Jockey Club JoyAge: Holistic Support Project for Elderly Mental Wellness

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BACKGROUND

To develop a viable and sustainable best practice model to promote elderly mental wellness and prevent elderly depression for Hong Kong, the Hong Kong Jockey Club Charities Trust has initiated a pilot holistic support project entitled "JC JoyAge: Holistic Support Project for Elderly Mental Wellness". This project aims to develop and implement a collaborative stepped care and peer support programme for effective outreach, engagement, and prevention of depression among older people in four pilot districts in Hong Kong, namely Kwun Tong, Sham Shui Po, Kwai Chung, and Tseung Kwan O.

Objectives

1. To evaluate the effectiveness of a collaborative stepped care and peer support programme in engaging older people at-risk of or with depression.
2. To evaluate the efficacy of the programme in reducing symptoms/risks and promoting wellbeing in older people at-risk of or with depression.
3. To investigate the impact of the programme on care resources utilization in these older adults.

Methods

Design

This study adopts quasi-experimental design and compares older adults at-risk of or with depression receiving the stepped collaborative care (intervention group) versus those receiving standard care (control group).

Participants

1. Intervention Group: older people at-risk of having depression (n=1,600) and those with clinically significant depressive symptoms (n=400) recruited from NGOs providing the intervention in four pilot districts in Hong Kong
2. Control Group: older people at-risk of having depression (n=400) and those with clinically significant depressive symptoms (n=100) referred by different NGOs in Hong Kong and recruited through open recruitment

The inclusion criteria are:

- age 60 years or above; and
- residing in Kwun Tong, Kwai Chung, Tseung Kwan O, or Sham Shui Po; and
- have one or more known risk factor(s) for developing depression; and/or
- have depressive symptoms of mild level or above; and
- able to give informed consent to participate

The exclusion criteria are:

- known history of autism, intellectual disability, schizophrenia-spectrum disorder,
- bipolar disorder, Parkinson's disease, or dementia
- (temporary exclusion criteria) imminent suicidal risk;
- and difficulty in communication

Assessment Procedures

After basic screening, assessments will be conducted by trained social services staff and peer supporters employed by NGOs for the intervention group, and by trained research assistants employed by the University of Hong Kong for the control group.

For the intervention group, assessments will be conducted at baseline (T0/Intake), completion of intervention (4 weeks to 6 months, depending on individual condition) or drop-out (T1/Exit), and follow-up at 12 months (T2/FU). For control group, assessment would be conducted at T0 and T2.

Assessment for those with clinically significant depressive symptoms will last for about 90 minutes, and assessment for those at-risk of depression will last for around 60 minutes.

Interventions

The intervention group will receive a collaborative stepped care programme provided by registered social workers and trained peer supporters from elderly or mental health service units (NGOs) according to level of risks, symptom severity, and intervention response. Home visits or other format of contact will be delivered by trained peer supporters employed by NGOs to detect and engage hidden cases.

For "at-risk" group, 4 weeks of "selective prevention" group sessions will be provided at the elderly service level by trained peer supporters with registered social worker supervision, on wellness topics tailored to the person's concern as entry point, packaged with mental health information, followed by a review. If the review shows no significant improvement, a further 2-4 weeks of group plus individual casework sessions will be provided.

For people with depressive symptoms, we further divide them to "mild" and "moderate" groups. For mild group, 6-8 weeks of indicated prevention with psychoeducation or low-intensity psychotherapy would be provided. For moderate group, 6-8 weeks high- intensity cognitive behavioral therapy (CBT) would be provided. All intervention for depressed elderly would be conducted by registered social workers who are trained by this project and employed by the NGOs. The trained peer supporters will be matched to individual older adults to walk them through the process.

The control group will receive treatment as usual, which will be determined by the responsible worker from NGO units.

Measurements

1. Basic demographics: age, gender, marital status, education (years and highest attainment), and work experience.
2. Risk flowchart: a customized questionnaire for quick screening of the following known risk factors for late-life depression: recent spousal death; widowed; disability; living alone; pain & sleep complaints.
3. The Patient Health Questionnaire (PHQ-9) (Kroenke, Spitzer, & Williams, 2001): a 9-item instrument that incorporates depression diagnostic criteria with other leading major depressive symptoms, and rates the frequency of the symptoms which factors into the scoring severity index. PHQ-9 scores of 5-9, 10-14, 15-19, 20 and above represent mild, moderate, moderately severe, and severe depression.
4. Self-harm risk assessment: assessment by social service staff on participant's risk of self-harm (yes or no answers to 10 items) and harm to others (yes or no answers to 4 items), and in the end social service staff will give an overall evaluation of suicidal risk score ranging from 0-No to 3-High.

5. Generalized Anxiety Disorder scale (GAD-7; Spitzer, Kroenke, Williams, & Lowe, 2006): a 7-item scale, responses to each item are rated on a 4-point Likert scale and range from 0 to 3. The following guidelines are recommended for the interpretation: 5-9 for mild anxiety, 10-14 for moderate anxiety, and 15-21 for severe anxiety.

6. Hong Kong Montreal Cognitive Assessment 5-Minute Protocol (HK-MoCA 5-Min) (Wong et al., 2015): a validated and reliable cognitive screen for stroke and transient ischemic attack, brief and highly feasible for telephone administration. It includes four items examining attention, verbal learning and memory, executive functions/language, and orientation extracted from the MoCA.

7. Name generator: asking participants to list out names of people who they would turn to when they feel down, and when they need help for trivial things.

8. UCLA loneliness scale (UCLA-3) (Hughes, Waite, Hawkley, & Cacioppo, 2004): a 3-item self-report measuring individual's perceived loneliness. Each item is evaluated with scores ranging from 0 (never) to 3 (often), total score is the sum of all items, and higher score indicates higher level of perceived loneliness.

9. EQ-5D-5L (Herdman et al., 2011): a measure of health-related quality of life at five dimensions (5D), each with five levels (5L) of problems, and the five dimensions are: mobility, self-care, usual activities, pain/discomfort, and anxiety/depression. The traditional Chinese version for Hong Kong developed by EuroQol Group would be used.

10. Life engagement: a semi-structured interview asking clients about their typical day activities in three domains, physical, social, and mental. A combination of being active in at least two domains would be used as one of the exit criteria.

11. Client Service Receipt Inventory (CSRI) (Chisholm et al., 2000): to collect the current types and level of services which comprise the care package of each participant, and a locally adapted short version would be developed for this purpose.

Data Analysis

We will generate descriptive statistics of the demographic and clinical variables at the baseline (T0/Intake) assessment. The independent sample t-test will be used to compare the means of continuous variables in the intervention and control groups; the chi-square test will be used to compare categorical variables; and Fisher exact test will be used for variables with low cell counts (n < 5). For the majority of clinical scales that are ordinal in nature, the independent samples Mann–Whitney U-test will be used to examine whether the same distributions could

be assumed across groups. As observations at two /three time points are nested within individuals and individuals are nested within clusters (centers), changes in outcome measures, including PHQ-9 and GAD-7 scores, will be assessed by a three-level linear mixed model. Because the number of clusters is small, degree-of-freedom correction using the Satterthwaite method will be applied to the mixed models to maintain the desired type I error rate (Leyrat, Morgan, Leurent, & Kahan, 2017). We will use STATA 14.1 (StataCorp, 2015) for data analysis. For all the tests, the statistical significance level was set at .05.

To investigate engagement in the intervention versus control group, the following analyses will be conducted: (1) Cox proportional hazard regression analysis of the time to the primary endpoint of voluntary withdrawal from service; (2) Chi-square test of initial refusal of service by eligible participants after screening.

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