

Abstracts for Poster Presentation: Health Promotion

HP-1-36

Exercise for Chronic Musculoskeletal Pain in Older People: A Randomized Clinical Trial

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Introduction and Project Objectives: Exercise therapy is commonly prescribed by primary care physicians (PCPs) in the management of chronic musculoskeletal (MSK) pain. We evaluated the clinical effectiveness of a supervised neuromuscular (NM) exercise program in older people with chronic MSK pain.

Methods: A 12-week, two-arm randomized controlled trial comparing 6 weeks supervised NM exercise versus waiting list control. We enrolled 72 participants with chronic MSK pain at seven public primary care clinics. Participants were randomly allocated (block size of 12) in 1:1 ratio to the NM (N=36) and control group (N=36). Data were collected at baseline, 6 and 12 weeks. The primary outcome was the Brief Pain Inventory (BPI) severity pain score at 6 weeks (post-intervention). Secondary outcomes included the BPI interference score, Pain Self-Efficacy Questionnaire (PSEQ), Short form of Health Survey (SF-12), General Anxiety Disorder-7 (GAD-7), and Patient Health Questionnaire-9 (PHQ-9) scores, and functional measurement using the Timed-Up-and-Go test and handgrip strength.

Results: Compared with the control group at 6 weeks, the NM group demonstrated a significantly greater improvement in the BPI-severity pain score (between-group difference -1.27, 95% CI = -2.08 to -0.45, P <0.01), PSEQ (between-group difference 6.50, 95% CI = 2.22 to 10.77, P <0.01) and SF12 physical scores (between-group difference 3.4, 95% CI = 0.05 to 6.75, P <0.05). Statistically significant overall trends of improvement were also observed for the BPI interference and PHQ-9 scores.

Conclusion: NM exercise has the potential of reducing pain, improving self-efficacy and physical function in older people with chronic MSK pain. It can be an option for PCPs in exercise prescriptions.

Trial registration: #ChiCTR1800014890

Project No.: 30160254

HP-2-44

Community-based Mental Wellness Project for Adolescents and Adults

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Introduction and Project Objectives: Based on the theory of positive psychology and the Joyful@HK themes (Sharing, Mind and Enjoyment, SME), we developed three community-based engagement projects for adolescents aged 12-17 years: A) SME App Pilot Project, B) Joyful Adventure Day Pilot Project, C) 'Fun · Feel · Share' – Lyrics-writing and Singing Show Pilot Project, and three for adults aged 18-59 years: D) Joyful Parenting Pilot Project, E) Healthy Community Pilot Project, F) SME Ambassador Pilot Project.

Methods: Projects A – E were cluster randomised controlled trials, while project F adopted a pre- and post-test design. The interventions were designed based on public health and family-focused approaches, delivered through a smartphone app (A), simple school physical activities (B), lyrics writing competition (C), appreciation and praise skills (D), simple family physical activities (E), and voluntary services (F). SME-related outcomes, subjective happiness, wellbeing, personal health and happiness, family health, happiness and harmony, awareness and understanding of mental health were measured at baseline, 1-month and 3-month. Focus group interviews of participants and individual in-depth interviews of service providers were conducted after the interventions.

Results: A total of 2641 adolescents and 527 adults were enrolled and provided valid baseline data. The average retention rate at 1-month and 3-month was 89.6% and 87.2%, respectively. A total of 26 focus groups and 22 in-depth interviews were conducted. For adolescent projects, small to moderate effect sizes (d: 0.19 to 0.52) were observed for increasing awareness of anxiety disorder symptoms, and small effect sizes (d: 0.14 to 0.21) were observed for improving the SME behaviours and other outcomes. For adult projects, small to large effect sizes (d: 0.46 to 1.06) were observed for increasing awareness of mixed anxiety and depressive disorder symptoms, and small to moderate effect sizes (d: 0.30 to 0.57) were observed for improving the SME behaviours and other outcomes. The qualitative findings supported the quantitative results in general. The adolescents liked the peer-based elements, such as the competition in fitness assessment, cooperation in the games, and the contest for prizes in the lyrics writing. Adult participants enjoyed the activities and welcomed more workshops and similar programmes in the future.

Conclusion: For the adolescents' projects, further improvements and trials with greater adherence are warranted. The

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interventions in the adult projects can be scaled up (with simple adjustments as appropriate), disseminated and evaluated, and further improvements and larger trials are warranted.

Project No.: CPP-HKU

HP-3-52

Resilience Enhancement in Mainland Immigrants to Hong Kong: A Randomized Controlled Trial

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Introduction and Project Objectives: Resilience resources facilitate positive adjustment of immigrants. By focusing on new immigrants from Mainland China to Hong Kong, this research project sought to fulfill two objectives: (1) to compare a resilience intervention with a resilience + information intervention in a randomized controlled trial and (2) to develop the training infrastructure to ensure that the evidence-based interventions can be sustained despite the completion of the research project.

Methods: Two hundred and sixty-nine Mainland immigrants who had arrived within 3 years of residence in Hong Kong were randomly allocated to the resilience intervention or the resilience + information intervention, and 168 participants completed evaluation at pre- and postintervention. Experienced social workers delivered these interventions in the group format. After the completion of this research project, we compiled training materials (e.g., intervention manuals and statistical analysis tools), organized a sharing symposium, and conducted a train-the-trainer workshop to transfer knowledge to social workers who had interest in conducting resilience-based intervention programs in the future.

Results: The interventions enhanced resilience by 11.91% as well as decreased depressive symptoms by 19.21% and adaptation difficulties by 9.76%. Although the Resilience + Information Intervention did not show higher increases in resilience or more decreases in depressive symptoms and adaptation difficulties compared with the Resilience Intervention, the compound intervention showed significantly greater increases in knowledge (Cohen's $d = 1.87$, $p < .001$), service utilization (Cohen's $d = 0.29$, $p = .01$), and service use capacity (Cohen's $d = 0.53$, $p < .001$). Fifty-seven social workers from 12 organizations attended the sharing symposium and train-the-trainer workshop, which substantially increased their understanding of the implementation of randomized controlled

trials in social services.

Conclusion: This intervention program effectively empowered new arrivals from the Mainland to adapt to the new environment. Social workers acquired knowledge and skills related to delivering the resilience-based interventions and evaluating randomized controlled trials in the social service context. The knowledge transfer model strengthened the joint forces of academic and social service sectors to serve the community.

Project No.: 08150145

HP-4-58

Use of Nicotine Replacement Therapy (NRT) Sample and Brief Smoking Cessation Advice for Recruiting Smokers to Smoking Cessation Services and Motivating Quit Attempts

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Introduction and Project Objectives: Nicotine replacement therapy (NRT) sampling is effective to increase use of smoking cessation service use and tobacco abstinence in primary care settings. This study promoted the delivering of NRT sampling and brief smoking cessation advice to smokers and the effects of this strategy on smokers' recruitment and cessation outcomes when it was applied at outdoor smoking hotspots.

Methods: This is a pragmatic two-arm cluster-randomized trial which was conducted in 4 phases: (1) Training of smoking cessation (SC) ambassadors (SCAs) for the SC promotion; (2) SC promotion sessions to deliver the quitting advice and NRT sampling (experimental group), or the quitting advice only (control group); (3) Follow-up of the recruited smokers; (4) Evaluation of the effectiveness of promotion, quit outcomes, and use of NRT sampling.

Results: This project trained 59 SCAs, held 244 smoking cessation promotion sessions, approached 9224 smokers and offered SC counseling to 1427 (15.5% of all approached smokers) smokers onsite. This project helped 299 (21.0% of smokers received counseling) smokers to quit successfully. By intention to treat, the NRT sample significantly attracted more participants to receive nurses' onsite counseling (Adjusted incident rate ratio=1.35, 95%CI, 1.12-1.62, $p < 0.01$). Group differences in other recruitment outcomes were not significant. The two trial groups showed similar quit attempts (RR (risk ratio) =1.02 and 0.90 at the 1-, and 3-month follow-up, respectively,

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all p-values > 0.05), but the experimental group reported lower use of cessation service (RR=0.72, and 0.85 at the 1-, and 3-month follow-up, respectively, respectively, all p-value < 0.05). Tobacco abstinence at 6-month was similar in both groups. At 1-month follow-up, in the experimental group who received NRT sample, 51.7% had ever used the NRT sample and 34.1% completed the full course of the NRT samples. At 1-month follow-up, no significant group difference in the use of any NRT in the past month was detected (39.8% and 34.4%, p>0.05).

Conclusion: Delivery of NRT sample at outdoor smoking hotspots increased uptake of onsite nurses' brief counseling. This strategy reduced enrolment of smoking cessation services, but it did not alter quit attempts and long-term tobacco abstinence.

Project No.: 01170418

HP-5-70

《穩步前行》社區長者防跌計劃

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Introduction and Project Objectives:

計劃以增強意識和主動識別作為預防跌倒的教育方針，讓長者認識跌倒危機的因素及學習預防跌倒之方法；培養長者健康運動的生活模式，提昇自我管理健康風險的能力。

Method:

透過不同健康推廣項目接觸了超過五千名長者，提倡防跌意識及進行防跌普查，篩選出 217 位有高危險跌倒風險的長者作深入跟進，提供個人跌倒風險評估，讓他們清楚了解自己跌倒的成因，從而在生活作出調整，預防跌倒。

Results:

計劃亦安排「防跌大使」義工上門探訪，其中 24 位具特別需要的長者獲治療師進行家居環境改善建議及上門教授復康運動。此外，甄別了其中 82 位長者參加 8 期運動治療小組，治療師按評估結果教授相應運動，提高他們身體平衡力、增強四肢肌肉強度及改善步態，結果發現 87% 長者下肢肌力及平衡力有顯著進步或維持良好。

Conclusion:

計劃成功起動全面社區性預防跌倒服務，廣泛地提昇社區人士關注長者防跌的重要性，同時亦發現了長者潛在的跌倒風險因素，除了身體機能、家居環境、藥物及視力影響外，慢性痛症亦是主要因素，痛症治療是預防再次跌倒的重要因素。

Project No.: 30160484

HP-6-77

"Sweet Home, Safe Home" Child Safety Project for Ethnic Minority Families Project

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Introduction and Project Objectives: In 2015, there were 62,000 children (aged 0-19) attended Accident and Emergency Departments due to injury, and home injuries being the most common. EM child injuries or even deaths were often reported in news. The project aimed that the child (aged 0-9) injury risks among participating EM families were reduced through

- 1) Facilitating EM families to provide a safe home environment for children in Home Safety Assessment and Enhancement Scheme
- 2) Equipping EM parents with the knowledge and skills of preventing and handling the child injury in the Home Safety and Maintenance Class
- 3) Enhance EM parents' awareness on home safety in Community Education

Method: The completed project consisted 1) Home Safety Assessment and Enhancement Scheme, 2) Home Safety and Maintenance Class, and 3) Community Education.

As the applications of the Home Safety and Enhancement Scheme and Home Safety and Maintenance Class were mainly through the referral from their community, this implied that the EM community had a strong network and it could be a way to promote health related message through their network.

Results: The Home Safety and Enhancement Scheme received 128 applications and eventually 100 applications was completed. During the first home visit, living room was found to be the major source of home accidents risk according to the assessment by the Home Safety Assessment tools issued by the Department of Health.

2-session Home Safety and Maintenance Class was conducted in 4 organizations. The class participation was active with interaction on discussing how to handle or prevent home accidents for child.

A total of 25 EM volunteers were recruited to facilitate the promotion of home safety among their community. They were responsible for translation and promotion through home visit, information booth and outreach.

Conclusion: To conclude, the knowledge and awareness of home safety were lacking among the EM communities. The completed project could both enhance the awareness of home safety and provide resources (\$1000 subsidies) for low income EM families. The current project also followed up 3 months after the home safety items installment. There was no children

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injury reported. Moreover, all participating families received the assessment report during home visits. These demonstrated that the objective of enhancing awareness of home safety was achieved. Moreover, the active participation of Home Safety and Maintenance Scheme indicated that the need of EM parents on home safety knowledge. Overall, the project achieved the objectives in general.

Project No.: 29150124

HP-7-81

Improving Well-being of Children with Autistic Spectrum Disorder (ASD) and Their Families with Mindfulness Training in Hong Kong

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Introduction and Project Objective: Autism spectrum disorder (ASD) is a lifelong condition associated with significant neurodevelopmental hurdles and behavioural problems. Previous studies showed that mindfulness training for children with ASD combined with Mindful Parenting is a feasible and promising intervention to benefit adolescents with ASD and their parents. However, there is a lack of studies examining the effectiveness of mindfulness training on adolescents with ASD and their parents in the Chinese context. The current study was the first pilot randomized controlled trial to investigate the feasibility and effectiveness of mindfulness-based intervention (MYmind) on Chinese adolescents with ASD and their parents in Hong Kong.

Methods: This trial had two study arms: the MYmind group versus the waitlist control group. 37 eligible families were successfully recruited. 19 families were randomized to the MYmind group, and 18 families were randomized to the waitlist control group. In the MYmind group, both adolescents with ASD and their parents received an intervention including 9 weekly 90-min mindfulness training sessions. Outcomes were measured from parents in both groups before (pre) and after (post) the 9-week mindfulness intervention. The primary trial outcomes were the feasibility and acceptability of the MYmind program as measured by the recruitment, compliance, retention rates and program evaluation. The secondary outcomes included adolescent's social responsiveness and behaviour, parenting stress, mindful parenting, parenting style,

and parent's rumination as measured by various scales.

Results: Current findings showed that the MYmind program had an 80% compliance rate, 0% dropout rate, and 89% response rate. No statistically significant differences were found in both within-group and between-group comparisons. Nevertheless, medium to large between-group effect sizes were found in the measures of parent's rumination ($g= 1.16$), mindful parenting ($d=0.6$), parenting style ($d= 0.59$) and parenting stress ($d= 0.5$). Results suggested that mindfulness might have beneficial effects on these aspects.

Conclusion: This study demonstrated the feasibility of the MYmind program with high attendance among Chinese adolescents with ASD. Further study with larger sample size and more extended follow-up period is suggested to better examine the effectiveness of mindfulness on adolescents with ASD and their parents.

Project No.: 29150654

HP-8-87

StickyRiceLove: Development, Evaluation and Dissemination of an Innovative Peer-Led Sexual Health Social Media Promotion

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Introduction and Project Objectives: Online dating apps are popular platforms among young adults. At the same time, they have been associated with risks such as unsafe sexual behavior and privacy concerns. An online intervention to promote safer dating app usage was designed and evaluated.

Intervention: A peer-led approach was adopted in key stages of the development process. Focus group discussions and a crowdsourcing contest were held to assess the experience and needs of dating app use. A one-day intensive workshop involving peer mentors was held for the production of creative interventional materials. The online intervention material included four short videos, an interactive scenario game, and a risk assessment tool.

Methods: A clustered randomized controlled trial was conducted among college students to evaluate the effectiveness of the intervention. Students aged 17 to 27 years were randomized into intervention and control groups. An existing website promoting physical activities and healthy living was used as a control. The general self-efficacy scale (GSE) was set as the primary outcome and the risk propensity scale (RPS) as the secondary outcome. Questionnaires were administered before, immediately after, and at 1 month after the intervention. Intention-to-treat analysis was

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adopted, and between-group differences were assessed using the Mann-Whitney U test. A post-hoc multiple linear regression model was used to examine the correlates of the GSE and RPS. Apart from this research, the intervention was disseminated online and promoted on social media.

Results: A total of 578 eligible participants (290 in the intervention group and 288 in the control group) participated in the study with 36 lost to follow-up. Overall, the participants in the intervention group reported favorable experiences when compared with the control group. There was significant improvement in the GSE score and reduction in the RPS score ($P < .001$) of the intervention group. Regarding public dissemination, the campaign website had 18,340 page view in 3 months. The total reach of promotional material on social media was 1,006,732.

Conclusion: It was feasible to develop an effective and popular online intervention with high peer participation. The online intervention was effective in improving general self-efficacy and reducing risk tendency among young students.

Project No.: 09160275

HP-9-90

School-based Physical Activity Intervention for Obesity among Adolescents with Intellectual Disability in Hong Kong

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Introduction and Project Objectives: To evaluate the effectiveness of a 9-month school-based adapted physical activity (APA) program in reducing weight among adolescent with ID who were overweight or obese.

Methods: A randomized controlled trial was implemented in six special schools in Hong Kong, China in the academic year of 2018/2019. Students who aged 12-18 years, had mild and moderate ID and were overweight or obese were recruited and randomly assigned into intervention and control groups. The APA intervention consisted of aerobic and resistance exercises with an overall moderate intensity and was delivered at two 45-min sessions per week for 9 months. Changes in body mass index (BMI, primary outcome) and those in BMIz, weight, percent body fat, waist circumference and waist-to-height ratio (secondary outcomes) were examined using general linear models.

Results: Totally 61 subjects (39 in intervention and 22 in control) completed the study and included in the analyses. After the

intervention, the intervention group exhibited a reduced BMI of -0.66 kg/m² (95% CI -1.06 to -0.25 kg/m², $p=0.002$), while a significant increase in BMI was observed in control. After adjustment for age, sex and baseline BMI, a significant post-intervention between-group difference in change in BMI (-1.31 kg/m² [95% CI -1.99 to -0.63], $p < 0.01$) was found in favor of the intervention group. Similar results were also observed in all secondary outcomes.

Conclusion: The study provides evidence that a 9-month APA intervention at a moderate intensity induced clinically meaningful effects on weight loss in adolescents with ID.

Trial Registration: Clinicaltrials.gov NCT04463069.

Funding: This study was financially supported by the Health Care and Promotion Scheme (HCPS) under the Health and Medical Research Fund (HMRF), administered by the Food and Health Bureau of Hong Kong (Ref. No. 01170068).

Project No.: 01170068

HP-10-108

Diabetes Prevention Program for South Asian Ethnic Minorities Families

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Introduction and Project Objectives: Hong Kong is a predominantly Chinese society but has a sizeable South Asian ethnic minority (EM) community. However, there is a dearth of health promotion programs that outreach to this group of people to promote healthy diet and physical activity for improving their healthy life.

Methods: This project was successfully implemented and well received by 59 South Asian EM adolescents aged between 12-18 years and their parents/ grandparents ($n = 116$) recruited from a local designated school under the Education Bureau. The project was conducted in 3 phases. In Phase I, South Asian EM adolescents were trained as health ambassadors to learn the diabetes knowledge and to enhance their attitude and practice in healthy diet and physical activity. Two health ambassadors, recommended by school teachers, were invited to participate in the production of three 5-min Youtube video entitled "Candy Crush Health Crash" in different languages including English, Urdu, and Nepali. In Phase II, the trained health ambassadors delivered the 3-month behavioral change programme to their families that may involve parents and grandparents with the use of Youtube videos for information consistency. In Phase III, a Health Carnival was held in a community hall for disseminating the diabetes prevention messages to the EM communities.

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Results: There was no statistically significant improvement on the mean Brief Diabetes Knowledge Test (General) scores before and after the project. The physical activity levels on three areas: at work, transportation (walking and cycling) and leisure activities measured by the Global Physical Activity Questionnaire showed some improvement. For vigorous-intensity activities at work, 20.7% reported that they had increase in their involvement while 13.8% of them reported that they involved more for moderate-intensity at work. For walking or cycling, 29.3% of them started to develop such habit. For vigorous-intensity sports activities, there were 22.4% participants reported an increase in engagement while 19% participants reported doing more sports for moderate-intensity sports activities.

Conclusion: This project was not able to significantly enhance their diabetic knowledge but it enhanced physical activities among the participants. The results supported the necessity of cultural sensitivity and competence in health promotion for EM families. Appropriate strategies that target traditional beliefs on active lifestyle endorsed in the South Asian culture and the concerns on language and literacy in health promotion may warrant more promising behavioral outcomes for future programs.

Project No.: 29150744

HP-11-127

The Treasure Of Gold : Using DementiaAbility Methods: The Montessori Way™ To Re-discover The Abilities and Strengths In Persons With Dementia

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Introduction: There is a Chinese proverb "A family with an old person has a living treasure of gold" 「家有一老，如有一寶。」. Every elderly has a unique personal story, a wealth of skills and experiences that define who they are. As dementia care providers and caregivers, we concern what is "lost" to the person and how to support their "limitations". How about what is "remain"? Are we able to re-discover and make meaning of the "treasures" within them? Dementia is a progressive condition and it does not steal the person's abilities and strengths completely right away, they remain for a long while and might be longer than we thought.

The Montessori Way™ (DMMW) is a non-pharmacological and person-centred care approach, developed by dementia specialist Gail Elliot. She was inspired by the work of Dr. Cameron Camp who successfully adapted Dr. Maria Montessori's educational philosophies and principles to dementia care. DMMW focuses on re-discovering the abilities in person with dementia; designing meaningful activities, roles and routines

based on the person's needs and strengths; support the person in a prepared environment.

Objective: To explore the effect of Montessori-based activities on Behavioural and Psychological Symptoms of Dementia (BPSD) and the feasibility in implementing Montessori-based activities group in residential and day care setting

Methods: 30 participants with dementia and BPSD (mainly agitation and wandering) from nursing home and day care centres were invited to join the Montessori-based activities group. There were a total of 5 groups with 6 participants in each group. Each group consisted of 12 sessions (2 sessions per week, each session of 1 hour) with group-based warm up activities, followed by individualized Montessori-based activities. Frequency of agitation and wandering behaviours before and during the group were compared. Program evaluation was conducted through structured interviews with multidisciplinary stakeholders involving social workers, nurses and health care workers.

Results: Results showed a 53% reduction in overall frequency of agitation and wandering behaviours. All staff were positive towards the experiences in Montessori-based activities group i) activities are tailor-made and unlike a "set menu"; ii) observed an increased engagement of all participants especially the ones who refused other usual group activities; iii) opportunities to appreciate the "hidden treasures of participants".

Conclusion: Montessori-based activities group is a feasible non-pharmacological intervention for addressing wandering and agitation behaviours in persons with dementia.

Project No.: 08150095

HP-12-139

"No Alcohol for Cheers" - Reduce Alcohol Consumption Health Promotion Programme for Working Group

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Introduction: Alcohol plays an important social and cultural role in society. It is the world third largest risk factors among over 200 disease burdens and injury conditions, as well as the main contributing factor for non-communicable diseases. In Hong Kong, the working group is vulnerable population. Therefore workplace could be a health promotion setting on reducing alcohol consumption as well as induce behavioral change among the working group.

Project Objectives: By the end of this 12-month programme, the participated employees will have raised awareness and understanding towards alcohol-related health consequences and

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build up positive attitude to control over their drinking behaviour, as a result of promoting lowering alcohol consumption using workplace as platform and built up partnership with employers to take the initiative for health promotion.

Method: The programme included two levels of intervention initiated by programme outreach team including Registered Nurse and Registered Social Worker: Staff level and Employer's level. For staff level, talks and workshops were offered in workplace for alcohol harm educational purpose and skills enhancement to reduce risk factor for adopting drinking behavior. For employer's level, organizational healthy policy was suggested and implemented in a top-down approach to strengthen capabilities of individuals to take action in alcohol reduction by providing an encouraging and supportive environment.

Results: The programme successfully recruited 24 companies participated, with over half of them come from Property Management Industry. Throughout the 24 talks and 23 workshops provided, 516 employees are benefited from the service provision. Evaluation questionnaires have been given to the participated employees, in which positive change in knowledge, awareness towards harmful effect of alcohol drinking have been observed after attending the health talk; over 90% of workshop participants agreed they have learned positive ways from relaxation, social skills to refuse alcohol invitation, developed positive attitude to reduce drinking alcohol. Overall 97% of participants are satisfied on the service provision.

Conclusion: The result indicated health promotion on alcohol reduction has been successfully implemented using workplace setting. In fact, utilizing workplace as health promotion setting take the advantage of existing supportive environment created by colleagues and favorable internal health policy which act to empower drinkers for behavioral change and strive for a better health. It is foreseeable that there would be more corporates from different industries interested to the outreach based health promotion programme.

Project No.: 30160734

HP-13-167

「乳妳同盟」母乳餵哺社區支援計劃

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Introduction and Rationale:

本計劃旨在集結跨界別力量，如：護理專業人士、具母乳餵哺或具陪月經驗的婦女等，為準新手父母及母乳餵哺家庭提供支援服務，讓媽媽及其家庭成員在知識及照顧技巧層面獲得正確的資訊，同時承托媽媽在情緒層面上的需要，正面鼓勵及支持新生嬰兒媽媽以母乳餵哺孩子，增強她們對母乳餵哺的信心及延長母乳餵哺期。

Project Objectives:

(i) 提升新手父母的能力及信心；(ii) 集結跨界別力量，建立協作平台；(iii) 推動關愛精神，支援有需要的家庭；(iv) 提升家庭關係，以助延長母乳媽媽的餵哺期；(v) 加強公眾對母乳餵哺的認識。

Methods:

舉行「母乳好處及餵哺技巧」工作坊、「乳妳同盟」大使（指導員）訓練、「為母則強」社區互助小組、「乳妳同盟」大使支援服務及社區教育活動。

Results:

本計劃接觸到：(i) 126 位母乳餵哺的母親；(ii) 30 名母乳餵哺指導員；(iii) 84 名家庭成員；(iv) 8 個合作伙伴，包括：香港大學護理學院、香港助產士學院、廣華醫院產科門診部、瑪嘉烈醫院婦產科、葵青及荃灣區母嬰健康院、媽媽牌同盟、明愛綠色小腳板及社會福利署。及 (v) 420 位公眾人士。

Conclusion:

本計劃旨在集結跨界別力量，為準新手父母及母乳餵哺家庭提供支援服務，為媽媽及其他家庭成員在餵哺的知識及照顧嬰兒技巧層面提供正確的資訊，同時亦承托媽媽在情緒層面上的需要，正面鼓勵及支持母乳餵哺媽媽，增強她們的信心，並鼓勵延長母乳餵哺期。是次項目計劃共有 126 位新手父母及母乳餵哺家庭參加，計劃團隊同時招募了 30 名母乳餵哺指導員，透過不同的專業團體，為計劃參加者提供訓練及支援服務。當中有 90% 母親認同工作坊能增加對母乳餵哺的知識及技巧，並增強其餵哺母乳的信心，延長母乳餵哺期。此外，70% 母親滿意「母乳餵哺指導員」所提供支援服務。她們認同當遇上疑問及困難時，能夠有平台可以查詢，甚至有婦女義工進行家庭探訪，能協助改善母乳餵哺的實踐情況，有助她們舒緩身心壓力。另一方面，80% 指導員認同訓練內容實用，有助她們為計劃參與母親提供指導；而且她們所得的知識及技巧，能於日常生活中學以致用，甚至協助自己的親友，有助提升其自信心，同時加強人際關係。是次項目計劃邀請到不同的單位共同協作，如：廣華醫院產科門診部、瑪嘉烈醫院婦產科提供平台，讓計劃團隊招募新手父母、母乳餵哺家庭參與計劃；同時邀請到香港大學護理學院、香港助產士學院的專業團隊，為計劃參加者提供工作員及訓練活動等。80% 合作伙伴認同社區支援計劃能支援母乳餵哺的母親，願意繼續共同協作，於社區內推動母乳餵哺的工作。與坊間其他團體稍為不同的一點，是計劃團隊致力鼓勵及邀請家庭成員一同參與活動，包括新手爸爸及祖父母。工作員希望增強家庭成員們的能力和參與，能為母乳餵哺媽媽提供正面的支持甚至是正確的支援。90% 家庭成員認同透過講座能認識母乳餵哺的好處，表示願意支持母親以母乳餵哺嬰兒，並協助及鼓勵其延長母乳餵哺期。計劃團隊年度性地於社區內舉行社區教育活動，安排母乳餵哺大使於活動內協助向準新手父母推廣及宣傳母乳餵哺好處，同時向公眾人士推廣及宣傳母乳餵哺的資訊，以提升公眾人士對母乳餵哺的接受性。70% 回應的公眾人士認同增加對母乳餵哺的認識，表示支持及鼓勵身邊女性以母乳餵哺嬰兒。

Project No.: 30160474

Abstracts for Poster Presentation: Health Promotion

HP-14-169

The Effectiveness on Students' Knowledge and Absenteeism of a Comprehensive Health Education Programme for Communicable Diseases Prevention in Primary School Setting

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Introduction and Project Objectives: Young children (age 6-9) in the school setting are particularly at risk for transmission of communicable diseases (CDs). Although health education is a common approach for increasing people's knowledge, most educational materials are too complicated to this age group, making its effectiveness unknown. In addition, potential effectiveness in reducing student's absenteeism is still unclear. We developed and implemented a comprehensive health education programme (HEP) to promote knowledge against CD among young primary school students (grade 1-3), and examined its effectiveness on students' knowledge improvement and impact on reducing absenteeism during the influenza seasons.

Methods: A comprehensive HEP with four principle components, including mode of common CD transmission, cough etiquette, hand hygiene technique and face masks usage in a format comprehensible to student in primary 1-3 was conducted in local schools. Participated schools were randomised using a wait-list control design to receive the HEP either before (Semester 1) or after (Semester 2) the influenza season in 2018/19 academic year. The knowledge level was assessed at three timepoints using a simple test consisting of 27 questions on the four components. Mean total test scores were compared before (pre-test), 1 week after (post-test), and more than 3 months after the intervention (follow-up test). Feedback was gathered from teachers to evaluate the programme.

Results: The HEP was delivered in 90 local primary schools covering 29,396 students. Among whom 24,809, 21,673 and 8,503 children had completed the pre-tests, post-tests and follow-up tests respectively. There was a 11.92% ($P < 0.05$) relative improvement in the overall mean scores in the pre- and post-test comparison. The absence of significant difference between the post-test score at 1 week and follow-up test score at 3 months suggested good long-term retention of the gained knowledge.

Comparing to schools receiving the intervention in Semester 2, schools receiving the HEP before the influenza season (in Semester 1) was having a significant 9% lower overall absence rate for the whole school (incidence rate ratio, IRR 0.91, 95% CI 0.86, 0.97), and a 23% lower specific absence rate for grade 1-3 students directly reached by the programme (IRR 0.77, 95% CI 0.70, 0.85) during the influenza season.

Conclusion: Our result highlighted the effectiveness of the HEP to improve knowledge related to CD prevention and reduce student absence rate during the winter influenza season among primary school in Hong Kong.

Project No.: 01170588

HP-15-172

DASH A DAY - Community Nutrition Promotion Program

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Introduction and Project Objectives: Dietary Approaches to Stop Hypertension (DASH) diet is proven to prevent hypertension and improve patients with hypertension. This project aim to increase the awareness and capability to adapt DASH diet for the elderly and/or middle-aged adults, to provide train-the-trainer opportunities to community professionals (doctors and nurses) and to provide training and practicum with future community nutrition promoters.

Methods: Each Elderly Community Center (ECC) received one educational workshop and two focus groups (1.5 hour each). Workshop included education of relationship between diet and hypertension, low sodium and DASH diet. Participants who attended workshop were invited to join focus group one and two (about 1-2 months apart) to share practical experiences, successfulness and difficulties on adaption of DASH diet, in order to sustain long-term compliance.

Results: A total of 690 direct beneficiaries (80.9% attendance) joined the program. Average knowledge score on DASH diet components increased from 37.3% to 94.8%. Average attitude score towards willingness on adapting DASH diet increased from 91.3% to 95.2%. The average spreading of DASH diet information from participants joined focus group and not joined focus group was 85% and 61.2% with an average of one participant spread to 2.0 and 1.1 people, respectively. Also, 95.7% participants, who joined focus group (N=234), reported with adapting DASH diet in daily life 5.4 days per week, compared with 84.0% who without joined focus group (N=213), reported with adapting DASH diet in daily life 3.0 days per week. Participants were provided with practical experiences for knowledge attainment and DASH diet application and thus increase the frequency of applying DASH diet in their daily lives after this program.

Conclusion: This program enhanced participants' knowledge on DASH diet and further improved their attitudes towards DASH diet application. They were evaluated to increase their frequency of practicing DASH diet on their own after this

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program. Hence, it is necessary to educate the community on DASH diet, on top of a well-balanced approach, would be introduced earlier prior to middle-aged adults as preventive approach.

Project No.: 29150184

HP-16-199

Community Partnership Programme on Mental Health Promotion in Hong Kong (Elderly)

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Introduction and Project Objectives: The aging population is at risk of mental health problems, which are associated with cognitive impairment; maintenance of good mental well-being may help to delay onset of dementia. This project aimed to develop two interventions for community-dwelling older people to improve their mental well-being, cognitive functioning, and social engagement.

Methods: Two interventions were developed in this project. The Mindfulness Programme (MP) lasted for eight group sessions, one session per week for eight weeks, two hours per session. The Cognitive and Social Stimulation Programme (CSSP) consisted of 14 group sessions, two sessions per week for seven weeks, one hour per session. The effectiveness of the interventions was evaluated by a randomised controlled trial with waitlist design. 19 community centres (N=209 for MP, N=195 for CSSP) participated in the research. At each centre, participants were randomly assigned as intervention group or control group, with the control activities being usual activities at centres. The primary outcome of both interventions was mental well-being measured by the Chinese Short Warwick-Edinburgh Mental Well-being Scale (SWEMWBS). Other outcome measures included (1) Montreal Cognitive Assessment 5-minute version, (2) Verbal Fluency Test (VFT), (3) International Shopping List Test, (4) Peace of Mind Scale, (5) Geriatric Depression Scale (GDS), (6) Pittsburgh Sleep Quality Index, (7) Five Facet Mindfulness Questionnaire Short Form, (8) Self-Compassion Scale Short Form, and (9) Multidimensional Scale of Perceived Social Support (MSPSS) (7-8 for MP only, 9 for CSSP only). The outcome data were collected at baseline (T0), immediate post-group of intervention group (T1), and two months after intervention group completed the intervention (T2).

Results: For MP, the intervention group had better mental well-being (SWEMWBS score difference: 0.9 [95% CI: 0.1, 1.8], p = 0.025) and less depressive mood (GDS score difference: -1.0 [95%

CI: -1.7, -0.3], p = 0.002) than the control group at T1. For CSSP, no between-group difference was observed, while significant improvement in verbal fluency (VFT: 29.6-32.3, p < 0.001) and self-perceived social support (MSPSS: 5.0-5.2, p = 0.004) were observed at T1 in the intervention group and the changes were sustained at T2 (ps < 0.001).

Conclusion: The Mindfulness Programme developed in this project benefited the mental well-being and self-perceived depressive mood of community-dwelling elderly while the Cognitive and Social Stimulation Programme might improve verbal fluency and self-perceived social support.

Project No.: CPP-CUHK

HP-17-213

Promotion of Dietary and Cognitive Health in Dementia Prevention to Elderly Community – a Pilot Project

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Introduction and Project Objectives: It is estimated that the Hong Kong population of over 65 years old will escalate to 24% in 2027, and exceed 30% by 2064. The rapid growth of ageing population implicates an expanding incidence of chronic diseases, including hypertension. Hypertension is a key risk factor for cognitive impairments, including dementia. Considering the close association of elderly with dementia and hypertension, health promotion intervention is therefore a timely and pivotal approach to enhance the primary care and well-being in the community of older people. This project focused on two main health issues, including hypertension and dementia, in elderly and aimed to improve the elderly participants' health status, quality of life and enhance their social engagement. The key objectives of this pilot project are: • To increase elderly's understanding of the diet-and-disease relationship of hypertension; • To enrich their knowledge of functional foods having desirable effects on cardiovascular diseases; • To maintain or even improve their cognitive activities through strategic games; and • To promote social connections among the elderly themselves and with the young volunteers.

Methods: Four health education workshops were arranged to the elderly participants. They were encouraged to join a recipe design campaign to propose healthy recipes to foster them to take initiative of their health. A recipe book was compiled. Hard copies of the recipe book were distributed to participants and the collaborating organizations. During the activities/workshops elderly participants were engaged in various brain exercises. Lastly, a closing ceremony was arranged.

Target Group: 259 elderly were recruited from 7 elderly centres

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in Kwai Tsing district to participate in our activities. 39 young volunteers from the BSc (Hons.) in Health Care programme in Technological and Higher Education Institute of Hong Kong (THEI) were recruited.

Results: The health knowledge and concerns of the elderly participants were greatly enhanced through a series of health education workshops. Additionally, a recipe book was compiled. 39 student volunteers were trained with skills and knowledge to teach and communicate with the elderly participants. The total headcounts of elderly participating in all activities was 239. They could gain some knowledge on dietary and cognitive health through strategic games. This pilot project also promote social connections between the young volunteers and the elderly participants.

Conclusion: This pilot project could provide a good reference for various organizations to organize similar activities to the elderly in local community.

Project No.: 01171158

HP-18-225

A Pragmatic mHealth Program for People at High Risk of Diabetes: The Use of Diabetes Risk Score Mobile App (DRS App) and Telephone Counselling

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Project Objectives: This project aimed to promote diabetes risk self-assessment and lifestyle modification through a mHealth program.

Methods: This project adopted assess-advice-assess model to provide individualized health promotion through mobile app and telephone counseling. The inclusion criteria of participants were: 1) aged 40 or above; 2) Hong Kong Chinese Residents; 3) possess a smart phone; 4) able to communicate in Cantonese. A total of 18 health seminars, 36 sessions of health assessment and 54 sessions of telephone counselling were held. In the health seminars, the importance of regular physical activity and dietary advice was highlighted. Participants were assisted to download a Diabetes Risk Score mobile app (DRS app) developed by the Project Team. Diabetic risk score was shown in the app upon receiving the inputs from the participants. Those who were at high risk of diabetes were invited to join a health assessment in which HbA1c, physical fitness, dietary and exercise habits was recorded. Three phone calls were made by trained health ambassadors in 3 months. Post-intervention health assessment was carried out after 3 months.

Results: A total of 2,795 persons participated in various activities and 2,221 persons downloaded the app and used it to assess their risk. Majority (71%) of the participants were females and their mean age was 63.2 (SD 9.1). Participants' lower body strength (mean difference, m.d. = 2.24, p<0.001), aerobic exercise ability (mean difference, m.d. = 6.05, p<0.001), lower limb flexibility (m.d. = 2.07, p<0.001), upper limb strength (mean difference, m.d. = 2.14, p<0.001) and number of steps taken per day (mean difference, m.d. = 430, p=0.016) were significantly improved. Participants also had more vegetables daily (mean difference, m.d. = 0.178, p=0.005) than their usual practice after 3-month intervention. 37% participants increased their physical activity level after the intervention. Majority of the app users (64.7%) indicated their confidence to use the mobile app for recording after telephone counselling.

Conclusion: Participants used mobile app to assess diabetes risk, report lifestyle, learn the importance of physical activity and dietary modification in diabetes prevention. This DRS app and telephone counselling were evidenced as a useful and pragmatic diabetes prevention program to Hong Kong population.

Acknowledgment: The project is funded by Health Care and Promotion Fund, Health and Medical Research Fund, Food and Health Bureau, The Hong Kong SAR Government in 2016-2018 (reference no.: 29150794).

Project No.: 29150794

HP-19-226

Promoting Mental Health Literacy for Community-dwelling Older Adults: A Randomized Wait-listed Control Trial Using the Concept of Photovoice

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Project Objectives: This project aimed to promote community-dwelling older adults' mental well-being and develop their capacity to seek for mental health advices.

Methods: A randomized wait-listed control design was used to assess the efficacy of this mental health literacy program. Four weekly group meetings (the intervention) were arranged in community centers. Older adults took photos, expressed their feelings through photos, and discussed their feelings with community workers and peers. Community workers were

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trained to recognize the symptoms of depression/ negative emotions and encourage them to seek for supportive resources in the community. Eligible criteria of the participants were: aged 60 or above, cognitive intact (SPMSQ score > 7) and were able to communicate in Cantonese and ambulate independently. Geriatric Depression Scale (GDS), Patient Health Questionnaire (PHQ-9), Quality of life Short form (SF-12v2) and Lubben Social Network Scale-6 (LSNS-6) were measured before and after the intervention.

Results: A total of 540 older adults were recruited and screened for eligibility to join the programme. After screening, 458 older adults were eligible and agreed to participate in the programme. Among these, 240 were randomized into the intervention group (IG) and 224 were randomized in the waitlist control group (CG). The mean age of the IG participants was 74.87 (SD 6.68) and about 77% of them were female. After the 4-week intervention, participants in IG had significantly lower depressive level (GDS scores) than those of the CG, mean difference = -0.54, SD = 1.95, $d = -0.278$, $p = 0.011$. Help-seeking behaviors of IG was also significantly higher than the CG.

Conclusion: This program has reduced community-dwelling older adults' depressive level and encouraged them to seek help for mental health issues in the community. The community workers who received training possessed a new set of skills for promoting mental health literacy for community-dwelling older adults.

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Project No.: 09160175
