ILC Singapore
International Longevity Centre
A Tsao Foundation Initiative

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Tsao Foundation Initiatives
Hua Mei Centre for Successful Ageing
Hua Mei Training Academy
International Longevity Centre Singapore

Annual Report of ILC Singapore
July 2013-October 2014
Submitted by Susana Concordo Harding, Director

1. Research

1.1 Tsao-NUS Ageing Research Initiative, A/P Angelique Chan

1.2 ILC Singapore team

1.2.1 Build Your Own Nest or BYON

This programme was developed by ILC Singapore with the aim to support mature Singaporean women (those aged 40 to 60) to be more independent and resilient as savers by matching their savings. Through the study, we aim to prove that a matched savings programme is effective in inculcating a savings behavior amongst low income women which will help in ensuring that they meet the Minimum Sum requirement in their Central Provident Fund (CPF) accounts, which would contribute towards a more adequate income in old age for this vulnerable population in Singapore.

The Build Your Own Nest Matched $avings Programme employs an experimental design to examine the relative effects of the following three independent variables on savings behaviours (the dependent variables):

i. Amount saved (contributed by the participant);
ii. Matching ratio, i.e., the ratio of the amount matched (contributed to the participant) to the amount saved (contributed by the participant); and
iii. Framing of the matching ratio.

The dependent variables (i.e., outcomes of interest) are saving behaviours in terms of the participation rate, the retention rate, the pattern of savings behaviours and the maintenance of savings behaviours after the matching programme has ended. Other variables such as demographics (e.g., age, income, education) and relevant behaviours (e.g., expenditure pattern, private savings) will be collected to examine as correlates.

The experiment is a fully-crossed between-subjects factorial design with two levels of amount saved (monthly amount of $50 vs $100), 4 levels of matching ratio (0.5:1 vs 1:1 vs 1.5:1 vs 2:1) and 2 levels of framing (matching percentage of amount saved vs expansion of amount saved), thereby producing a total of 2 (amount save) X 4 (matching ratio) X 2 (framing) = 16 experimental conditions that involve matching of the savings.

1.2.2 Community for Successful Ageing or ComSA

This is an initiative and a pilot programme of the Tsao Foundation to develop a community based system to support ageing in place. Overall the ComSA aims to use grassroots and volunteer led initiatives to: improve primary care detection for better Care Management, while at the same time building social capital and cohesion through Community Development – toward the better health and Quality of Life (QoL) of older people in Whampoa. The initiative follows the City for All Ages (CFAA) vision by the Ministry of Health of a successful ageing.

This initiative will be evaluated by the research team from the NUS Saw Swee Hock School of Public Health.

1.3 Collaborative Platforms and Capacity Building

For this period, the following are the events we have organised:

1.3.1 Tsao Foundation Experts Series 2014: This year, we have invited two scholars, A/Prof Thomas Kong (NUS Singapore) and A/Prof Siu King Chung (Hong Kong Polytechnic University, Hong Kong) and they shared and discuss their experience and ideas about community museum and how it can contribute towards ageing in place. We organised a two day programme for them culminating in a forum, "Community Museum and Social Art: Forging Communities for All Ages". We are exploring this for potential replication in Whampoa, which is our pilot site for a Community for Successful Ageing (ComSA) project.

1.3.2 Conducted Training of Trainers for UPM (Malaysia) for their financial education programme for women

1.3.3 Conducted training on advocacy for PPSW (Indonesia)

1.3.4 Conducted Tea and Learning Session with women leaders of PA WIN (Singapore)

1.4 Conference Presentations

1.4.1 CSR Asia, Community Investment Forum, held 4-6 June, in Singapore. Susana participated as a speaker on Perspectives in Partnership

HelpAge Regional Meeting, held 1-4 September, in Chiang Mai, Thailand. Susana participated as a speaker on the panel on community care

1.4.2 Wu, Treena et al "Which older adults refuse to or dropout from participation in a trial of integrated care in Singapore and why? Insights from quantitative

and qualitative data" in AIC World Congress in Integrated Care November 2013

1.4.3 Wu, Treena et al "The interRAI-HC Method for Assigning Priority Levels (MAPLe) and Allocating Resources for Home and Community Based Care in Singapore" in AIC World Congress in Integrated Care November 2013

1.4.4 Wu, Treena "The Asian Family, the State and Care for Urban Older Adults: A Comparison of Singapore, China and Indonesia" University of New South Wales Center for Excellence in Population Aging Research (CEPAR) October 2013

1.4.4 Wu, Treena "The Asian Family, the State and Care for Urban Older Adults: A Comparison of Singapore, China and Indonesia" Emerging Economies Workshop, Department of Economics, University of New South Wales October 2013

1.5 Publication

1.5.1 The Future of Ageing, from the papers presented at the ILC GA Symposium 2013. Copies have been distributed to all ILC GA partners and other key stakeholders within Singapore and the ASEAN region

1.5.2 Do KY, Wu, T and Chan, A "Intention to re-enter the labour force among older male Singaporeans: Does health status matter?" *(accepted for publication)*

1.5.3 Ng, WC, Wu, T et al (2014) "Community End-of-Life Care for Older Non-Cancer Patients : A Pilot Study" Annals of Academy Medicine Singapore Volume 43 No. 10 October 2014 *(forthcoming)*

1.5.4 Wu, Treena et al "Which older adults refuse to or dropout from participation in a trial of integrated care in Singapore and why? Insights from quantitative and qualitative data" International Journal of Integrated Care Volume 13, 18 December 2013

1.5.5 Wu, Treena et al "The interRAI-HC Method for Assigning Priority Levels (MAPLe) and Allocating Resources for Home and Community Based Care in Singapore" International Journal of Integrated Care Volume 13, 18 December 2013

1.6 Tsao-NUS Ageing Research Initiative(Research Output/Outcomes)

1.6.1 SCOPE Diabetes Study

As Singapore ages, chronic disease has become a major concern for policy makers. Despite efforts to encourage improved screening and access to care for conditions such as hypertension and diabetes, progress in reducing blood pressure and glucose levels is constrained by lack of knowledge and awareness. The Self-Care for Older People (SCOPE) study in Singapore was designed to evaluate the impact of a self-care program for chronic disease awareness and management on specific health measures and quality of life of older people over eighteen months. This randomized, controlled trial (RCT) provided self-care education over eight months for the intervention group. The results from this study indicate that prevalence of chronic disease in the target population (n=378) is high; for example, 32% had diabetes, and 9.5% were unaware of their condition.

We have been conducting preliminary research for a study that will involve specific interventions for older diabetics. We will be conducting in-depth interviews with SCOPE participants diagnosed with diabetes to understand the needs, concerns, and constraints of diabetics. These interviews will cover quality of life, medication adherence, diet and exercise habits specific to diabetes, health care access, and diabetes knowledge. We are planning to use the quantitative and qualitative data from these interviews to design effective interventions and self-management systems for diabetics in Singapore.

1.6.2 PROGRAMME EVALUATION

Two programmes were evaluated last year.

a) **Singapura Programme for All Inclusive Care of Elders (SingaPACE)** is a 3 year demonstration project co-funded by Tote Board Singapore. Research study co-funding was received from the AIC Integrated Long Term Care fund. The project was launched in August 2011 and the data collection for baseline and three waves were completed by June 2014.

An impact evaluation using a randomized controlled trial (RCT) design was conducted to test the following hypotheses:

- H_{01}: The elderly in SingaPACE will have fewer admissions to accident & emergency (A&E) hospitalization than the elderly who are not in SingaPACE.
- H_{02}: The elderly in SingaPACE will have fewer admissions to acute care hospitalization than the elderly who are not in SingaPACE.
- H_{03}: The elderly in SingaPACE will delay first admission to institutionalized residential care nursing home more than the elderly who are not in SingaPACE.
- H_{04}: The elderly in SingaPACE clients will have an enhanced QOL and satisfaction compared to the elderly who are not in SingaPACE.
- H_{05}: Caregivers of the elderly in SingaPACE will have less care-giving burden compared to caregivers of the elderly who are not in SingaPACE.

98.8% of the target sample size was achieved as result of an extended recruitment period of twelve months. Despite randomizing 114 participants, only 69.3% was finally included in the study. 22.8% of the randomized were retrospectively excluded due to their ineligibility to participate in the study (RAF category 1 and category 4, declined participation in a three year study). 7.9% of them were excluded due to other reasons (nursing home admitted before starting SingaPACE, deceased before starting SingaPACE). Three waves of follow up were conducted since the baseline assessment at 6^{th}, 12^{th} and 18^{th} months. The attrition rate at each follow up was less than 10 percent.

Baseline characteristics revealed that the two groups were mostly comparable. The intervention group participants were found to be mostly married compared to the control group. Also more than 50% of the participants in both the groups lived in a single room HDB flat. Almost 60% of the participants from both groups had three or more ADL limitations. It was also found that the control group participants were more depressed compared to the treatment group. More than

50 % of the participants in both the groups did not have any caregivers. Most of the caregivers were the participant's own children.

At baseline, the treatment group was found to have lesser number of A & E visits, lesser number of acute care hospitalizations and lesser number of days hospitalized compared to the control group. The treatment group also reported a lesser quality of life EQ5D visual analogue scores compared to the control group. The caregivers from the treatment group had reported of higher Zarit caregiver burden scores compared to the control group. These above differences between the two groups were not statistically significant.

b) **Self-Care on Health of Older Persons (SCOPE)** is a community development programme to build the self-care capability of elders as well as their health partners in disease prevention and health promotion. The study adopts the Randomized Control Trial (RCT) design. It is used to test the impact of a state-of-the-art self-care training programme focused on preventive care and care management. This programme was launched in August 2011 and will be implemented for two years. 400 Singaporeans aged 55 and over were recruited for the project, with 200 allocated to the intervention group and 200 allocated to the control group.

The intervention was delivered over 7 months of weekly training and 6 months of fortnightly support group facilitated by community trainers (also called community health workers).

To date, the SCOPE Project team has recruited 382 participants from 12 different senior activity centres around Singapore. Baseline data analysis gathered from questionnaires and health screenings is ready. The self-care training programme has been since completed.

<u>Findings from the SCOPE programme</u>

At baseline, we found that our control and intervention participants shared similar socio-demographic and clinical traits. More than half of our population had no formal education and 70% lived in 1-2 rooms HDB flats. Prevalence of chronic disease was high: 32% had diabetes, 77% had hypertension, and 70% had respiratory obstruction. Many of them were unaware of their chronic conditions until the baseline health screening.

Our eight-month follow-up analysis included both quantitative and qualitative methods. We also conducted focus group discussions with SCOPE trainers and groups of ten participants from each site to better understand the impact of SCOPE at the individual and SAC level.

The results from the eight-month follow-up analyses were mixed. For example, systolic blood pressure increased in the intervention group and decreased in the control group. PEF values increased for both group and HbA1c (glycated hemoglobin) decreased in both groups, suggesting an overall improvement in blood sugar management and expiration. Self-reported health (EQVAS) declined in both groups, along with IADL limitations. The intervention group increased spending on prescription medicine, while the control group paid less. Participants in the intervention group used TCM less while those in the control group increased their TCM expenditure and number of visits to TCM practitioners.

Qualitative findings were overwhelmingly positive, emphasizing the individual-level satisfaction with SCOPE. Their health-related self-efficacy and confidence improved and they detailed more productive and proactive visits with doctors. Besides improved health behavior and everyday habits, participants reported feeling happier and less lonely as a result of the intervention sessions. Friendships within the intervention groups were forged and strengthened as a result of SCOPE and both control and intervention participants felt cared for.

1.6.3 COLLABORATIVE PLATFORMS & CAPACITY BUILDING

1.6.3.1 The Initiative supported three interns from Temasek Polytechnic. The interns conducted interviews, assisted with data entry, and were involved in research meetings.