12 (SF-12) health survey including physical component summary (PCS) and mental component summary (MCS). **Results:** There was significant improvement in TUG scores after 6-week intervention (pre-intervention: 11.58 + 3.03s, post-intervention: 10.11 + 2.82s, $P < 0.001$). For the SF-12, there was significant improvement in MCS (pre-intervention: 54.09 + 10.42, post-intervention: 57.91 + 6.63, $P = 0.027$). However, there was no significant change in PCS of SF-12 health survey. **Conclusion:** Our pilot results show that a 7-week community-based multi-dimensional program with exercises and nutrition education is feasible and acceptable by older adults in Hong Kong. Such program could improve the functional mobility and subjective health status on mental health. Randomized controlled clinical study with larger sample size is warranted to investigate the efficacy of this multi-dimensional program on community-dwelling older adults.

Providing Nutrition Education to Community-dwelling Older Adults: A Learning-contract Approach

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Purpose: Nutrition affects the maintenance of our biological systems and therefore impacts on the aging process and our risk of acute and chronic diseases. In this study, a Nutrition and Lifestyle Programme (NLP) was provided to community-dwelling older adults in elderly community centres, and a learning contract approach was adopted to encourage older persons to adhere to the programme. **Methods & Intervention:** The NLP started with a nutritional assessment using the Mini-Nutrition Assessment, calculation of Body Mass Index (BMI), waist measurement, and collection of data in regard to food preferences and demographics (age, gender, health condition, educational level and financial situation). The NLP lasted for 8 weeks, covering nutritional labelling, identifying healthy and unhealthy snacks and food (e.g. those high in cholesterol, saturated fat, salt), meal planning, and encouraging physical activity with 15 minutes' physical exercise at the beginning of every session. Older adults were followed up weekly regarding their learning contract on dietary modification and physical activity. **Results:** There were 63 older persons (52 females, 11 males, ages ranging from 60 to 89 years, mean age 73.5) who joined the NLP. At the baseline, over 50% reported receiving no formal education. The majority were suffering from at least one chronic illness (hypertension, diabetes, hyperlipidaemia or osteoporosis). None knew their BMI, and 41 (65.1%) were either overweight or obese. Consumption of 'desirable' foods (fruits, vegetables, dairy and bean curd products) was found to be low. Upon completion of the NLP, there was a positive improvement in their knowledge on healthy eating and an increase in their consumption of desirable foods. The older people stated that they had enjoyed the NLP, would practise what they had learned, and would share their knowledge with family members and friends. **Discussion:** Motivation for behavioural and dietary changes among older persons is expected to be high when they become aware of why and what change is needed. Providing focused nutritional education to older adults

for health maintenance and disease prevention is important for functional longevity.

"Blessing Through Love" – A Quality One-stop Multi-disciplinary Aged Care Complex for Senior Citizens in Hong Kong

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Introduction: Resulting from the rapid increase in the ageing population, residential care for the seniors is in enormous demand. Although there are over 20 thousands subvented beds, subsidized places and self-financing beds in the market, there are still 24,423 seniors wait-listing for residential care because majority of the seniors will have location preference and have to wait-listing for at least 3 years for admission. The Hong Kong Sheng Kung Hui Welfare Council (the Council) acted proactively to meet the changing needs of the senior citizens and committed a project to build an aged care complex to fill the existing service gap by providing aged care service to seniors of the middle-class families and the affordable group to accommodate the seniors' medical, rehabilitation, social and housing needs. **Method:** The Council was granted a site with an area of about 1,510m² by the Government in Shatin for the development of a Church and a Complex for the seniors. Holistic care will be provided to the seniors so as to enhance their quality of life in terms of physical, psychological, social and spiritual care. **Results:** The Hong Kong Sheng Kung Hui Cyril and Amy Cheung Aged Care Complex (the Complex) was built and commenced service since July, 2009. The Complex aims to provide quality and holistic care for the maintenance and enhancement of wellness of the seniors. The Complex not only provides residential beds for long stay, short stay, respite care and end-of-life care, but also provides pastoral care, day care and community care to meet the different needs of the seniors. **Discussion:** The Complex provides a continuum of care to the senior service users and their family members in order to enable them to enjoy independent living as far as possible through a comprehensive package of service and home-like environment. To enhance quality of life of the seniors, the Complex provides service not limited to personal care service, but a holistic care including counseling service, social and recreational service, medical and nursing care, rehabilitation service and spiritual care. The service users can enjoy a one-stop multi-disciplinary service to fulfill their multi-dimensional needs. The Complex helps to bridge the existing aged care service gap and the seniors can have a place to enjoy a comfortable, fulfilling and respectful later live.

Good Practices in Case Management in Community-based Long-term Care

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Introduction: Since 2003, community-based long-term care has been re-structured so that services could be provided to older people with special care needs so that they can stay in the community. Along with such changes, case management has become a mandatory service delivery model in Integrated Home Care Services (IHCS) and Enhanced Home and Community Care Services (EHCCS). This paper aims to examine the experiences of case managers and their supervisors in regards to case management experiences. Emphasis was placed on good practices that support and enable case managers to provide quality case management. **Method:** Qualitative in-depth interviews were conducted with four case managers and four supervisors. Interviews were guideline by a semi-structured guideline, which covered questions on the definition of case management, the process of case management, difficulties and good practices, and ways of improvement. This paper only reported the results on good practices identified by the interviewees. The interview processes were recorded and transcribed for data analyses by using NVivo8. **Results:** Themes on good practices were identified at three levels. At the organizational level, appropriate resource allocation, quality supervision, team building, staff training and re-training, and information exchange platform establishment were dominant themes. At the service level, themes emerging included matching and delivering service from a

systematic approach, negotiating needs among multi-disciplinary team members, prioritizing needs among the pool of service recipients, and developing good partnerships with community partners if applicable. At the service recipient level, building rapport with the service recipient and his or her family members, matching frontline workers with specific service recipients, and person-centered care were some of the leading themes. **Conclusion:** Good practices in case management call attention to the multiple levels of the service delivery system, from organization and the service delivery team, to service recipients. Implications for service provision will be discussed. **Acknowledgement:** The project was supported by a Direct Grant from The Chinese University of Hong Kong, Ref. 2020824.

The Five-Timed-Sit-to-Stand Test is Reliable and Correlates Significantly with Balance Ability in Healthy Elderly

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Introduction: Five-Timed-Sit-to-Stand Test (FTSTST) has been widely adopted as an outcome measurement for functional lower limb muscle strength in older adults. Although FTSTST was administered by both experienced and experienced assessors in community conditions, reliability of the test administered by different assessors and relationship of FTSTST and balance ability was unclear. Therefore, the purpose of the study is to identify: (1) test-retest reliability and intra-rater reliability of both experienced and inexperienced assessors, and (2) correlation of FTSTST with muscle strength and balance ability in healthy elderly. **Methods:** Twelve healthy elderly subjects were recruited through convenience sampling (2 males and 10 females). FTSTST measures the time taken to complete 5 repetitions of sit-to-stand manoeuvre from the chair. Performance of 5 trials FTSTST was videotaped. Video clips was viewed and timed by 3 experienced assessors (physiotherapists with minimal 3 years of experience), and 3 inexperienced assessors (students without medical or healthcare background) on 2 different days within the same week. Lower limb muscle strength of hip flexors, knee extensors, knee flexors, ankle dorsiflexors and ankle plantarflexors were tested with a hand-held dynamometer. Balance ability was assessed by the Limits of Stability (LOS) test of computerized dynamic posturography. **Results:** Excellent test-retest reliability was identified in both 3 experienced assessors (ICC 2,1= .994) and 3 inexperienced assessors (ICC 2,1=.995). In addition, excellent intra-rater reliability of all assessors was noted. The ICC range was .920 to .924 and .924 to .929 for experienced and inexperienced assessors respectively. No significant difference was noted in the mean FTSTST scores assessed by either the experienced or the inexperienced assessors. No significant correlation was found between FTSTST and muscle strength of lower limbs and BBS. The FTSTST was found to be significantly correlated with movement velocity of centre-of-pressure ($r = -0.657, P=0.02$) in left-right direction during LOS test, but not muscle strength. **Conclusion:** The Five-Timed-Sit-to-Stand Test, which is a simple and easy-to-administer clinical tool, has excellent intra-rater and test-retest reliability. It is suitable for use either by experienced or non-experienced clinicians. Future studies with larger sample size should be directed to quantify the contribution of balance ability to FTSTST scores. Such knowledge would be important in using FTSTST as an outcome measure in designing an effective exercise or rehabilitation program to promote healthy aging.

Effects of Aromatherapy among Institutional Elderly People with Osteoarthritis (OA) Knee

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Introduction: Tung Wah Group of Hospitals (T.W.G.Hs.) has set up three care & attention homes within the Shuen Wan Complex for the Elderly

(SWCE) and is the largest of the kind in South East Asia. Aromatherapy has been introduced in the Complex since 2007. It was incorporated in our 2-year palliative care project in which to evaluate the effectiveness of an intensive and comprehensive end of life care service in preparing the residents who suffered from cancer and incurable diseases in the old age homes in facing end of life. Osteoarthritis (OA) knee is one of the commonest medical conditions in the elderly people. It significantly impacts their ability to conduct their normal activities of daily living. No curative therapies exist for osteoarthritis; thus, there is an increasing trend of complementary treatment focusing on controlling pain and reducing functional limitation. The objective of this research is to investigate the effects of aromatherapy among elderly residing in aged homes with disturbance of OA knee. **Method:** Totally 20 institutional Chinese elderly people suffering from OA knee were recruited from three elderly homes of T.W.G.Hs SWCE. They were randomly assigned to be either a treatment group or control group. Subjects in the treatment group received a course of aromatherapy massage treatment consisting of a twenty-minute massage which was performed by a therapist to their bilateral knees once a week for 4 weeks. Massage oil, which was used for massage, consisted of essential oils, including *Origanum marjorana*, *Juniperus communis* and *Zingiber officinalis*, which were diluted in a mixture of sweet almond and St. Johns Wart carrier oils with dilution of 1%. The subjects were also asked to perform self-massage with a pre-blended massage cream, which consisted of essential oils, including *Origanum marjorana*, *Juniperus communis* and *Zingiber officinalis*, which were diluted in a fragrance free moisture lotion with dilution of 1%, on their bilateral knees everyday. **Results:** Comparing scores of Wong-Baker Faces Pain Rating Scale (WBF), Berg Balance Scale (BBS), Functional Reach (FR) and Time-up-and-go Test (TUGT), pre and post intervention in each group showed that subjects of the treatment group had significant improvement in WBF, BBS and TUGT tests with p value 0.023, 0.005 and 0.007 respectively. There was no significant difference in WBF, BBS and FR in the control group. On the contrary, the control group showed significant deterioration in TUGT. **Conclusion:** This study revealed that aromatherapy has benefit in reducing pain and physical disability for elderly people with OA knee. As it has been reported that massage can stimulate endorphin production for people who are in pain, it has value as a pain-relieving tool, especially in chronic or muscular pain. It is also a special form of non-verbal communication that conveys empathy and emotional release. In addition, inhaled essential oils may increase alertness and reduce anxiety, as well as facilitate positive effects on autonomic nervous system so as to enhance relaxation. Therefore, aromatherapy massage may help cope with anxiety and fear and to support symptom control by giving those who are in pain a feeling of being pampered and cared. However, the sample size of this research was relatively small which may limit the generalization of the results. More extensive investigations are needed to validate the effects of this complementary therapy as an integral to the existing orthodox treatment for osteoarthritis.

Art Therapy for Elderly People with Dementia: A Pilot Study

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Introduction: As the number of persons with dementia is also increasing with an increase in elderly population, dementia is sometimes referred to as "the disease of the century" (Thomas, 1992). Ways to assist with supportive treatment and behavioural and psychological interventions for this health concern and to improve the quality of life of elderly people with dementia are greatly needed (e.g., Chiu & Chiu, 2005; Kahn-Denis, 1997; Lawton, 1994; Rusted et al., 2006). Much has been said and written about the effectiveness of art therapy in improving demented people's psychological health (e.g., Kahn-Denis, 1997; Pini, 1996). It is a non-pharmacological, non-medical intervention that can have a direct impact on the well-being of the patients (Johnson & Sullivan-Marx, 2006). This claim however mainly based on some single case observation (e.g., Johnson & Sullivan-Marx, 2006; Johnson

et al., 1992; Kahn-Denis, 1997; Kamar, 1997; Rentz, 2002; Rusted et al., 2006; Steward, 2004; Wood, 2002). Little empirical work has been done to determine its effectiveness. This pilot study was an attempt to systematically evaluate the usefulness of art therapy in dementias and to determine if art therapy could help alleviate their behavioural and psychological symptoms. **Methodology:** Outcome Measures: To measure behavioural and psychological symptoms, the Chinese version of Cohen-Mansfield Agitation Inventory (CCMAI) and the Chinese version of Neuropsychiatric Inventory (CNPI) were used. These scales are commonly used to measure demented people's levels of agitated behaviour and psychological problems. To estimate the effectiveness of the art therapy programme, participants will be assessed by using CCMAI and CNPI before and after the treatment. To determine if there are any sustained effects, the participants will be assessed again at one, three and six months after the treatment stops. Design: A repeated measures design was adopted. Participants: Twelve demented elderly aged 65 years and over were recruited from an old aged home. Two group sessions with a number of 6 patients were conducted as small group format can help to decrease social isolation and offer connection

and support (Johnson & Sullivan-Marx, 2006). Intervention: Participants received a session of one-hour art therapy once a week for 20 weeks. An art therapist was hired to run the sessions. **Results:** Results show that after the 20 sessions of art therapy, participants' levels of CCMAI and CNPI (i.e., their levels of agitated behaviour and psychological problems) were reduced significantly and these effects appeared to sustain up till 3 months after the treatment stopped. However, these improvements were not maintained at six-month follow up. **Conclusion:** These preliminary findings, albeit with such a small sample size, seem to provide support for the hypothesis. This pilot study helps to form a basis for future research and study. **Direction for Future Study:** A randomized controlled trial will be adopted and a larger sample size (140 patients) will be recruited in our main study. **References:** Kahn-Denis, K. B. (1997). Art therapy with geriatric dementia clients. *Art Therapy: Journal of the American Art Therapy Association*, 14(2), 194-199. Pini, P. (1996). Psychiatry conference recognizes art therapy, *The Lancet*, 348, 603. Rusted, J., Sheppard, L., & Waller, D. (2006). A multi-centre randomized control group trial on the use of art therapy for older people with dementia. *Group Analysis*, 39(4), 517-536.