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HONG KONG CHRISTIAN SERVICE

Research Report on
Program Evaluation: Effectiveness of the Holistic Healthcare Program for
Caregivers of Drug Dependent Persons in Hong Kong

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In collaboration with



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Abstract

Background

Drug use disorders have devastating physical, mental, and socio-economic consequences not only for patients but also for their families. Caring for the needs of another can be rewarding, however, there are many downsides to taking on such caregiving tasks. The purpose of this research study is to assess the potential benefits of a professional-led, 6-session holistic healthcare program designed to help family caregivers of drugs dependent persons to cope with the turmoil of caregiving through cultivation of holistic wellness and self-compassion.

Methods

The research team at the Centre on Behavioral Health, The University of Hong Kong adopted a single-group, repeated-measures study design, with both quantitative and qualitative methods of inquiry to assess the effectiveness of the holistic healthcare program to support caregivers of drug dependent persons. All eligible participants were surveyed on a self-administered questionnaire on anxiety symptoms, depressive symptoms, self-compassion, positive and negative affect, holistic wellbeing, as well as capacity to support, across three time-points including: (i) at baseline (T_0), (ii) post-program (T_1) and (iii) 2-month post-program (T_2). Repeated measure ANOVA with Bonferroni post-hoc tests were conducted to explore potential effectiveness of the program. To supplement the quantitative results, a randomly selected sample of participants were invited to participate in focus group interview after completing the program (T_2).

Results

A total of 25 participants (Age: $M = 54.4$ years, $SD = 13.1$ years) participated in the evaluation study. Caregivers were predominantly women (84.0%; $N = 21$). Quantitative results showed statistically significant improvements on non-compassionate attitude from T_0 ($M = 3.18$, $SD = .94$) to T_1 ($M = 2.69$, $SD = .86$) and T_2 ($M = 2.89$, $SD = .86$), fewer negative affect only at T_2 ($M = 22.70$, $SD = 8.19$) in comparison with T_0 ($M = 28.15$, $SD = 9.55$). Caregivers also reported sustained improvements in mental wellbeing. They reported significant reduction in anxiety symptoms between T_0 ($M = 11.20$, $SD = 6.76$) to T_1 ($M = 7.10$, $SD = 5.54$) and T_2 ($M = 8.15$, $SD = 5.98$); and alleviation of depressive symptoms between T_0 ($M = 11.05$, $SD = 6.84$) to T_1 ($M = 7.35$, $SD = 7.46$) and T_2 ($M = 7.60$, $SD = 7.16$). Qualitative data suggested that intervention group was helpful in enhancing participants' awareness of emotions, facilitating their emotional expression, cultivating their sense of connectedness and common humanity.

Implications

The purpose of this study is to explore the potential benefits of a professional-led, holistic healthcare support program for caregivers of families with drug dependence. Despite the unforeseeable challenges of the social unrest and pandemic, as well as methodological issues (such as small sample size and the absence of a control condition), this research study yielded tentative evidence to support the contributions of this time-limited, holistic healthcare program in removing roadblocks to self-compassion, alleviating anxiety and depressive symptoms, as well as in reducing negative affect of family caregivers.

Effectiveness of the Holistic Healthcare Program for Caregivers of Drug Dependent Persons in Hong Kong

1. Background

Caring for the needs of another can be rewarding, however, there are many downsides to taking on such caregiving tasks. Drug use disorders have devastating physical, mental, and socio-economic consequences not only for patients but also for their families. About a quarter of family caregivers of drug dependent persons reported chronic psychosocial impacts, including depressive symptoms, anxiety, compromised emotional well-being, fatigue, muscle pain, impaired quality of life, and social isolation (Marcon, Rubira, Espinosa, Belasco and Barbosa, 2012). This finding highlights the need for support program, which is integrative and multi-dimensional for caregivers of drug dependent persons. There is an imminent need to foster well-being of family members of drug dependent persons. On the one hand, it is because the progress of rehabilitation is dependent on the quality of caregiving, which is in turn dependent on the well-being of the caregivers. When the caregiver fails, the care recipients would suffer, and impose additional risk in substance dependency and additional caregiving burden on the caregivers, resulting in a reciprocal pattern of suffering (Brodaty & Donkin, 2009). And on the other hand, the burden of caregiving does not necessarily end when professional care is rendered to family members with drug dependence. The caregiving duty may have ended, but the emotional impact still lingers. In view of the pressing demands of family support service for drug dependent persons, the Hong Kong Christian Service has launched the CATCH II - Family Support Scheme as an adjuvant intervention alternative to offer support to family caregivers in June 2016 aiming to improve the holistic well-being of caregivers.

To contribute to the existing service gap in the field, and to promote holistic healthcare in drug rehabilitation, the organization launched an integrative family support program to address the multi-dimensional needs of family caregivers of drug dependent persons. To build on its experience in offering family-based support programs for drug dependent persons, and as an effort to the furtherance of holistic health practice in the field, the organization will collaborate with Centre on Behavioral Health, The University of Hong Kong. Such multidisciplinary collaboration will allow the integration of the practical in-field experience with evidence-based practice and scientific research in holistic health practices. We genuinely believe that the collaboration will contribute to the development of an innovative, person-centered, and evidence-based practice model to support family members of drug dependent persons in Hong Kong, making positive impacts on the lives of drug dependent persons, and their family members.

2. An Integrative, Holistic Healthcare Program for Caregivers

To address the multi-facet needs of caregivers of drug dependent persons, an ideal family support program blends traditional modalities of psychoeducation and social support group with time-limited, experiential work on the enhancement of well-being through acquisition of self-care practices. Build upon in-field practice wisdom and proliferating research evidence in holistic healthcare over the past decades, the integrative caregiver support program composes of three core components: (1) educational sessions, (2) social support group, (3) a 6-session holistic healthcare program, (4) individual case follow-up, and (5) multidisciplinary medical support service.

This study will focus on the evaluation of the 6-session, holistic healthcare program. To gather empirical evidence to support the development and implementation of the integrative, holistic wellness-inspired caregiver support program, the Centre on Behavioral Health, The University of

Hong Kong was invited as a collaborator to offer staff training, clinical supervision support, and to conduct a program evaluation study with scientific rigor. The collaboration will allow the synergy of knowledge and practice wisdom between the frontline and the academic sector. The practice experience of the frontline workers will shed lights on how to integrate holistic practices into the everyday life of the end users. On the other hand, the input from the multidisciplinary team at the Centre on Behavioral Health will provide insights on an effective program delivery and professional evaluation services to the intervention programs for caregivers of drug dependent persons, as well as to ensure treatment fidelity.

2.1. The Holistic Healthcare Program

The holistic healthcare program co-developed by the team at the Centre on Behavioral Health and PS33 composes of 6 professional-led sessions in small group format. The program and the sessions are designed with the major goals to enhance wellness, cultivate self-compassion, and improve anxiety and depressive symptoms of caregivers, as well as their efficacy in caregiving. The caregiver program and the Train-the-Trainer program were curated based on the Body-Mind-Spirit Healthcare Model as developed by the team at Centre on Behavioral Health. The holistic health approach has its roots in traditional Eastern models of health emphasizing on nurturing life, attaining balance, and an integrated view of being. It is a strength-based approach, emphasizing on self-determination, patient empowerment; the approach integrates the Western psychological model and Eastern wisdom adopted from the teachings of Confucianism, Daoism, and Buddhism, as well as Traditional Chinese Medicine (Lee, Ng, Leung, & Chan, 2009). In view that Chinese has strong preference to practical and immediate solutions to problems (Ho, 2005; Sue & Sue, 1990), the approach is characterized by easy-to-learn body exercises, including simplified qigong practices, massage and acupressure techniques, as well as breathing exercises and brief meditation practices (Lee, Ng, Leung, & Chan, 2009). Adhere to the philosophies of evidence-based practice, in recent years, the program also incorporates components of Mindful Self-Compassion (MSC), which is an empirically supported mindfulness-based strategy to enhance well-being (Germer & Neff, 2011). Since its development, the approach has been applied as a group intervention model to empower medical professionals, social workers, and volunteers of local non-governmental organizations, and to equip them with the necessary conceptual and practical knowledge to bring about changes in service users. In addition, the model has also been applied to a broad array of population coping with different clinical conditions, including cancer, depression and insomnia, as well as divorced women, especially with positive results on sleep quality, mood improvements, and subjective well-beings (Chan, 2001; Lee, Ng, Leung, & Chan, 2009).

2.2. Treatment fidelity

Measures were taken by the team at Centre on Behavioral Health to enhance treatment fidelity. First, prior to the commencement of the caregiver support program, the Centre on Behavioral Health provided an experiential, integrative Train-the-Trainer Program for frontline staff. The training program provides the foundational knowledge in the practice and science of the holistic healthcare model and allows experiential learning opportunities for the frontline staff. Secondly, a Train-the-Trainer Manual was produced for frontline staff participating in the training program. The Manual summarizes and consolidates the theoretical framework of the holistic health model, the proposed themes, active components and the session plan for the 6-week program, including practical knowledge of each of the practices and exercises included in the holistic healthcare program. Thirdly, 16 supervision sessions (i.e. a total of 69.5 hours) conducted by qualified practitioner(s) in holistic health practices were offered to assist in the transfer of knowledge into practice, to ensure protocol adherence, and to support continuous staff development so as to

enhance staff competencies in the design, delivery, and evaluation of the caregiver support program.

3. The Training & Research Team at the Centre on Behavioral Health, HKU

The Centre on Behavioral Health (CBH) was founded by Prof. Cecilia L.W. Chan in 2002, under the Department of Social Work and Social Administration (under the Faculty of Social Science, The University of Hong Kong). The vision of the Centre is to provide a holistic approach for the promotion and betterment of mental, emotional, and behavioral welfare of the community by means of professional training, postgraduate education, holistic health service delivery, and rigorous scientific research. The Centre has built a multidisciplinary team with different professional backgrounds, including social workers, clinical psychologists, creative and expressive arts therapists, nurses, and full-time researchers. Since its establishment in 2002, the Centre has actively cooperated with different organizations, both governmental and non-governmental, to facilitate knowledge exchange and service development by means of scientific research. Over the years, the Centre has established a solid track record in clinical social work research, research on service delivery models, and program evaluation. Research work by the Centre has been presented in local and overseas conferences and published in textbooks and peer reviewed journals.

The training and research team at the Centre of Behavioral Health composes of a team of holistic health practitioners, social workers, and researchers who are experienced in conducting program evaluation research utilizing both quantitative and qualitative research methods. The multidisciplinary, professional team at the Centre on Behavioral Health includes scientist-practitioners in research and practices of holistic healthcare. Over the past decade, the team at Centre on Behavioral Health has designed, delivered, and evaluated for various organizations, both from the government sectors and the public sectors, serving people from different walks of life, including frontline professionals, people suffering from trauma, mood problems, and chronic illnesses. With the team's experience in scientific research as well as in designing and offering holistic health programs, professional training workshops, and community-based education, the team members worked collaboratively with the frontline staff of PS33 to orchestrate a state-of-the-art person-centered, culturally sensitive program for its service users. We believe that the collaboration will help furtherance of the application of holistic healthcare model in caregiver support, and encourage evidence-based practice in the field.

4. Research Methodology

4.1. Study Design

The evaluation study adopted a single-group, repeated-measures study design, with both quantitative and qualitative methods of inquiry to assess the effectiveness of the holistic healthcare program to support caregivers of drug dependent persons. Quantitative data allows for descriptive data on effectiveness and users' experiences towards the group, whereas qualitative data allows for fine-grained information on the underlying change processes and other personal responses to the support program.

4.2. Data Collection

Ethical approval was obtained from the respective Human Research Ethics Committee at the University of Hong Kong prior to the commencement of the study. All participants were invited to participate in the study on a voluntary basis, and written consents were obtained prior to all data

collection.

Quantitative data were obtained from a paper-and-pencil questionnaire packet. All eligible participants were invited to complete the self-administered questionnaires on three time-points including: (i) at baseline (T_0), (ii) post-program (T_1) and (iii) 2-month post-program (T_1). Staff at PS33 was responsible for distribution, collection, and data entry of the self-administered questionnaires at all time points.

Qualitative data were obtained from a randomly selected sample of participants using a semi-structured, focus group interview after completing the program (T_1). The focus group interviews were conducted by the research team members at CBH. A semi-structured focus group interview protocol was compiled for the qualitative data collection. All focus group interviews were audio-recorded for data transcription and analysis. Data was extracted from the recordings, and themes were identified and triangulated by the research team members.

4.3. Recruitment

Staff at PS33 recruited the participants from the community and performed eligibility screening on the inclusion and exclusion criteria of the participants. Eligible participants of this evaluation program are adult family caregivers participating the holistic healthcare program, who are: (1) aged 18 or above, (2) willing and able to give informed consent for participation, and (3) able to attend 80% of the program components within an 8 to 10 weeks' period at enrolment. Participants are excluded if they are unable, or unwilling, to provide written consent prior to data collection at baseline. Clinical diagnosis of any medical conditions that impair participation in the group was also regarded as exclusion criteria.

4.4. Measurements

For evaluating the effectiveness of the holistic healthcare program, locally validated instruments with good psychometric properties and self-constructed survey were adopted as outcome measures.

- (a) *Anxiety symptoms.* Anxiety was assessed by the 7-item anxiety scale (GAD-7), which was developed as a screening instrument for generalized anxiety disorder (GAD) in primary care settings (Spitzer et al., 2006). Participants were surveyed on a 4-point Likert scale, ranging from 0 ('Not at all') to 3 ('Nearly every day'), on how often they have been bothered by each of the anxiety symptoms during the last 2 weeks. The GAD-7 total score ranges from 0 to 21 and cut-points of 5, 10, 15 can be interpreted as representing mild, moderate, and severe levels of anxiety. Higher scores reflect higher anxiety severity.
- (b) *Depressive symptoms.* Depression was assessed by the 9-item Patient Health Questionnaire (PHQ-9) (Kroenke et al., 2001). The PHQ-9 is the depression module, which scores each of the 9 depression symptoms as 0 ('Not at all') to 3 ('Nearly every day') over a 2-week period. The scale has been validated for use in primary care settings. As a severity measure, the PHQ-9 total score ranges from 0 to 17. Scores of 5, 10, 15, and 20 represent cut-points for mild, moderate, moderately severe, and severe depression, respectively. Higher scores reflect higher depression severity.
- (c) *Self-compassion.* Self-compassion refers to the ability to treat oneself with kindness in times

of difficulty, and was indexed by the locally validated 12-item Chinese version of the Self-Compassion Scale - Short-Form (SCS – SF) (Raes et al., 2011; Wan, 2018). The item scales measure how an individual responds to adversity on a 5-point Likert scale ranging from 1 ('Almost never') to 5 ('Almost always'). The scale yields a Self-Compassionate subscale and a Non-Self Compassionate Subscales. Higher scores in the Self-Compassionate subscale is indicative of more self-compassion, while higher scores in the Non-Compassionate Subscales reflect having harsher self-responding mindset.

- (d) *Positive and negative affect.* Positive and negative affect are measured by the Positive and Negative Affectivity Schedule (PANAS; Waston, Clark & Tellegan, 1988), which measures both the positive and negative ambient moods. The scale consists of 10 items in Positive Activation subscale (PA) (active, alert, attentive, determined, enthusiastic, excited, inspired, interested, proud, strong) and 10 in Negative Activation subscale (NA) (afraid, ashamed, distressed, guilty, hostile, irritable, jittery, nervous, scared, upset). The scale is rated on a 5-point Likert Scale, ranging from Very Slightly or Not at all (1) to Extremely (5). A higher score in each of the subscales indicates more of that affective state one subjectively experienced.
- (e) *Holistic well-being.* Caregiver's holistic well-being was indexed by 7 selected items from the locally constructed and validated Holistic Well-being Scale (HWS) (Chan et al., 2014). The scale conceived holistic well-being as the absence of affliction (maladaptive attachment) and presence of equanimity (sense of resilience). The general vitality subscale (measured by 4 items) and the spiritual self-care (measured by 3 items) were employed in this study. The instrument was administered on a 10-point Likert scale, ranging from 1 ('Totally disagree') to 10 ('Totally agree'). Scores for each subscale were calculated by the mean of subscale item responses. Higher scores indicate better well-being in the corresponding domain.
- (f) *Caregiver capacity to support.* In view of an absence of locally validated drug addict-specific measurement on caregiving efficacy, the concept was measured by the 9-item self-constructed evaluation set No. 20 developed by the Beat Drugs Fund (Security Bureau, 2020). The measurement was administered on a 5-point Likert Scale (ranging from 1 to 5). The item scores are summed to produce a total score. A higher total score reflects improvement in caregiver's capacity to support drug dependent persons.
- (g) *Satisfaction towards the program.* A self-constructed poll survey was used to measure the general satisfaction towards the program component at the completion of program. Satisfaction level was measured on a 5-point Likert scale, from 1 ('Strongly disagree') to 5 ('Strongly agree'). Higher scores represent a higher satisfaction level.
- (h) *Demographics.* Participants' socioeconomic background, including age, gender, religion, education level, employment and marital status, current living conditions, relationship with the drug abusers, and prior exposure to relevant program, was surveyed.

4.5. Data Preparation (Quantitative Data)

Data processing. All data input was entered on an Excel spreadsheet (provided by the research team at CBH) by staff at PS33. All participants were assigned participant codes in the dataset. The research team at CBH was responsible for data management (including data and analysis) using

IBM® SPSS® Statistics (Version 26).

Missing data. Before data analysis, missing data were identified by the research team at CBH. The response rate was 100% (N = 25) at T₀, 88% (N = 22) at T₁, 80% (N = 20) at T₂ respectively. The proportion of dropouts reported in this study is comparable to other studies with similar study design.

Assumptions of normal distribution. The Shapiro-Wilk test revealed that 11% of the outcome variables deviated significantly from the normal distribution. Despite the departure from normality, the one-way repeated measures ANOVA was used, as it is an appropriate, robust procedure with respect to the violation of normality assumption when using a single group, repeated-measure study design in assessing intervention effectiveness (Blanca et al., 2017).

Reliability of outcome measures. Internal consistency of the outcome measures was indexed by Cronbach's alpha (α) (Table 1). A Cronbach's alpha of 0.7 or higher is considered good reliability in social science research. The scales adopted in this study yielded good to excellent internal reliability (as indexed by the Cronbach's alphas ranging from .80 to .95), with the exception of the spiritual self-care subscale ($\alpha = .71$).

Data analysis. For evaluation of the effectiveness of the holistic healthcare program, a one-way repeated measures ANOVA and Bonferroni-adjusted post-hoc tests were conducted to determine whether there were within-group changes of outcomes over time. For outcomes that violate the assumption of the sphericity assumption, as assessed by Mauchly's test, the Greenhouse-Geisser estimate was used to calculate the result. Effect size was represented by partial-eta squares (η_p^2), where η_p^2 of .01, .06 and .14 and above indicate small, moderate, and large effect sizes respectively. For all findings, the convention cut-off for statistical significance of p -value smaller than or equal to .05 was adopted.

4.6. Data Preparation (Qualitative Data)

Data processing. Focus group interviews were recorded and were transcribed by a bilingual (English and Cantonese) research team member at the Centre on Behavioral Health for data analysis.

Data analysis. The audio recordings of the in-depth interview were reviewed, and transcriptions were produced for each of the participants by a bilingual research team member (English and Cantonese). Thematic analysis was performed by the same research team member to identify recurrent themes that emerged from the interview data. The contents of the interview were coded line-by-line by the author. Similar and related ideas were grouped together to form a unit of idea, and a code was assigned to each unit, whereas related codes were grouped into a theme. To counter-check for research bias, and ensure reliability of the codes, the analysis of transcriptions involved two coders (i.e. a research team member, and another non-research team member) who worked independently of each other. A coding scheme was then created summarizing all codes and themes. In case of discrepancies in coding, they were resolved between the primary and second coder to create the finalized themes reported in this report.

5. Results of Quantitative Study

5.1. Participants Profile

A total of 25 participants (Age: $M = 54.4$ years, $SD = 13.1$ years) participated in the evaluation study. Caregivers were predominantly women (84.0%; $N = 21$). Over half of them, 64.0% ($N = 16$), have attended secondary school. Amongst them, 76.0% ($N = 19$) are parents, 12.0% ($N = 19$) are spouse, 4.0% ($N = 1$) is a grandparent and 8% ($N = 2$) are children of the drug dependent persons. 36.0% ($N = 9$) of the caregivers currently reside in public rental housing. 44.0% ($N = 11$) of the participants are currently full-time employed, and 40.0% ($N = 10$) of the participants have an average monthly family income of less than HK\$15,000. The majority of them (80%; $N = 16$) do not receive social security assistance. In the past year, the majority of the caregivers ($N = 24$) have participated in at least one program at the service agency. Table 2 shows the demographic characteristics of the caregivers.

5.2. Attendance and Mode of Program Delivery

Participant adherence to the intervention is recognized as one of the key confounding variables for intervention effectiveness. The average attendance rate was 85.2%, which suggested that the program was deemed feasible and acceptable to caregivers. Due to the COVID-19 pandemic situation, participants received either the face-to-face (28.0%), online (12.0%), or the hybrid (60.0%) mode of delivery for the intervention.

5.3. Quantitative Results

5.3.1. Result of the Holistic Healthcare Program

Table 3 shows the pre-, post- and 2-month post-program differences in outcome measures. Findings of the present study showed statistically significant results for *negative affect*, $F(2,38) = 7.35, p = .002, \eta_p^2 = .28$, and *non-compassionate tendency*, $F(2,38) = 6.20, p = .005, \eta_p^2 = .25$, as well as mental health as measured by *anxiety*, $F(1.39,26.44) = 9.39, p = .002, \eta_p^2 = .33$, and *depression*, $F(1.36,25.83) = 9.55, p = .002, \eta_p^2 = .33$, respectively; and these findings were reported with large effect size. Post-hoc analysis with Bonferroni adjustment further revealed that caregivers reported statistically significant less non-compassionate attitude from T_0 ($M = 3.18, SD = .94$) to T_1 ($M = 2.69, SD = .86$) and T_2 ($M = 2.89, SD = .86$). In addition, post-hoc test also showed that caregivers reported statistically significant decrease in negative affect only at T_2 ($M = 22.70, SD = 8.19$), but not at T_1 ($M = 24.35, SD = 9.42$) in comparison with T_0 ($M = 28.15, SD = 9.55$). As for mental wellness, caregivers reported sustained improvements from T_0 to T_2 . Specifically anxiety symptoms were significant reduced from T_0 ($M = 11.20, SD = 6.76$) to T_1 ($M = 7.10, SD = 5.54$) and T_2 ($M = 8.15, SD = 5.98$). Similarly caregivers reported significant alleviation of depressive symptoms from T_0 ($M = 11.05, SD = 6.84$) to T_1 ($M = 7.35, SD = 7.46$) and T_2 ($M = 7.60, SD = 7.16$).

The results suggested that participants changed over time in terms of the level of non-compassionate mindset, negative affect, and psychological health. Post-hoc tests suggested that participants reported sustainable improvements in mental well-being (i.e. across T_0 to T_2), continually benefited from being less self-judging and critical towards themselves after program completion (i.e. at 2-month, post-group follow-up); whereas the benefits of improving everyday affective state took time to unfold.

Although ANOVA showed statistically significant changes over time in *general vitality*, $F(2,38) = 4.22, p = .02, \eta_p^2 = .18$, and *capacity to support family members with drug dependence*, $F(1.31,24.95) = 5.20, p = .02, \eta_p^2 = .22$, post-hoc tests showed statistically non-significant results. Despite the main effect of time was significant, the overall results remained inconclusive, given

non-significant post-hoc test results. Nonetheless caregivers showed trends of improvements in vitality for T₁ ($M = 6.03, SD = 2.36$) and T₂ ($M = 6.01, SD = 1.99$), in comparison to T₀ ($M = 5.38, SD = 2.18$). In addition, caregivers reported enhanced capacity (T₀: $M = 29.50, SD = 6.02$; T₁: $M = 31.90, SD = 4.73$; T₂: $M = 32.10, SD = 4.41$) to support their family members with drug dependence.

Nevertheless, the present findings showed no statistical significant results in terms of *compassionate self-responding*, $F(2,38) = 1.64, p = .21, \eta_p^2 = .08$, *positive affect*, $F(2,38) = .21, p = .81, \eta_p^2 = .01$ and *spiritual self-care*, $F(1.40,26.60) = .88, p = .39, \eta_p^2 = .05$. Nevertheless, trends of improvement were reported in self-compassionate attitude from T₀ ($M = 2.95, SD = .69$) to T₂ ($M = 3.27, SD = .58$), in positive affect from T₀ ($M = 27.50, SD = 7.89$) to T₁ ($M = 28.05, SD = 8.06$) and in spiritual self-care from T₀ ($M = 6.55, SD = 2.11$) to T₂ ($M = 6.88, SD = 1.93$).

Overall, quantitative findings suggested that the professional-led, holistic healthcare program helped caregivers to alleviate anxiety and depressive symptoms, reduce their non-compassionate attitude towards themselves, reduce negative affect, and enhance vitality and capacity to support family members. Findings of the present study also seemed to suggest the potential benefits of promoting positive affect at post-program and improving self-compassionate attitude and enhancing spiritual self-care in the relative long-run (i.e. 2-month follow-up).

5.3.2. Satisfaction towards the program

Overall, caregivers reported an above optimal satisfaction towards the program (4.36 out of 5). They regarded that the program content as very practical (4.36 out of 5). They also were likely to recommend the program to caregivers of drug users (4.23 out of 5). Table 4 summarizes the satisfaction level of caregivers towards the program.

5.4. Qualitative Results

A random subset of participants was invited by the research team members to attend two sessions of focus group interviews. A total of 7 participants from various cohorts attended the focus group interviews via ZOOM software online in December 2020. The interviews were conducted by a research team member who is familiar with the program content, evaluation study design, and in conducting focus group interviews.

Participants shared that the practice of holistic health exercises, such as mindful breathing and mindful walking, has helped to enhance their *awareness of emotions*. While engaging in experiential, contemplative activities, the caregivers were given the opportunities to reorient their attention towards their inner experiences. A participant explicitly shared that awareness of his own emotions allowed him to acquire a better self-understanding. Two participants shared that:

“During the contemplative practices, I have the chance to get in touch with my emotions... and from there I better understand how I feel so that I could do something to it before they (my emotions) get the better of me” (Participant A01).

“In the past I was not very aware of my own feelings or emotions... and now I could better feel them in my body... my racing heartbeats, the

tightness in my chest...” (Participant B02).

Participants also shared that they found awareness of emotions helpful as such awareness served as cue for them to stop-and-think, and to allow them the chance to “respond to” the situation rather than impulsively “reacting to it”.

“I used to be very reactive to my family members’ behaviors, or his emotions... and now I realize I could do it differently.... (recalling the practices in the session, and the reminder given by the social workers) I can allow myself to pause, before I talk back to my family, and our relationships began to change” (Participant A01).

The group setting was found to be instrumental in facilitating participants’ *emotional expression*. The participants shared that the safe and supportive group setting allowed them to express their negative emotions (e.g. anxiety frustration, sadness, guilt, and shame), and to share their stories. The expression of emotions in an open, non-judgmental, and supportive environment allowed the participants to acquire alternative ways to meet with difficult emotions they encountered in daily life. The group setting has provided them a platform so that corrective experience could be possible:

“In the past, when I wanted to talk about my feelings, everyone (my family members and friends) turned away. So I learned to bottle up my feelings; not because I don’t want to share with others, but it hurts so much when others turn deaf-ear to your sharing... But I know it is okay to talk about these negative emotions... and that someone will listen.” (Participant B01).

The group also provided the participants’ *sense of belonging* and connection with other people facing similar issues, which serve as an antidote to the shame that is related to their family issues:

“In the past, I did not feel good to talk about this [having a family member who has drug dependence] because I felt very shameful about that, and just the thought of that made me feel sick. But now I am more willing to speak up and express my own feelings more often, because I know there are people like me, and I am not alone...” (Participant B03).

“I feel I am being accepted, being taken care of in this group... someone will be there for me – maybe the social workers, or maybe the other group mates. Nothing has changed since I joined the group [the problem of my family member has not changed or maybe is getting worse], but I have changed in a way I feel I am more capable in managing this... at least, I can better cope with my anger, my sadness, and my guilt” (Participant A03).

Shame is a subjective, strong-held, self-conscious belief that people are evaluating us in a negative way constantly. Recent research indicated that shame is one of the salient, psychological vulnerabilities to a broad range of psychological difficulties, such as adjustment issues, anxiety, depression, post-traumatic stress; as well as a spectrum of maladaptive coping styles, including

avoidance, self-criticism, and ruminations (Gilbert & Andrews, 1998; Gilbert & Chode, 2014).

The group setting was also instrumental in cultivating a sense of *common humanity* among the group participants. Common humanity referred to the awareness that we were not alone in failures, setbacks, or mishaps in life. Common humanity acknowledged human vulnerabilities and instilled in us a sense of connectedness with each other through the common experience of these vulnerabilities. Neff (2009) hypothesized that common humanity was one of the core building blocks of emotional resilience.

During the focus group interview, the participants identified three major components of the group that might be helpful in helping them to connect with each other during the group process: (1) non-judgmental attitude of the group facilitator, (2) common experience among the group members, and (3) the authentic presence of each other during the group process.

“They would listen to my [repetitive and] long-winding story... I felt like I am part of a big family who share a common problem... I thought I was at my worst... but their stories inspired me.” (Participant A04)

“During the discussions, I found that I resonate with the sharing of the others. And I realized that my experience might be of help to them. I’ve gone through all these before, and I managed to survive. I feel like I could be of help to them. I am no longer a lonely caregiver.” (Participant A02).

The sense of common humanity allows us to focus on the commonalities, rather than the differences between the individuals in the group; and thus reinforcing the sense of connectedness within the group. All participants shared that the group learning experience has *broadened their perspective in managing difficult emotions* in daily life, especially as the sole caregiver in the family.

“The massage and the exercises have helped me a lot. I can touch myself, or give myself a massage, I feel more relieved; and I felt I have more control in my own emotions.” (Participant A02)

“I have learned of some of these practices before, but I have never realized they can help me with my stress. I enjoy practicing these exercises more than ever.” (Participant B01).

Participants also learnt the skills that they could adopt for self-soothing in their daily lives; the group taught them alternative skills that enhanced their resilience in face of the challenges in caregiving.

“Now I know I can offer myself a little massage when I feel sad. It looks strange in the very beginning; but it helps to calm my mind, offering me comfort, and then I realized, it is [the situation] not that bad at all.” (Participant A03)

Interestingly, the participants did not report any single practice or exercise that was the most useful to them to cope with the turmoil of caregiving; they opined that the ability to offer

themselves kindness, self-care, and being understanding to themselves were the key catalyst for the positive changes they experienced throughout the intervention group.

Overall, the participants regarded that the program as insightful and practical. They found the group helpful in enhancing their awareness of emotions, and in facilitating their emotional expression. The group activities, such as group practices and sharing, were also instrumental in cultivating their sense of connectedness and the awareness their common vulnerabilities – the awareness of which made them more empathetic and human as a caregiver. The easy-to-learn practices, such as mindful breathing, Chinese Medicine-inspired exercise were also helpful in broadening their perspective in managing difficult emotions (such as anger, shame, worries, etc.) and in encouraging self-care – a quality which is much needed for informal caregivers taking care of their family members in need.

6. Discussions

The professional-led holistic healthcare program was found acceptable, feasible, and efficacious to help caregivers of individuals with drug dependence cope. The program helped in the alleviation of anxiety and depressive symptoms, reducing non-caring mindsets towards the self and negative affect for the caregivers, enhancing vitality and improving caregiving efficacy. While the intervention program also showed potential contributions to bio-psychosocial care of caregivers, such as cultivating compassion towards the self, enhancing positive affect and spiritual self-care.

First and foremost, findings of the research suggested that self-compassion is a psychological strength one can learn and apply in his or her emotion regulation (Baker, 2018). The findings also showed a significant reduction in self-critical mindset among caregivers, while caregivers showed trends of improving the sense of self-compassion after completing the program – a finding that was supported by the results of the qualitative interview. The time-limited, professional-led program was found to be helpful in reducing harsh self-criticism, sense of isolation, and over-identifying with the caregiving among caregivers; notably, such improvements were sustainable up to a 2-month follow-up time point, suggesting an upward spiral of positive emotionality (Frederickson, 2004). The psychosocial support program appeared to have an impact in breaking the downward spiral patterns of being self-critical and succumbed to the vicious cycle of a negative affective state. The finding is also consistent with the notion that self-compassion is a resilient factor for those who are facing adversities, especially informal caregivers to individuals with various psychiatric issues (Alizadeh, 2018; Llyod, Muers, & Patterson, 2018; Neff et al., 2020). It is also reasonable to believe that when caregivers became less critical towards themselves, there is the potential for them to learn to be more compassionate, caring, and understanding towards themselves – and thus embracing their humanness and accepting their limitations as caregivers.

The compassion-inspired, holistic healthcare program was also found helpful in alleviating the negative affect of caregivers. The improvements were the most prominent when comparing the scores at 2-month follow-up and baseline. The finding echoed the work of Robertson and colleagues (2007) on the patterns of positive and negative affect of family caregivers; as well as on Schulz and Sherwood's (2008) work on physical and mental health effects of family caregiving. Although it is not the objective of this study to explore the relationships between the outcome variables, it is tempting to postulate that it is the cultivation of self-compassion that precedes the

alleviation of negative affect (i.e. suffering) (Gerber & Anaki, 2020; Willits, 2015). Further research studies would help to dismantle and inform us of the underlying mechanism of how reduction in self-defeating mindset translates into positive coping outcomes. It is plausible to suggest that when caregivers become less judgmental and harsh towards themselves (and begin to embrace their own limitations), they feel less distressed in the process of caregiving (i.e. less negative affect). Further service development could go further in this direction, and to explore ways to integrate compassion into caregiver support service. Substantial amount of evidence has begun to emerge to suggest that compassion is a *transdiagnostic* and *transtheoretical* process that underlines effective psychotherapy and mental health intervention (Asano, 2019; Zvelc & Zvelc, 2021).

The study also suggested the *potential* positive impacts of the psychosocial support program on improving self-compassion and enhancing spiritual self-care of family caregivers between baseline and post-intervention. Although statistically non-significant, these findings were reported to have a large effect size. Furthermore, continual support may also help maintaining these observed positive changes among the participants as many of these positive changes showed a subsiding trend at 2-month follow-up. Continuous self-initiated practice and extended program duration might be able to help caregivers to establish a habit of self-care, and to offer a continual support network. Future studies with larger sample size might yield additional support to these observations. In addition, the results of the present study also highlighted the possibility of nurturing psychological strengths and resilience, despite the inevitable suffering, leaning support to the value of strength-based approach to psychosocial care, in addition to the traditional skills-training and symptom-focused modalities.

Results of the qualitative study shed further light on the potential of integrating self-compassion into caregiver support programs. Participants regarded that the sense of connectedness, and non-judgemental acceptance were the most helpful; the group setting allowed them a platform to acknowledge and validate their negative feelings, to learn alternative ways to cope with their emotions, and a safe and open platform where their efforts as a caregiver were being acknowledged and appreciated. More important, through small group sharing, participants gained the insight that *suffering* is part of their humanness – suffering makes them feel vulnerable and inadequate, yet at the same time makes them human (Neff, 2009). While it is not always possible to avoid suffering, we, like anyone else, deserve love and kindness – the central tenant of being self-compassionate. Being one of the very first studies in Hong Kong exploring the potential contributions of a compassion-focused, holistic healthcare intervention for caregivers, this study broadens our perspective towards the value of cultivating self-compassion for family caregivers. To serve this purpose, we recommend training programs for frontline staff on self-compassion, and its applications in clinical work might be beneficial to the development and furtherance of compassion-inspired psychosocial support services for caregivers to help them cope.

Qualitative study elicited fine-grained information regarding the underlying process of change for the holistic healthcare support group. All participants reported improvements in general mood and in their awareness of self-care, echoing the results in the quantitative findings. Participants also shared the sense of belonging, common humanity, and the mutual support of the group have provided them a safe place to gain awareness of their emotions, and their constructive expression. The acquisition of self-care techniques, through experiential learning, has also broadened their coping repertoire to buffer against the turmoil of caregiving burden and associated distress. The

reported findings may shed light on the future development of psychosocial support programs by identifying potential active components that are instrumental in yielding adaptive changes among the participants. Both the participants and the facilitators found that the inquiry process was helpful in establishing an empathetic presence in the group program, and in cultivating positive changes. Professional training on advanced facilitation skills in delivering holistic healthcare support services will allow the frontline workers to further extend their knowledge, deepen their practice, and transform their practice wisdom to help caregivers cope with the turmoil of caregiving.

The findings of this study are based upon a relatively small sample size ($N = 25$) using a single group, quasi-experimental study design with pre-test and post-test comparisons. Additional studies with larger sample size and a comparison group (either an active control, wait-list control, or a naturalistic control) may help solicit additional evidence to support, address, and discuss the effectiveness of the holistic healthcare psychosocial support program caregivers. Despite the encouraging results on the improvement of self-compassion and negative affect, a larger sample size might help to improve the generalizability of the findings. The findings might also be confounded by the year-long social unrest, and the COVID-19 pandemic; without a control condition, it is difficult for us to take into consideration the potential influences of these unexpected events that possible have negative impacts on the individuals (both the family members and the caregivers), as well as the sentiment of the society. As a result of these unexpected disruptions to the program, some of the program components were delivered via an internet-assisted platform, while some are delivered face-to-face. Variations in the mode of program delivery may be a threat to the validity of the findings.

Going beyond the traditional form of psychosocial support service, which are usually solution-focused and skills training-oriented, the holistic healthcare program presented in this project is one that focuses on the cultivating of wellness and self-compassion for caregivers. The findings of this research highlight the potential of integrating compassion (and self-compassion) into clinical practices to support family caregivers tackling the challenges of caregiver burden. In particular, research findings indicated the potential changes in self-compassion is sustainable for at least 2 months' time and may indirectly link to the reduction of negative affect for the caregivers. Further professional training, and ongoing supervision sessions, maybe helpful for case workers, and mental health professionals to enhance their skills, knowledge, and practice wisdom in this direction.

7. **Conclusions**

The purpose of this study is to explore the potential benefits of a professional-led, holistic healthcare support program for caregivers of families with drug dependence. The role of caregiving is both rewarding and demoralizing. A substantial amount of research pointed towards the importance of the maintenance of caregiver well-being in the caregiving dyads; this innovative, integrative psychosocial program and the research study yielded preliminary support to the value of a compassion-based, holistic healthcare program in improving psychosocial well-being of caregivers in need of support. Despite the unforeseeable challenges of the social unrest and pandemic, this research study yielded tentative evidence to support the contributions of this time-limited, holistic healthcare program in cultivating self-compassion, enhancing vitality and the efficacy in caregiving of those facing the turmoil of caregiving burden, alleviating anxiety and depressive symptoms, as well as negative affect of caregivers. While empirical data also suggested

the potential of the program in enhancing positive affect in the short term and spiritual self-care across time. Further research, and ongoing professional support to frontline professionals will contribute to the development and furtherance of compassion-oriented approach to caregiver support in Hong Kong; a movement that would help families and individuals to cope with the psychosocial-spiritual challenges that they face as family caregivers of those who are struggling with drug dependency.

Table 1. Internal consistency (Reliability) of outcome measurements (Cronbach's Alpha, α).

	Cronbach's Alpha (α)
1. 7-item Generalized Anxiety Disorders Scale (GAD-7)	.95
2. Patient Health Questionnaire-9 (PHQ-9)	.90
3. Self-Compassion Scale – Short Form (SCS-SF)	
a. Self-Compassionate Subscale	.80
b. Non-Compassionate Subscale	.88
4. Positive and Negative Affect Schedule (PANAS)	
a. Positive Affect	.89
b. Negative Affect	.93
5. Holistic Well-Being Scale (HWS)	
a. General Vitality	.90
b. Spiritual Self-Care	.71
6. Beat Drugs Fund Evaluation Question Set 20 (Capacity to support drug abusing family members)	.88

Table 2. Demographic profile of Caregivers.

Holistic Healthcare Program for Caregivers		
(N = 25)		
Characteristics	N	%
Gender		
Male	4	16.0
Female	21	84.0
Age		
Mean (S.D.)	54.4	13.1
Relationship with drug abuser		
Parent	19	76.0
Spouse	3	12.0
Grandparent	1	4.0
Children	2	8.0
Education level		
No formal education	2	8.0
Primary school	1	4.0
Secondary school	16	64.0
University	4	16.0
Master or above	1	4.0
Prefer not to say	1	4.0
Religion		
Christianity	5	20.0
Catholicism	1	4.0
Buddhism	4	16.0
Taoism	1	4.0
Others	9	36.0
Prefer not to answer	5	20.0
Type of Housing		
Rental Housing	6	24.0
Private Housing	4	16.0
Public Rental Housing	9	36.0
Home Ownership Scheme	3	12.0
Subdivided Unit	2	8.0
Temporary Housing	1	4.0
Number of family members		
1	5	20.0
2	9	36.0
3	6	24.0
4	5	20.0
Average monthly family income		
≤\$15,000	10	40.0
\$15,001 - \$20,000	3	12.0
\$20,001 - \$25,000	4	16.0
\$25,001 - \$30,000	2	8.0
\$30,001 - \$35,000	1	4.0
\$35,001 - \$40,000	0	0
\$40,001 - \$45,000	1	4.0

**Holistic Healthcare Program for Caregivers
(N = 25)**

Characteristics	N	%
Average monthly family income (cont'd)		
\$45,001 - \$50,000	1	4.0
\$50,001 - \$55,000	0	0
≥\$55,001	3	12.0
Employment status		
Unemployed	4	16.0
Self-employed	3	12.0
Full-time	11	44.0
Part-time	4	16.0
Full-time Student	1	4.0
Full-time Caregiver	2	8.0
Social Security		
Old Age Allowance	3	12.0
Comprehensive Social Security Assistance	1	4.0
None	21	84.0
Number of groups participated in the past year		
1	9	36.0
2	8	32.0
3	3	12.0
4	3	12.0
5	1	4.0
Prefer not to say	1	4.0

Table 3. Baseline (T₀), post-program (T₁) and 2-month follow-up (T₂) differences in outcome variables for the program.

	N = 20			F	p-value	Effect size (η^2_p)
	T ₀ M (SD)	T ₁ M (SD)	T ₂ M (SD)			
1. Anxiety (GAD-7)	11.20 (6.76)	7.10 [^] (5.54)	8.15 [^] (5.98)	9.39	<.01*	.33
2. Depression (PHQ-9)	11.05 (6.84)	7.35 [^] (7.46)	7.60 [^] (7.16)	9.55	<.01*	.33
3. Self-Compassion (SCS-SF)						
a. Self-Compassionate Subscale	2.95 (.69)	3.20 (.76)	3.27 (.58)	1.64	.21	.08
b. Non-Compassionate Subscale	3.18 (.94)	2.69 [^] (.86)	2.89 (.86)	6.20	<.01*	.25
4. Positive and Negative Affect Scale (PANAS)						
a. Positive Affect	27.50 (7.89)	28.05 (8.06)	27.45 (7.04)	.21	.81	.01
b. Negative Affect	28.15 (9.55)	24.35 (9.42)	22.70 [^] (8.19)	7.35	<.01*	.28
5. Holistic Well-Being Scale (HWS)						
a. General Vitality	5.38 (2.18)	6.03 (2.36)	6.01 (1.99)	4.22	.02*	.18
b. Spiritual Self-care	6.55 (2.11)	6.55 (2.25)	6.88 (1.93)	.88	.39	.05

	N = 20			F	p-value	Effect size (η^2)
	T ₀ M (SD)	T ₁ M (SD)	T ₂ M (SD)			
6. Beat Drugs Fund Evaluation Question Set No. 20						
a. Capacity to support family members with drug dependence	29.50 (6.02)	31.90 (4.73)	32.10 (4.41)	5.20	.02*	.22

^ Bonferroni Post-hoc tests: Within-group significant results when compared to T₀

* $p \leq .05$

Table 4. Satisfaction level of the Holistic Healthcare Program for Caregivers at post-program (T₁) (N = 22).

	<i>M (SD)</i>
1. Overall satisfaction level with the Program	4.36 (.58)
2. Content of the Program are Practical	4.36 (.58)
3. Program effectively improves capability in family caregiving	3.86 (.77)
4. Program effectively improves confidence in family caregiving	3.91 (.68)
5. Program provides knowledge and skills to care for family with drug abuse problems	3.95 (.72)
6. Satisfaction level with the content of the Program	4.27 (.46)
7. Recommendation of the Program to other caregivers of drug users	4.23 (.53)
8. Satisfaction level with team members/ social workers of the Program	4.68 (.48)
9. Content of the Program is at a suitable level of difficulty that is easy to understand	4.55 (.51)
10. Overall engagement with the Program	4.27 (.63)

Note: Satisfaction level is measured on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree).

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Research Report by

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