The Effect of a Family Psycho-Education Program on Family Caregivers’ Attitude to Care for Patients with Schizophrenia

I Gusti Ayu Rai Rahayuni 1, Susheewa Wiehaikull 2, and Sukjai Charoensuk 3

1 Master of Nursing Science (MNS) Program, Kasetsart University
Bangkok, Thailand
Email: gekaik80@gmail.com
2 Boromarajonani College of Nursing Nopparat Vajira (BCNNV), Bangkok, Thailand
Email: susheewa@yahoo.com
3 Boromarajonani College of Nursing Chakriraj, Ratchaburi, Thailand
Email: sukjaif66@yahoo.com

Abstract — The purpose of this quasi-experimental study was to examine the effect of the family psycho-education program on family caregivers’ attitude to care for patients with schizophrenia in Bali, Indonesia. The attitude in this study included cognitive, affective and behavioural components. The participants were the family caregivers who care for schizophrenia patients. The sample was a group of 37 family caregivers, divided by matching pair-sampling technique into 18 participants who received 5 sessions of Family Psycho-Education (FPE) program as the experimental group and 19 participants who did not receive the intervention as the comparison group. The activities in the FPE program included building of working alliance, introducing about schizophrenia, caring strategies, coping mechanism and problem-solving strategies by methods of sharing experience, discussion and role play. The Attitudes towards Schizophrenia Questionnaire for Relatives was used to assess the family caregivers’ attitude. Data analysis used was paired t-test. The findings show that, the intervention of family psycho-education program (FPE) had significant effects on increasing family caregivers’ attitudes in terms of cognitive, affective and behavioural components to care for patients with schizophrenia (p < .05). The practitioners need to continue and extend the Family Psycho-Education (FPE) program based on the Balinese culture. Thus, the patients with schizophrenia will be better accepted to live together in their family and community.

Keywords — Attitude; family psycho-education; schizophrenia

I. INTRODUCTION

Schizophrenia can influence the problems both family and patients. Most of patients with schizophrenia (50% - 80%) live or have regular contact with their family members [1]. Approximately, 24 million people worldwide are affected by schizophrenia and more than 50% of them do not receive appropriate care [2]. Moreover, in developing countries, 90% of schizophrenia patients are untreated. The success of their care will be affected by role involvement of family at the community level [2]. The annual report of Bali Mental Hospital (2012) showed there were 1652 patients diagnosed with schizophrenia, which is approximately 80.2% from the total inpatients. The important factors influencing family functions include family psychological distress and patients’ behavioural problems [3]. Families living with family members who have mental disorders require holistic support in order to decrease the burden and responsibility by sharing the experience with others [4]. As the impact of the stigma, the families try to avoid and protect this condition by adopting positive behaviours and attitudes [5]. As a phenomenon, the negative attitude can affect the families that cannot accept the patient who is discharged from a hospital and return to their family.

Among Balinese people, attitudes are based on magico-religious beliefs and supranatural factors have the influence and a positive correlation with beliefs, attitudes and behaviours about psychiatric disorder, both patients and their family caregivers [6] [7]. This opinion was also strengthened by 76% of patients in two public hospitals in Bali was examined by a traditional healer before being consulted by psychiatrists and there are approximately 2,500 traditional healers’ practices in Bali [8]. There are many factors related to attitude change, such as ethnic, race, culture, religion, belief and health care services’ conditions, the group of the family caregivers and relatives [9] [10]. The previous studies suggested that the conditions of attitude change are due to the Balinese belief that mental illness caused by the interaction between niskala (abstract component) which is usually more commonly treated by a traditional healer and sekala (concrete component) that can be treated by a physician [11]. However, Balinese people believe more in the niskala component as the main cause of psychiatric disorders like a supranatural power or black magic. Although the family has been provided with sufficient knowledge and has enough level of education without supports with a good emotion and feeling (affective), a good belief (cognitive) and a good behavior intention that can influence their attitude, they will not give appropriate contribution to support the patient’s recovery.

The family needs a further support to reduce the burden and increase the quality of life of patients with mental illness [12]. It can be achieved through a family intervention. The intervention of psycho-education as a part of individual, family and group intervention can focus on education to help participants managing the challenge and developing coping
skills [13]. The specific definition of psycho-education include educating about living challenge, developing social and resource support, coping skills, supporting emotions, reducing stigma, exploring feelings, problem-solving skills, crisis-intervention [13]. In the current study, the intervention focuses on attitude change.

II. MATERIALS AND METHODS

A. Subjects

The subjects of this quasi experimental study were 38 family caregivers who were concerned and continue to accompany patients with schizophrenia to get treatment and medicine at in Primary Health Centre, one of the local areas in Bali, Indonesia. The sample was divided into the experimental and the comparison groups by matching pair sampling technique. 19 family caregivers were selected into the experimental group and were invited to join in 5 sessions of the family psycho-education (FPE) program. Unfortunately, during the intervention, one of the families in the experimental group dropped out because of the limitation with physical condition (hospitalization). Therefore, the final samples consisted of 37 family caregivers including 18 family caregivers in the experimental group and 19 family caregivers in the comparison group. Data were collected from April to July 2013.

B. Instruments

Data were collected using Attitudes towards Schizophrenia Questionnaire for Relatives. This instrument was initially developed by Caqueo-Urizar [14].The instrument covers three attitudes components including affective, cognitive and behavioural. This questionnaire comprises 9 items rated on a Likert scale ranging from strongly disagree (1) to strongly agree (5). The instrument was translated into Bahasa Indonesia by the technique called back translation. Cronbach's alpha was calculated as an index for the internal consistency that provided Cronbach's Alpha 0.936. In order to verify the validity of the subscale, Cronbach's alpha was calculated for each component: behavioural component: $\alpha = 0.908$, cognitive component: $\alpha = 0.801$, affective component: $\alpha = 0.997$.

The Family Psycho-education (FPE) Program Booklet was developed by the researcher. The validity of the booklet was evaluated by three mental healthcare experts as consultants in order to check the content validity. The inter-rater reliability of the guideline booklet of FPE was analysed using Cohen's kappa statistics. As a result, the checklist of implementation procedure in FPE booklet was almost perfect agreement ($k = 0.842$) to be used in the real intervention.

C. Ethical Considerations

Ethical approval was given by the Ethical Review Board of Boromarajonnani College of Nursing Nopparat Vajira (BCNNV)

D. Intervention Procedures

The intervention of Family Psycho-Education (FPE) procedure was divided into 5 sessions. Each session of training took 90-120 minutes of activities, twice a week. The training was implemented by mixing between Balinese language and Bahasa Indonesia because the participants were most comfortable in speaking thus, the researcher could maintain the quality of the intervention. Each session was divided into three phases, consisting of the orientation phase around 20 minutes (greetings, validation and contract of the current session), the intervention phase around 60 minutes (key point of the session based on the objective) and the termination phase around 10 minutes (evaluation, follow up and contract for the next session).

The teaching methods used in this intervention comprised of oral and visual presentations, brainstorming, case studies by learning "real life" situations, practice / role-play discussion and sharing idea. The multimedia materials consisting of: introductory power point presentation, leaflet or sample brochure and introductory video were needed to support this intervention.

The detailed outline of activities for each session as follows:

<table>
<thead>
<tr>
<th>Sessions</th>
<th>Intervention of Family Psycho-Education (FPE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Joining Session</td>
<td>To build a trustful relationship with practitioner and other participants</td>
</tr>
<tr>
<td>2 An Educational workshop 1</td>
<td>To provide information about schizophrenia disease and patient treatments</td>
</tr>
<tr>
<td>3 An Educational workshop 2</td>
<td>To provide understanding and practice about strategies related to caring for schizophrenic patients</td>
</tr>
<tr>
<td>4 Ongoing FPE 1</td>
<td>To improving family’s coping mechanism skills</td>
</tr>
<tr>
<td>5 Ongoing FPE 1</td>
<td>To improving family’s problem solving skill</td>
</tr>
</tbody>
</table>
**E. Data analysis procedures**

The demographic and socio economic characteristics of both groups were compared by using the chi-square test. Paired t-test was used to test the hypotheses at 0.05 levels of significance. The data were processed by using SPSS v.17

**III. RESULTS AND DISCUSSION**

**F. Results**

The first part of the results explains the demographic characteristics of subjects consisting of age, gender, marital status, education, occupations, the length of living with patients, the relationships with patients and social acceptance. All of the demographic characteristics between experimental group and comparison group are homogeneous or equal (p>.05). The second part of the results explains the Hypotheses Testing. The first hypothesis is accepted and thus, the result can be concluded that there is a significant improvement of family attitude between pre and post interventions in the experimental group (p < .05). The second hypothesis also accepted and thus, the result is presented as follows:

**TABLE I. COMPARISON OF FAMILY CAREGIVERS’ ATTITUDE BETWEEN EXPERIMENTAL GROUP AND COMPARISON GROUP, PRE AND POST-INTERVENTIONS OF FAMILY PSYCHO-EDUCATION (FPE) PROGRAM USING PAIRED T-TEST (N=37)**

<table>
<thead>
<tr>
<th>Attitude score</th>
<th>Groups</th>
<th>n</th>
<th>Mean</th>
<th>S.D</th>
<th>t</th>
<th>v-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Intervention</td>
<td>Experimental group</td>
<td>18</td>
<td>20.67</td>
<td>3.343</td>
<td>0.411</td>
<td>.686</td>
</tr>
<tr>
<td></td>
<td>Comparison group</td>
<td>19</td>
<td>20.42</td>
<td>2.987</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post Intervention</td>
<td>Experimental group</td>
<td>18</td>
<td>13.72</td>
<td>2.244</td>
<td>-7.862</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Comparison group</td>
<td>19</td>
<td>20.58</td>
<td>2.694</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1 show that the attitude of family pre-intervention of FPE program between the experimental group and comparison group is homogeneous / equal variances (p>.05). However, in the post-intervention, there is a significant difference of the attitude score of family caregivers between the experimental group and the comparison group (p < .05). The result can be concluded that the present intervention has a significant influence to increase family caregivers' attitude to care for patients with schizophrenia. The third part of the results explains the analysis components of family caregivers’ attitudes toward care for schizophrenic patients. The result is presented as follows:

**TABLE II. COMPARISON OF FAMILY CAREGIVERS’ ATTITUDE COMPONENTS BETWEEN EXPERIMENTAL GROUP AND COMPARISON GROUP AFTER INTERVENTION OF FAMILY PSYCHO-EDUCATION (FPE) PROGRAM USING PAIRED T-TEST**

<table>
<thead>
<tr>
<th>Component of Attitude</th>
<th>Experimental group (n=18) Mean (S.D)</th>
<th>Comparison group (n=19) Mean (S.D)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive</td>
<td>4.39 (0.979)</td>
<td>6.74 (1.300)</td>
<td>-7.079</td>
<td>.000</td>
</tr>
<tr>
<td>Affective</td>
<td>4.78 (1.166)</td>
<td>6.26 (1.284)</td>
<td>-3.651</td>
<td>.002</td>
</tr>
<tr>
<td>Behavioral</td>
<td>4.56 (0.984)</td>
<td>6.95 (1.026)</td>
<td>-7.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 2 shows that the present intervention has a significant influence to increase the cognitive, affective and behavioural components of family caregivers’ attitude to care for patients with schizophrenia (p < .05).

**G. Discussion**

The findings of this research show that FPE program was significant to improve the family caregivers’ attitude for caring patients with schizophrenia. The importance of attitude is the change of perceptions about objects or groups by creating situations and efforts to foster attitude change as the impact of negative attitude for the schizophrenic patients [15]. The model of Fishbein and Ajzen [16] assumes that the important basis of attitudes is beliefs but not all beliefs or religions may be relevant to our attitudes. Therefore, in order to change attitudes, we should change these salient primary beliefs, which occur by altering the expectancies associated with their beliefs or values. This intervention is accentuated how to stimulate the change of beliefs related to the Elaboration Likelihood Model (ELM) of persuasion about the processes, which are responsible for attitude change [17]. This model explains that the different processes along the elaboration continuum can influence the attitude. Accordingly, high motivation and abilities to reckon are required in order to process high efforts of influencing attitudes. Some of the variables that influence attitudes include: the number of information processing activities, the perceived personal relevance or the importance of the communication and message repetition. All of the variables mentioned are the basis used to encourage, motivate, and stimulate the participants along the 5 sessions of FPE intervention in the current study.

According to the results the caregivers’ attitudes have changed because the main activities in this FPE program may improve all attitude components by sharing experience and discussing information together among the participants who have the same problems in every session. Related to this statement, based on the conceptualization of attitudes [18], individuals are evaluated as favourable or unfavourable of the new sources of information compared with previous or other information. Thus, after receiving the information, they have the opportunity to critically decide about the best ways to remove a negative belief to be a positive belief and attitude as
the stimuli to open their mind. This is also related to the Calgary Family Intervention Model (CFIM) focusing on promoting, improving and sustaining effective family functioning in three domains: cognitive, affective and behavioural as parts of attitudes. It is believed that the most profound and sustaining change occurring is family’s belief (cognition) [19].

The advantages of the current intervention are the experiences that encourage self-introspection. Thus, after identifying that some families have had the same problems, they could avoid thinking that is their own problems this intervention could be considered as guidance to make decisions together in treating patients.

The unique chance for the participants to socialize, share experiences and extend social networks is provided in a group approach to psycho-education [20], [21].

IV. CONCLUSIONS AND RECOMMENDATIONS

The intervention of family psycho-education program (FPE) has a significant influence to increase family caregivers’ attitudes including affective, cognitive and behavioural to care for patients with schizophrenia in Balinese culture. The partnership between practitioners with participants and families needed as an approach in the family psycho-education. The combination of teaching-learning process is effective to encourage the participants in order to critically consider regarding the patients’ recovery and gain all of the benefits from this intervention. The sample was acquired from 1 of the primary health centre in Bali with a small number of samples that might be difficult to generalize.

The intervention only focuses on the family caregivers with schizophrenic patients, which cannot be generally applicable to other mental disorders. It is a limitation of the study. Thus, for future studies regarding the family psycho-education can also involve beliefs, burdens and others related variables. The similar intervention is also important to be developed in various countries and cultures. The intervention needs to be introduced and socialized for practitioners.

In summary, the FPE attitude booklet can be employed as a guideline to enhance the families’ attitude and consequently promote quality of life to the patients without being isolated. Thus, families have important roles and responsibilities to achieve the goals by increasing positive attitudes toward care for schizophrenic patients. The program needs to be continued, considered and extended with the longer times, larger samples and areas by collaboration between government policy and other decision makers.

ACKNOWLEDGMENTS

The authors would like to acknowledge STIKES Bali and DIKTI (Directorate General of Higher Education of Indonesia) for the financial support to this study. Considerable thanks go to Bali Mental Health Hospital and Abiansemal 1 Primary Health Center of Badung regency, Bali province of Indonesia, which provided the place and participants for the intervention of the study.

REFERENCES