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RESEARCH ARTICLE

Is a Holistic Health Practice Program Effective to Promote Personal Growth in Persons with Serious Mental Illness – A Pilot Study

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Abstract:

Background:

Self-help groups (SHG) have been found to be effective in enhancing psychiatric rehabilitation. A Holistic Health Practice Program (HHPP) was developed in which all recovery components are covered. It has been conducted on a group of student nurses and was found to be effective in promoting holistic health, self-esteem, and self-efficacy. But the question arises if it is also effective when conducted on the members of the SHG comprising persons with serious mental illness.

Aim:

This study aimed to explore the holistic health status of the members of the SHG and investigate whether the HHPP is effective for the personal growth of members of the SHG, including persons with serious mental illness and trained lay persons as volunteers in the group.

Methods:

A pre- and post-test group approach was adopted in this study. Group members were invited to join an HHPP, which consisted of 6 sessions held within 6 weeks, with one session weekly comprising 3 hours per session. Participants were asked to fill in a pre-test questionnaire before the program and a post-test questionnaire when they completed the program.

Results:

Results showed that among the 6 domains of the healthy lifestyle profile, participants scored the lowest in the physical activity of the physical domain, followed by the health responsibility of the psychological domain. Whereas, they scored the highest in the interpersonal relations of the social domain. The study also found no significant differences between the mean scores of the persons with serious mental illness and the volunteers. Besides, there were significantly positive increases in mean scores in the domains of physical activity, nutritional habits, spiritual growth, and the total scores of HPLP-II ($P < 0.05$), as well as self-esteem ($P < 0.05$) and self-efficacy ($P < 0.05$) when comparing the pre-test and post-test results.

Conclusion:

This study showed that the holistic health status of persons with serious mental illness is the same as that of the general population. It also demonstrated that the Holistic Health Practice Program is effective in promoting holistic health, self-esteem, and self-efficacy among the persons with serious mental illness and the volunteers.

Keywords: Holistic health practice program, Pre-test, Post-test study, Holistic health, Persons with serious mental illness, Nutritional habits, Spiritual growth.

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1. INTRODUCTION

In the late twentieth century, psychiatric rehabilitation was defined as “the process of identifying and preventing or minimizing causes of disabilities, while at the same time helping the individual to develop and use his or her talents, and thus to acquire confidence and self-esteem through success in

social roles” [1]. At that time, psychiatric rehabilitation for persons with serious mental illness has been focused more on the control of the psychotic symptoms and building up their confidence to integrate into the community. In the beginning of the 21st century, more emphasis was laid on empowerment, where staff shared power with patients in the hospital units [2], and the psychosocial clubhouse was established in the community worldwide in which members and staff worked together to run the program in the community for rehabilitation [3].

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Initiated by a Christian ex-mental patient with serious mental illness and formed with the help of a hospital chaplain and some Christian mental health professionals, including psychiatrists, nurses, social workers, and occupational therapists, a holistic care model of psychiatric rehabilitation was developed locally in 1989 [4]. This model is characterized by a self-help group (SHG) approach to provide long-term support with holistic care content to render physical, psychosocial, and spiritual care. Spiritual intervention is in the form of hymn singing, Bible reading, personal sharing, and intercession. This model also adopts a hybrid mode by mutual support among members, who are mostly persons with serious mental illness, and shared governance in the management of individual self-help groups with the support of volunteer mental health professionals. Empowerment is highlighted not only with the management of the individual self-help group by the members themselves and one or two volunteers who are healthcare professionals, but also some of the group members become the management board directors who take charge of the management of all the SHGs.

From the beginning of the first SHG, it developed as a non-government organization, the Christian Oi Hip Fellowship (Fellowship), and has been successfully implemented with 20 self-help groups established within 30 years from its inception. Some of the groups have been maintained for more than 20 years after its establishment. With the increase in the number of groups, the newly developed groups are supported by lay persons who have gone through a series of training in mental health courses and are supervised by mental health professionals in running the group.

Studies have shown that these self-help groups are effective in enhancing rehabilitation holistically, including the physical, psychosocial and spiritual dimensions. A preliminary qualitative study [5] on clients and facilitators (volunteer healthcare professionals) of the SHG indicated that members gained positive experiences and made some positive changes in their lives, which contributed to the rehabilitation of their illness. Adopting a multi-method approach, Luk and Shek (2006a) [6] first used a quasi-experimental design to evaluate the SHGs and found that those who joined the SHGs had more friends and more social satisfaction than the control subjects. Using a repertory grid based on the personal construct theory to measure self-identity changes after joining the SHGs, Luk and Shek (2006b) [7] found that participants perceived positive changes in physical, psychological, social, and spiritual dimensions after joining the SHGs. In a qualitative approach, results showed that by attending the SHGs, participants had positive feelings and gained many positive learning opportunities when interacting with peers. Interacting with group leaders was also very beneficial to them [8]. A follow-up study aimed to investigate the long-term effects of this holistic care model on persons with serious mental illness was conducted five years later. The study showed the model is still effective in providing some positive changes to its participants. The perception of help in terms of support, encouragement, enhancement of self-confidence, spiritual assistance, and reflection of values was identified. Job sustainability was one of the important factors for their rehabilitation. As a member of the SHG, they could share information about job opportunities,

job hunting experiences, and ways of sustaining a job in terms of skill practice and improvement in interpersonal relations [9].

More evidences support that most persons suffering from schizophrenia get improvement after an extended period of rehabilitation [10, 11]. Many mental health professionals advocate mental health recovery as “a journey of healing and transformation to live a meaningful life in a community of one’s choice while striving to achieve maximum human potential” [12]. Ten recovery components, including self-direction, individualized and person-centered empowerment, holistic well-being, non-linear, strength-based, peer support, respect, responsibility and hope, are well acknowledged. A Holistic Health Practice Program (HHPP) was developed to better prepare nursing professionals to take care of themselves holistically before taking care of their clients. The contents of the program included physical, psychosocial, and spiritual health, in which all recovery components have been covered [13]. The program has been conducted on a group of student nurses and was found to be effective in promoting holistic health, self-esteem, and self-efficacy [14]. But the concern was if it is also effective when conducted on the members of SHG. Thus, this study aimed to explore the holistic health status of the members of the SHG and investigate whether the HHPP is effective for the personal growth of members of the SHG, including persons with serious mental illness and trained lay persons as volunteers in the group.

Health was originally defined by the World Health Organization (WHO) in 1948 as a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity [15]. In 1998, the spiritual dimension was added when describing health [16]. Holistic health is a goal and an approach to how one’s body, mind, and spirit get connected to one’s environment in order to reach the maximum level of well-being [17]. The studies on the Christian Oi Hip Fellowship demonstrated the importance of the spiritual dimension in holistic care in the rehabilitation of persons with serious mental illness when the whole person’s needs in physical (nutritional and biological), psycho-social, cultural and spiritual aspects are met in order to maintain a healthy well-being [18]. Another study also showed that taking care of all aspects of the whole person can enhance the immune system to defend against psychological stress and promote healing of impaired human body functioning [19].

Holistic health provides a comprehensive view of the whole person’s wellness, including physical, psychosocial, and spiritual dimensions; however, not many tools can be found for its measurement. The Health Promotion Lifestyle Profile (HPLP) is a tool widely adopted to measure one’s healthy lifestyle, which includes 6 domains for the assessment of a person from a holistic perspective. The 6 domains of the HPLP cover [20]:

- (1) Physical aspect, including physical activity and nutritional habits;
- (2) Psychological aspect, such as health responsibility and stress management;
- (3) Social aspect, *i.e.*, interpersonal relations, and
- (4) Spiritual aspect, which involves spiritual growth.

2. AIM AND HYPOTHESIS

The aim of the study was to explore the holistic health status of the members of the SHG, including the persons with serious mental illness and its volunteers, and to investigate whether a Holistic Health Practice Program could help to enhance their personal growth in terms of the holistic health status, self-esteem, and self-efficacy. It is hypothesized that the Holistic Health Practice Program benefits both persons with serious mental illness and volunteers in personal growth.

3. METHODS

3.1. Design

A pre- and post-test group approach was adopted in this study. Group members were invited to join the study on a voluntary basis by signing a consent form with detailed information concerning the current study. Participants were asked to fill in a pre-test questionnaire in the first session, which included demographic information, and the measurement (*i.e.*, HPLP-II, ESTEEM & GSES) to determine their health-promoting lifestyle, self-esteem, and self-efficacy, respectively. After the 6 sessions, all participants were invited to complete the post-test questionnaire, which was the same as that used in the pre-test.

3.2. Intervention – The Holistic Health Practice Program

The 6 sessions of Holistic Health Practice Program were conducted within 6 weeks, with one session weekly comprising 3 hours per session. The 6 sessions included: (1) the introduction of the concept of holistic health, self-assessment of an individual healthy lifestyle, and designing a personal health-promoting plan; (2) ways to promote physical health by maintaining healthy diet and nutrition, adequate physical activity and sufficient sleep; (3) developing mental health and managing life stress; (4) promoting social health by enhancing interpersonal relationship; (5) understanding spiritual health and pursuing the meaning of life; and (6) group presentation of the results of the pursued health-promoting plan. This HHPP covered the whole human body's well-being, including physical, psychosocial and spiritual aspects. The program was designed by the author [13] and was conducted by the author himself. The HHPP is described in Table 1.

3.3. Participants and Sampling

There were around 230 active members and 30 volunteers, respectively, who joined the SHGs in the Fellowship. Posters were sent out for the recruitment of participants to join the program.

3.4. Ethical Consideration

Ethical approval was obtained from the board of directors of the Fellowship. Participants were invited on a voluntary basis. They were briefed about the purpose and the procedure of the study. An informed consent was signed by those who agreed to join the study. However, the participants were free to withdraw at any time during the program. The confidentiality of the participants was ensured as no name was written on the questionnaire, and the 4 digits of their personal password and

data were destroyed after the study.

Table 1. The holistic health practice program.

Session (Date)	Topics	No. of Hours
25/09/2021	Assessment of holistic health and designing a personal health-promoting plan	3
02/10/2021	Promoting physical health by maintaining a healthy diet and nutrition, adequate physical activity, and sufficient sleep	3
09/10/2021	Developing mental health and managing life stress	3
16/10/2021	Promoting social health by enhancing interpersonal relationship	3
23/10/2021	Understanding spiritual health and pursuing the meaning of life	3
30/10/2021	Individual presentation of the initial result of the personal health-promoting program	3

3.5. Data Collection

Data collection was done in the first and the last session of the program. All participants signed an informed consent after they have been briefed on the details of the study by the author.

3.6. The Measurements

The same set of questionnaires for the pre-test and post-test was used, which included demographic information and the measurement tools (*i.e.*, HPLP-II, ESTEEM & GSES) to assess the health-promoting behaviors, self-esteem, and self-efficacy of the participants, respectively.

3.6.1. The Chinese version of Health Promotion Lifestyle Profile-II (HPLP-II)

HPLP-II consists of 52 items with 6 domains: health responsibility (9 items), physical activity (8 items), nutritional habits (9 items), spiritual growth (9 items), interpersonal relations (9 items), and stress management (8 items). A score from 1 (never) to 4 (routinely) on a 4-point Likert scale is assigned to each item. The sum of the total score of each item within each domain forms the domain score. The maximum score of the 6 domains added together is 208. The HPLP-II was converted to Chinese using the forward and backward translation [21]. A study on enrolled nurse students in Hong Kong using the Chinese version of HPLP-II showed high reliability with Cronbach's alpha ranging from 0.81 to 0.84 for the 6 domains and 0.92 for the total score of HPLP-II [22].

3.6.2. The Chinese version of the Rosenberg Self-Esteem Scale (ESTEEM)

The 10 items Rosenberg Self-Esteem Scale (RSES) is used to measure self-esteem with a 4-point Likert scale ranging from strongly disagree (1) to strongly agree (4), with 5 items representing positive self-esteem and 5 items representing negative self-esteem. The lowest to the highest score is from 10 to 40. This scale had been reported to possess a Cronbach's alpha of 0.75 in a study conducted on nursing assistants [23]. The Chinese version of the Rosenberg Self-Esteem Scale (ESTEEM) had been developed by Shek with an acceptable reliability [24], which had been reported with a Cronbach's alpha of 0.78 in a study among Chinese adolescents [25].

3.6.3. *he Chinese version of the General Self-Efficacy Scale (GSES)*

GSES is composed of 10 items which are rated by a 4-point Likert scale from (1) not at all true, (2) barely true, (3) moderately true, and (4) exactly true. GSES is widely used to measure self-efficacy in various countries with high internal consistencies, and it has demonstrated excellent internal consistency in the Chinese version with a Cronbach’s alpha of 0.91 [26].

4. RESULTS

4.1. Demographic Information

18 participants joined the program. 15 out of 18 participants (83% response rate) completed the pre- and post-test questionnaire in this study, including 6 male and 9 female participants. Half of them were 50 years old or above. All of them were Christian with different years of religious experience. More than half of them were persons with serious mental illnesses. The demographic data of the participants are shown in Table 2.

Table 2. Demographic information of the participants.

		N=15	%
Gender	Male	6	40
	Female	9	60
Age	26 – 30	1	6.7
	31 – 35	2	13.3
	36 – 40	2	13.3
	41 – 45	2	13.3
	50 or above	8	53.3
Year as Christian	10 or below	3	20
	11 - 15	3	20
	16 - 20		
	21 – 25	2	13.3
	26 – 30	2	13.3
	31 – 35	1	6.7
	36 or above	4	26.7
Sub-group	Volunteer	4	26.7
	Members	8	53.3
	Others (staff)	3	20.7

4.2. Holistic Health Status

The Chinese version of HPLP-II was used to explore the 6 domains of the holistic health of the participants: health responsibility, physical activity, nutritional habits, spiritual growth, interpersonal relations, and stress management of participants. The result found that the item means of physical activity scored the lowest (mean=2.46) among the 6 domains, followed by health responsibility (mean=2.48), nutritional habits (mean=2.67), stress management (mean=2.74), spiritual growth (mean=2.81), and interpersonal relationship (mean=2.82). The mean score of total HPLP-II was 2.67. Details of each item’s mean scores of the 6 domains of HPLP-II are presented in Table 3.

The mean scores of HPLP, ESTEEM, and GSES of persons with serious mental illness were found to be generally a bit lesser than those of other participants; however, the independent t-test showed no statistically significant differences.

Table 3. The mean scores of the 6 domain items on priority basis.

Subscales	Item Mean	SD	Highest to Lowest Score
Interpersonal relations (9 items)	2.82	0.56	1
Spiritual growth (9 items)	2.81	0.74	2
Stress management (8 items)	2.74	0.34	3
Nutritional habits (9 items)	2.67	0.59	4
Health responsibility (9 items)	2.48	0.54	5
Physical activity (8 items)	2.46	0.69	6
Total (52 items)	2.67	0.51	

4.3. The Effectiveness of the Holistic Health Practice Program

There were significantly positive increases observed in mean scores of the domains of physical activity, nutritional habits, spiritual growth, and the total scores of HPLP-II ($P<0.05$), as well as self-esteem ($P<0.05$) and self-efficacy ($P<0.05$), when comparing the pre-test and post-test results. Details of paired t-test scores of the 6 domains of HPLP-II, ESTEEM, and GSES are shown in Tables 4 and 5.

Table 4. Paired t-test scores of the 6 domains.

		Mean (SD)	N	t	df	Sig. (2-tailed)
Health responsibility	Pre-test	22.33 (4.82)	15	-.906	14	.380 (NS)
	Post-test	23.26 (5.48)	15			
Physical activity	Pre-test	19.66 (5.59)	15	-2.320	14	.036*
	Post-test	21.66 (6.62)	15			
Nutritional habits	Pre-test	24.00 (5.30)	15	-3.437	14	.004**
	Post-test	27.00 (5.07)	15			
Spiritual growth	Pre-test	25.33 (6.68)	15	-2.461	14	.027*
	Post-test	28.33 (5.80)	15			
Interpersonal relations	Pre-test	25.40 (5.08)	15	-1.588	14	.135(NS)
	Post-test	27.07 (5.23)	15			
Stress management	Pre-test	21.93 (4.17)	15	-1.431	14	.147(NS)
	Post-test	23.07 (4.25)	15			
Total 6 domains	Pre-test	138.67 (26.61)	15	-2.828	14	.013*
	Post-test	150.40 (27.94)	15			

Note: (NS – Not statistically significant, * $p<0.05$, ** $p<0.01$)

Table 5. Paired T-test of ESTEEM and GSES.

		Mean (SD)	N	t	df	Sig. (2-tailed)
ESTEEM	Pre-test	29.47 (5.25)	15	-2.511	14	.025*
	Post-test	32.00 (4.21)	15			
GSES	Pre-test	26.27 (7.04)	15	-2.463	14	.027*
	Post-test	30.13 (6.40)	15			

Note: (* $p<0.05$)

5. DISCUSSION

5.1. Holistic Health Status

The findings in this study were found to be consistent in both overseas [27, 28] and local studies [14, 22, 29], which showed physical activity and health responsibility to score the

lowest mean scores among the 6 domains. Regarding the lowest mean score found in physical activity in this study, one possible reason is that people living in the city lack physical activities, even though the health behaviour survey in 2020 showed that the level of physical activity of people in Hong Kong has increased to 80% according to the recommendation by the WHO [30]; however, the achievement of recreation-related physical activity is only 40% according to the setting-specific physical activities performed in a typical week [31]. Regarding persons with serious mental illness, one of the common side effects of the psychotropic drug was found to be lethargy; however, there may be other reasons behind the residual symptom of lack of drive.

Health responsibility was ranked the second-lowest among the 6 domains in the study. People are still more prone to seeking medical advice when one falls sick instead of taking more health responsibilities in terms of prevention of illness by acquiring more health knowledge and asking for more information from healthcare professionals. With regard to persons with serious mental illness, it is understandable that some clients do not want to report any unusual signs or symptoms to a psychiatrist because they are afraid of admission to the hospital or adding to the list of psychotropic drugs, which are accompanied by undesirable side effects. Furthermore, asking healthcare professionals questions sometimes requires courage and skill for those clients with severe symptoms and also adequate trust in the healthcare professionals.

Nutritional habits scored the third lowest among the 6 domains in the study. The health behaviour survey in 2020 showed 95% of the respondents to eat less than 5 servings of fruit and vegetables on average per day, which showed people in Hong Kong, on the whole, to lack the consumption of a balanced diet [32]. One of the main reasons may be that people like eating meals outside in fast food shops or restaurants where meat is consumed more and delicious dishes usually contain more salt, oil, and sugar. Regarding persons with serious mental illness, many members live alone and lack the motivation to cook a balanced diet for themselves. Having meals outside is quite common among the members of the Fellowship. Furthermore, the side effect of the psychotropic drug may also lead to overeating and obesity.

Though there were lower mean scores of all outcome measures of persons with serious mental illness than the others, no statistically significant differences were found. Besides the small sample size (*i.e.*, persons with serious mental illness=8, volunteer and staff=7), one of the possible reasons may be that both subgroups share the same cultural lifestyle in Hong Kong.

On the other hand, the highest mean score in interpersonal relations was consistent with the findings of the previous studies on the Fellowship that members of the Fellowship had more friends and more social interaction than the control group; the mutual support in the groups helps enhance their interpersonal relations [6 - 8]. With regard to their second highest mean score of spiritual growth, the follow-up study of the members of the Fellowship also showed that spiritual assistance and reflection of values are important content of the group, which helps develop their personal spiritual growth [9].

5.2. Effectiveness of the Holistic Health Practice Program

The hypothesis that the Holistic Health Practice Program is beneficial to both members of the self-help group, including persons with serious mental illness and its volunteers, is well supported. Two out of three lowest mean scores of healthy lifestyles have been found to be improved after the completion of the program. One possible reason may be that physical activity and nutrition habits can be better under one's control, which can be implemented according to what is designed in the health promotion plans, while some aspects of health responsibility need more time to acquire the health knowledge and opportunity to raise questions to healthcare professionals. On the whole, the Holistic Health Practice Program, including the essential components of physical, psychosocial, and spiritual aspects of holistic health, has been found to be effective in promoting a healthy lifestyle. This result is consistent with other randomized control trial studies for the interventional program for the promotion of holistic health [14, 33]. This program not only helps participants assess and reflect on their holistic health, but also encourages them to develop a health promotion plan to achieve better health. The findings of this study showed that the intervention could significantly enhance the holistic health status, self-esteem, and self-efficacy of the participants who had undergone a 6-weeks holistic health practice. The study is worth to be conducted for larger numbers of persons with serious mental illness.

6. LIMITATIONS

There are several limitations to this study. First, only a small sample could be recruited in the study so the interpretation should be taken with caution. Second, it is a pre- and post-test study involving a weak experimental design. A randomized control trial design involving a control group with only routine personal lifestyle may prove to be better so that more rigorous evidence can be obtained. Lastly, all of the participants had Christian beliefs, which may have influenced their psychosocial and spiritual health and self-esteem in some way or the other.

CONCLUSION

This study has explored the holistic health, self-esteem, and self-efficacy of members of a Self-help Organization, comprising persons with serious mental illness, volunteers, and staff. The study findings showed physical activity, health responsibility, and nutritional habits to score the lowest among the 6 domains in the HPLP-II. There were no statistically significant differences found in the mean scores between the groups of persons with serious mental illness and other participants.

This study has also demonstrated the Holistic Health Practice Program as effective in promoting a healthy lifestyle, self-esteem, and self-efficacy for persons with serious mental illness, and provided the basic data for further study on their holistic health. A Holistic Health Practice Program is recommended to be used as a tool to enhance the holistic health, self-esteem, and self-efficacy of persons with serious mental illness.

LIST OF ABBREVIATIONS

SHG	=	Self-help group
HHPP	=	Holistic Health Practice Program
WHO	=	World Health Organization
HPLP	=	Health Promotion Lifestyle Profile
GSES	=	General Self-Efficacy Scale

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

Ethical approval was obtained from the board of directors of the Christian Oi Hip Fellowship.

HUMAN AND ANIMAL RIGHTS

No animals were used in this research. All procedures performed in studies involving human participants were in accordance with the ethical standards of institutional and/or research committee, and with the 1975 Declaration of Helsinki, as revised in 2013.

CONSENT FOR PUBLICATION

Informed consent was obtained from all the participants.

AVAILABILITY OF DATA AND MATERIALS

The data that support the findings of this study are available within the article.

FUNDING

None.

CONFLICT OF INTEREST

The author declares no conflict of interest, financial or otherwise.

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