



Culturally Adapted Psychoeducation among Family Caregivers of Schizophrenic Clients: A Scoping Review

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Abstract

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BACKGROUND: As psychoeducation was originally developed from Western, this intervention should be integrated with a culture to obtain effective outcomes. However, how culturally adapted psychoeducation on family caregivers of schizophrenic client developed in the previous studies has not been systematically documented.

AIM: The purpose of this review was to map culturally adapted psychoeducation in the previous studies.

METHODS: This scoping review followed Arksey and O'Malley approach. Inclusion criteria including family caregiver, culture, psychoeducation, and schizophrenia. Non-primary and non-experiment studies, non-English language, and non-free articles were excluded from the study. Advanced search technique used keywords family caregiver, culture, psychoeducation, schizophrenia on CINAHL, PubMed, and PsycInfo databases. Screening was done by checking duplication, title, and abstract. Full text of relevant articles was read in detail to select eligible articles. Selection results were described in the PRISMA flowchart. Data were analyzed after these were extracted and resumed on the table.

RESULTS: A total of eight studies were included in this review. More than half of articles used randomized control trial but these studies did not conduct follow-up. Most of studies were in Asia (6) and it conducted in the outpatient department (6). Almost all studies modified multifamily group psychoeducation with culture theories. The longest duration of intervention was 12 months. Multidiscipline health professional delivered the intervention and most of them were psychiatrist. Coping was the most family caregiver outcomes in reviewed studies.

CONCLUSION: Limited studies were obtained in various ethnics and ways. Further studies need to measure effectiveness of the intervention in long-term effect.

Introduction

Schizophrenia is one of the severe and chronic mental illnesses. According to DSM V, schizophrenia is two or more symptoms such as delusion, hallucination, disorganization speech, catatonic behavior, affective flattening, avolition, and alogia that arise during 1 month. Then, it continuous persists for at least 6 months [1]. In the same year, the prevalence of schizophrenia in various countries ranged from 0.21% to 0.24% [2]. Even though the number of this prevalence is not quite high, the disease has become a concern of the entire mental health organization because of its negative effects.

People with schizophrenic might have functional dysfunction caused by brain disorder. Review from 104 papers study showed that people with schizophrenia experienced disability in psychosocial function, mental function, and activity limitation or restriction. From all of functions, psychosocial function is more experienced than others. Moreover, the disease can relapse that impact on high cost because of rehospitalization [3].

Therefore, the disease is included in one of the global burden diseases [4].

Taking into account various things, mental health policy has shifted from hospital-based care to community-based care since 1960. The World Health Organization has recommended this policy for various countries in the world in 2001 [5]. It means that caring for client with schizophrenia is more focused on the community than hospital as it would increase mental health in a community and decrease relapse [6]. However, the lack of mental health services in the community [7], especially in developing countries, has resulted in the role of the family being crucial as an extension of nurses in caring for clients with schizophrenia.

A family is two or more individuals who are joined because of certain ties such as blood relation or marriage [8]. In a family, there is a family member who cares voluntarily other family members who are sick that is known as a family caregiver [9]. Family caregiver can help client with schizophrenia in terms of fulfill daily activities and treatments [10] in various level of assistance either partially or fully.

Caring for clients with schizophrenia has both positive and negative effects for family caregivers themselves. On the one hand, caring for client with schizophrenia can cause increase relationship, responsibility, efficacy, spirituality, and self-growth [11]. On the other hand, it can causes physical problems such as fatigue, lack of sleep, headache; psychological problems for instance depression and others; and socioeconomic problems [12]. However, studies had showed that family caregivers of client with schizophrenia more experienced psychosocial problems [13], [14]. Indeed, these effects depend on family caregivers' coping [15], [16], severity of clients' symptom [13], [17], or stigma [18].

Unresolved psychosocial problems faced by family caregivers' have impacted on high emotional expression, such as frequent criticism or over involvement [19]. All of these causes low quality of care provided by family caregivers to schizophrenic clients [20]. Furthermore, it results on relapse and rehospitalization [21], [22] that consequence on high cost incurred by both the family and the government [23].

Role of family caregivers is crucial while caring schizophrenic client, so they must be involved in mental health services. Professional mental health services need to provide appropriate intervention for family caregiver. Studies have proved some interventions to overcome problems of family caregivers caring for schizophrenia [24]. From some these interventions, psychoeducation is one of the interventions supported by many evidence [25].

Psychoeducation is a structured and systematic program provided by mental health professional which includes providing information about illness and how to adapt with the problems during caring [26]. Through psychoeducation, family caregivers of schizophrenic clients will be offered information related to the disease and its treatments. Moreover, they will be offered skill training to adapt with stressor situation during caring. Through this program, family caregivers are expected capable to care client with schizophrenia.

Psychoeducation was originally developed from Western countries [27], [26], [28]. Although this intervention has robust evidences, applications of it on different culture background are still necessary further investigation. For instance, one of the studies has conducted to evaluate effectiveness of the multifamily psychoeducation group on 34 Australian and 25 Vietnamese. Result showed that this intervention decreases burden of Australian but it did not decrease burden Vietnamese significantly. The difference cultural background might be correlated with this result [29] since culture is set of values, belief, attitudes, and behaviors shared by a group of people and communicated from one generation to the next [30]. Furthermore, it influences how individual thinks and behaves [31]. Thus, psychoeducation should be modified systematically according to certain group culture including language,

belief, and norm. It is well known as a culturally adapted psychoeducation [32].

Some studies have conducted culturally adapted psychoeducation for family caregivers of client with schizophrenia but it was still doubt. For example, one study investigated relevant psychoeducation for Korean family caregiver and this intervention improves their coping and empowerment [33]. Another study attempted to develop a cultural appropriate psychoeducation program for Chinese population but the result had not addressed most of the important cultural issues related to mental illness [34]. Therefore, the question is how they developed culturally adapted psychoeducation for family caregivers of client with schizophrenia.

How previous studies developing culturally adapted psychoeducation for family caregivers of client with schizophrenia are crucial to be investigated since it will offer an understanding of which way is appropriate for future studies. However, the previous studies related to its intervention have not been documented clearly. Hence, the purpose of this review is to map previous studies of culturally adapted psychoeducation for family caregivers of schizophrenia clients including type of study, intervention of culturally adapted psychoeducation, and outcomes.

Methods

The scoping review method used in this review follows the Arksey and O'Malley approach [35]. This method consists of five stages, namely, identifying the research question, identifying relevant studies, study selection, charting the data, and collating, summarizing, and reporting the result. The problem question in this scoping review is how research on culturally adapted psychoeducation for family caregivers of schizophrenic clients has been carried out. Sub-questions arise in planning this scoping review (Table 1).

Table 1: List of research questions and operational definitions

| Research questions | Operational definitions |
|---|--|
| What types of research that has been used in the previous research? | Primary research: Quasi-experiment RCT |
| How cultural-based psychoeducation has been carried out in the previous research? | Cultural-based psychoeducation intervention: Setting (hospital/community) Theories/model approach Content Session and duration Provider (health professional) Receiver (ethnics) |
| What are outcomes that have been carried out in the previous research? | Health outcomes Positive Negative |

RCT: Randomized control trial.

Searching strategy for relevant study

Before searching for relevant articles, eligibility criteria and databases were determined. Eligible

articles reviewed were assigned by inclusion criteria and exclusion criteria. Inclusion criteria were set by population, content, and context (PCC approach) consisted of family caregiver population, culture and psychoeducation concept, and schizophrenic context. Non-primary research, nonexperiment studies, non-English language, and restricted articles were excluded. Furthermore, the databases in this scoping review were assigned. These were CINAHL, PubMed, and PsycInfo. The last process was searching strategy that was done through three stages:

Stage one

In this stage, the terms used developed from the research questions and key concept definitions for searching articles were set [35]. This review used major terms based on population, content, and context (PCC approach) including family caregiver population, culture and psychoeducation concept, and schizophrenic context. From the major terms, other terms were searched through MeSH and the synonym thesaurus. Furthermore, the Boolean term “OR” and Boolean term “AND” were used (Table 2).

Table 2: PCC grid for searching strategy

| PCC | Major term | Alternate term | Syntax |
|------------|------------------|---|--|
| Population | Family caregiver | Family caregiver* Spouse caregiver* Carer* informal caregiver* unpaid caregiver* non-formal caregiver* lay caregiver* | Family caregiver* OR Spouse caregiver* OR Carer* OR informal caregiver* OR unpaid caregiver* OR non-formal caregiver* OR lay caregiver* OR parent caregiver |
| Content | Culture | Culture* belief* customs cultural background traditional indigenous native race ethnic* ethnicity tribe* | AND Culture* OR belief* OR customs OR cultural background OR cultural relativism OR traditional OR indigenous OR native OR race OR ethnic* OR ethnicity OR tribe* |
| | Psychoeducation | Psychoeducational, psycho-education, psycho-educational | AND Psychoeducation OR psychoeducational OR psycho-education OR psycho-educational |
| Context | Schizophrenia | Schizophrenia* Schizophrenic disorder* Severe mental illness psychosis | AND Schizophrenia* OR Schizophrenic disorder* OR severe mental illness OR psychosis OR mental disorder OR delusion OR hallucination |

Based on the syntax obtained, searching articles were carried out from each database with restrictions on abstract available and English language. After collecting the articles, these were exported to the endnote reference manager. These articles were screened by removing duplicate articles and sorted by reading abstract. Then, irrelevant articles were discarded by identifying title, population, and abstracts.

Stage two

In this stage, abstracts were read and keywords were identified from 10% of the relevant abstracts carried

out. When new terms were not found, articles searching were stopped. However, the keywords or index terms were revised when different terms were found. After that, searching was continued comprehensively using keywords or index terms that had been revised.

Stage three

In this stage, appropriate articles and keywords traced through bibliography of abstracts and full papers. Then, those relevant articles were searched by Google Scholar search engine. If articles cannot be found by this way, authors were contacted.

Study selection

The articles selection was done through certain strategies and well-organized process. In this review, studies selection was done based on pre-determined inclusion and exclusion criteria. The screening process follows the flow of the ScR PRISMA diagram (Figure 1), including searching for articles through databases and additional sources, after that checking for duplicate articles and discarding duplicate articles. From the remaining articles, the relevant articles were checked through the title and abstract, then, the irrelevant articles were discarded. Furthermore, the full text of the relevant articles was read and the eligible articles were carried out. Those articles that meet the criteria were included in the review.

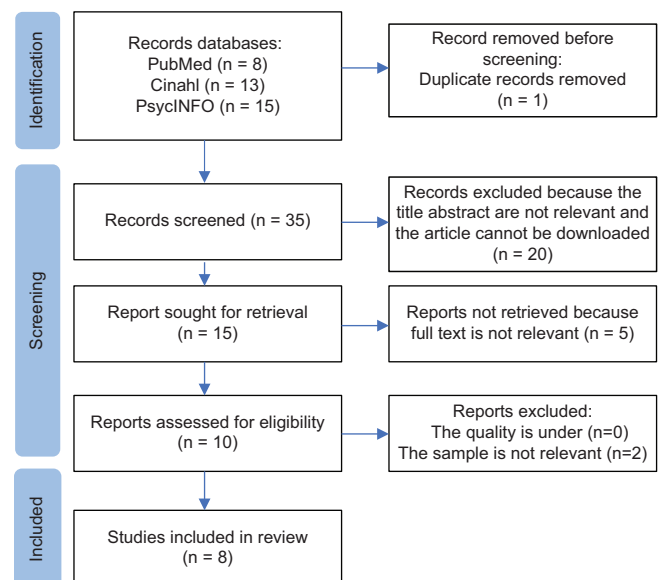


Figure 1: Data processing flowchart

Quality appraisal process

The selection involved two people on the team independently. When there was a discrepancy in determining of the articles, an agreement was made by two people in the team. If there was still no agreement, a third person outside the team is involved.

Data extraction and analysis

The next stage is to map key items based on information obtained from eligible articles. In the extraction stage, the data sources that are appropriate with the objectives and research problems are summarized logically by tables with the Excel database program. First, a draft table is made, then tested and revised as needed during the data extraction process. The table includes authors, year of publication, country, purposes, samples, method, intervention, and outcome.

Results

Literature search/study

At the beginning of articles searching, 36 articles are found in the databases. Then, duplication articles were checked. There was one duplicate article, so the remaining articles were 35. Of these, articles were screened by title and abstract and 20 articles were excluded from the study. Furthermore, 15 articles were retrieved for full-text review and five articles that were not relevant were excluded from the study. Then, 10 articles were remaining and two were excluded. Last, articles remaining that met inclusion criteria were eight articles.

Study characteristics

A total of eight studies were included in this review. Of these, five articles were RCT, one was quasi-experiment without control group, and two articles were quasi-experiment with control group. Studies were conducted in the USA (four studies), Canada (one study), Japan (one study), Egypt (one study), and Pakistan (one study). Races included in studies were Chinese-American, Japanese, Egyptian, Pakistan, Korean, Chinese, Tamil, Mexican-American, and Latino. Setting was outpatient (six studies), inpatient (one study), and in the community (one study).

Culturally adapted psychoeducation implementation

Psychoeducation provided for family caregiver of client with schizophrenia was varied. Health professional offered the intervention were psychiatrist, social worker, psychologist, nurse, and occupational therapist. Psychoeducation approach mostly used multifamily group psychoeducation model developed by McFarland, and others such as Anderson and Fallon. Culture adapted approach used explanatory models, cultural exchange theory, and the tenets of strength-oriented approaches. Most of psychoeducation was delivered through face to face either for single or group.

Receiver included family caregiver and schizophrenic client or family caregiver only or patient only. Media used were lecture, discussion, video, leaflet, and workshop. The longest duration of intervention was 12 months (two studies) while the shortest was 2 months (one study). The most frequent session was 24, but the least was 10 session. Duration each session was 1–2 h. Psychoeducation was included education about schizophrenia and skill to overcome problem. Content of culturally adapted was changing attitude including belief and norm. One study focuses on the keys adaptation including language, concepts, family, communication, content, cultural specific norm, and context. Only three studies did follow up: Two studies 3 months follow-up, and one study 4, 8, 12, 18, and 24 months.

Output of studies

Positive outcomes were quality of life, social adjustment, social functioning, coping skill, family empowerment, knowledge, family well-being, family warmth, social support, treatment satisfaction, and service use. Negative outcomes were burden, anxiety, perceived criticism, stigma, depression, family rejection, expression emotion, medication adherence, medication compliance, frequent hospitalization, and severity symptoms. Outputs of the previous studies were objected both for family caregiver and patients with schizophrenia. Most of output for family caregiver was burden followed by coping and stigma. In terms of patient, output about symptoms was the highest followed by social function and quality of life.

Discussion

The purpose of this review was to identify the previous study about culturally adapted psychoeducation for family caregivers with schizophrenic clients. Psychoeducation has been proved as a robust intervention for family caregiver caring for schizophrenia. However, application of this intervention for family caregiver of schizophrenic client with different culture background needs to be investigated further to increase their acceptance. How the previous studies developed culturally adapted psychoeducation for family caregiver of schizophrenic client have not been known clearly.

Eight articles presenting culturally adapted psychoeducation for family caregivers on schizophrenic clients have been found. According to the reviews of those articles, most of studies were done in Asian such as Chinese, Japan, Korean, Tamil, Indian, Egyptian, and Pakistan. This is probably Asia is the largest continent in the world. However, culturally adapted

| Author/Year/Title | Ethnics | Method | Setting | Term | Provider | Theory approach | Session/ duration | Content | Delivery/media | Receiver | Follow-up | Output | Result |
|--|-------------------------|-------------------------------|--|--|---|--|---|--|----------------|--|-------------------|---|--|
| Kung et al. (2012) [36] Pilot Study of Ethnically Sensitive Family Psychoeducation for Chinese-American Patients With Schizophrenia | Chinese-American | Quasi-experiment with control | Outpatient clinic/day treatment, USA | Multifamily group and single family group psychoeducation | Clinician Psychiatrist Psychologist | Family psychoeducation model developed by Anderson (1986) MacFarlane's problem-solving multifamily group (2002) | 3 months 12 sessions 1x/week 2 h/session | Sharing; Caregivers' strength and life satisfaction Impact mental illness on caregiver problematic behavior and rule cause and treatment communication skill emotional need of patient patient's marriage and child-bearing dealing with negative symptom relapse prevention community resource making meaning and spiritual | Face to face | Patient with schizophrenia Caregiver | 3 months | Patient: 1. Patient symptom 2. Level functioning and community 3. quality of life Caregiver: 1. Family life 2. Burden 3. Social support 4. Perceived causes of Mental illness caregivers' rejection of patients 5. Perceived criticism | Patient symptomatology and quality of life, and caregiver knowledge of the illness, treatment and community resources, and social support improved significantly |
| Shirashi et al. (2019) [37] Effectiveness of the Japanese standard family psychoeducation on the mental health of caregivers of young adults with schizophrenia: A randomized controlled trial | Japanese | RCT | Outpatient department mental hospital, Japan | Japanese standard model of family psychoeducation (SM-FPE) | Psychiatrist Clinical psychologist Nurse Occupational Therapist social worker | Multifamily psychoeducation McFarland | 2 months 16 sessions (2x/week within 8 weeks) 45 min/ educational session 60 min/ group session | Education session: Etiology, symptom, treatment, communication, respond social Group session: Problem-solving approach | Face to face | Patient with psychotic | 10 weeks 14 weeks | Patient: Patient's function Caregiver: 1. Anxiety 2. Burden 3. Family attitude 4. Stigma scale | SM-FPE plus TAU did not significantly improve all caregivers' individual outcomes. Caregivers of chronic patients as significant improvements of their overall mental health state at 10 weeks, which indirectly continued until 14 weeks. Preliminary evidence indicates that the intervention is effective by increasing illness knowledge and reducing family burden. |
| Barrio and Yamada (2010) [38] Culturally Based Intervention Development: The Case of Latino Families Dealing With Schizophrenia | Latino/Mexican-American | RCT | Community mental health centers (CMHCs), California, USA | Culturally based Family intervention for Mexican-Americans (CFIMA) | Social workers of Mexican origin – Master level Latino bilingual | Multifamily group psychoeducation culture theory on explanatory models, cultural exchange theory, and the tenets of strength-oriented approaches | 4 months 16 sessions 1x/week 2 h /session | Cultural assessment (9 sessions) Cultural accommodation (4 sessions) Cultural integration (3 sessions) | Face to face | Patient with schizophrenia Family member | 3 months | Family: 1. Knowledge of the illness, 2. Family burden, 3. Family well-being, 4. Family warmth, 5. Expressed emotion, 6. Coping, 7. Social support, 8. Treatment satisfaction Patient: 1. Symptom severity, 2. Quality of life, 3. Family warmth, 4. Medication compliance, 5. Service use | |

(Contd.,)

| Author/Year/Title | Ethnics | Method | Setting | Culturally adapted psychoeducation | | | | Result | | | | | |
|--|-------------------|-------------------------------|--|---|---|--|--|--|--|--|------------------------------|---|--|
| | | | | Term | Provider | Theory approach | Session/ duration | | Content | Delivery/media | Receiver | Follow-up | Output |
| Kopelowicz et al. (2012)[39]: The Ability of Multifamily Groups to Improve Treatment Adherence in Mexican-Americans With Schizophrenia | Mexican-Americans | RCT | Inpatient psychiatry outpatient CMHC Los Angeles, USA | Adherence-focused multi-family group (MFG-A) | Psychiatrists, psychologists, social workers, (bilingual and bicultural clinicians with at least 1 year of experience conducting family groups) | Planned behavior theory McFarlane's multi-family group (MFG) | 12 months 24 session 2x/month 90 min each | "Joining" sessions multifamily "Survival Skills" educational workshop multifamily group sessions: introducing discussion about schizophrenia, teaching problem-solving skills obstacles to maintaining medication adherence changing attitude: Beliefs regarding the importance of taking medication Alter subjective norm: Correct patients' inaccurate beliefs and opinion Psycho educational group sessions conducted in the Korean language included a variety of culturally oriented educational techniques The first part of each session was conducted in lecture form and was followed by question and answer and discussion. the second, individual supportive sessions Engagement (1 session); psycho-education (3 sessions), communication enhancement training (4 sessions) problem-solving skills training (4 sessions), termination (1 session). Cultural adaptations were: 1. Written in the classical Arabic language 2. Educational component was adapted from El Shafey 3. Arabic information leaflets 4. Only 6 months 5. Individual session 6. Spiritual/faith healer prior to seeing a psychiatrist | Face to face Lecture Video Workshop | Patient with schizophrenia Key relatives | 4, 8, 12, 18, and 24 months. | 1. Medication adherence 2. Frequent hospitalization | Increased adherence accounted for one-third of the overall effect of treatment on the reduced risk for psychiatric hospitalization. |
| Shin (2004)[33] Effects of Culturally Relevant Psychoeducation for Korean-American Families of Persons with Chronic Mental illness | Korean | Quasi-experiment with control | Outpatient mental health clinic in New York City | Family psychoeducational intervention | Social worker (Korean speaking, specializing in mental health) | Psychoeducational programs designed by Falloon (1985), Berheim and Lehman (1985), and Anderson et al. (1986) McFarlane et al. (1995) | 2.5 months 10 session 1x/week 90 min each | | Face to face: Lecture discussion curriculum manual | Mother or the father from each family of individuals with chronic mental illness | Not available | 1. Stigma devaluation 2. Family empowerment, 3. Coping skills | The psychoeducational group members significantly decreased stigma, improved empowerment during family crises, and increased coping skills |
| Khalil et al. (2018) [40] Impact of a culturally adapted behavioral family psychoeducational program in patients with schizophrenia in Egypt | Egyptian | RCT | Psychiatric outpatient clinic of the Institute of Psychiatry, Ain Shams University Hospitals, Cairo, Egypt | Behavioral family psychoeducational program (BFPEP) | Researcher (psychiatrist) | Psychoeducational program by El Shafey | 6 months 14 sessions 1x/week in 2 months 2x/month in 2 months 1x/3 weeks in 2 months | | Individual face to face | Patient with schizophrenia Key relatives | Not available | Positive and negative symptom drug attitudes quality of life social functioning | There was a significant different of BFPEP for all measures |

(Contd.,)

| Culturally adapted psychoeducation | | Culturally adapted psychoeducation | | Culturally adapted psychoeducation | | Culturally adapted psychoeducation | | Culturally adapted psychoeducation | | | | | |
|--|-------------------|------------------------------------|--|---|----------------------------|---|--|--|----------------------|---|---------------|--|--|
| Author/Year/Title | Ethnicity | Method | Setting | Term | Provider | Theory approach | Session/ duration | Content | Delivery/media | Receiver | Follow-up | Output | Result |
| Husain et al., (2020) [41] Culturally adapted family intervention for schizophrenia in Pakistan: A feasibility study | Pakistan | RCT | Outpatient departments of three large participating hospitals in Karachi, Pakistan | Culturally adapted family intervention (CuFI) | Trained research clinician | Previous work on culturally adapted psychosocial intervention in Pakistan | 2.5 months 10 sessions 1/week (8 weeks) 2x/week (2 weeks) 40-60 min/ session | The integrated culturally adapted intervention comprises: 1. Psychoeducation 2. Cognitive behavioral skills training for stress management, coping, and problem-solving. 3. Crisis intervention and suicide risk management 4. Relapse prevention education and support The key adaptations: Language, concepts, family, communication, content, cultural specific norm, context | Face-to-face leaflet | Caregivers/ relatives of client with schizophrenia | Not available | Positive and negative syndrome Global Assessment of Functioning Insight Depression Symptom | Eighty percent of those who initially provided consent were willing to be randomized and the quality of CuFI was rated as good to excellent by 85.7% of participants. |
| Chow et al., (2010) [42] Multi-family psycho-education group for assertive community treatment clients and families of culturally diverse background: A pilot study | Chinese and Tamil | Quasi-experiment without control | Mount Sinai Hospital Assertive Community Treatment Team (MSHACTT); Toronto, Ontario, Canada) | Multi-Family psycho-education group (MFIG) to an assertive community treatment team developed | Trained MSHACTT team in | McFarlane approach to MFG | 12 months 12 session 1x/month | The sessions were slightly modified to meet the specific needs of ethnocultural, addressing issues such as stigma and frustration over the long-term pharmacological management. Two sessions were dedicated to listening to concerns, and talking about the Canadian mental health system Montage and drawings were also used to help participants express how family life might have changed | Face to face | Chinese and Tamil clients of severe mental illness and their family members | Not available | Social adjustment | These changes included the family members' perceived burden of the client, family members' satisfaction with their own physical health, mental health, health in general |

psychoeducation needs to be developed and proven in other ethnic as each ethnic has its own uniqueness, especially related to mental health.

Theory and model underlying culturally adapted psychoeducation were psychoeducation and culture. In the previous studies, multifamily group psychoeducation developed by McFarlane was the most theory used than others. Multifamily psychoeducation is a therapeutic process aimed for families or family caregivers to help them increasing knowledge and skills to deal with distress while caring for ill family members. This intervention was done in group session. Through group session, family caregivers are expected to share experiences with others [26]. Being intervention which culture sensitive, the intervention needs incorporate with culture theory. Culture adapted approach in this articles review used explanatory models, cultural exchange theory, and the tenets of strength-oriented approaches.

Content psychoeducation was knowledge about schizophrenia and skill to cope with problems while caring. The keys culture adaptation including language, concepts, family, communication, content, cultural specific norm, and context. It was aimed to change attitude including belief and norm. Cultural adaptation refers to the systematic modification from protocol intervention including culture, language, and context that will be appropriate with client's culture [32]. Intervention that appropriates with family caregivers' culture will be more convenient for improve their behavior to be better in caring client with schizophrenia because culture influences how individual thinks and behaves and each group of people has different cultural background.

The previous studies on culturally adapted psychoeducation for family caregivers of schizophrenic clients have different sessions and durations. The longest duration of intervention was 12 months [39], [42] while the shortest was 2 months [37]. The most frequent session was 24 [39], but the least was 10 sessions [33]. Duration of each session was 1–2 h. The longer the intervention is given, the deeper understanding of the family caregivers.

Most of psychoeducation was delivered through face to face such as lecture, discussion, workshop through media video, or leaflet. Materials delivered directly by these ways can be effective. Of this, immediate respond between sender and receiver will be obtained. Sender can evaluate directly feedback of receiver, so she/he can improve the intervention quickly. However, obstacles of this way are time, energy, and funding.

The professional health providing culturally adapted psychoeducation was mostly multidiscipline including psychiatrist, nurse, social worker, psychologist, and occupational therapy. Those were the professionals who had experience in mental health, who had been

trained in psychoeducation, and who spoke in bilingual language. Psychiatrist was the most health professional offering the intervention among them as psychiatrist was one of the mental health professionals who have knowledge about schizophrenia and its treatment.

People who receive psychoeducation in these literature consisted of family caregiver and schizophrenic client or family caregiver only or patient only. Involvement schizophrenic client in the family psychoeducation intervention is more effective. The intervention will be successful if both family caregiver and their family member ill involve actively within the intervention. However, sometimes family caregivers might feel hesitate when they express their emotion feeling while caring. One study, which was conducted study in Japan, separated families and schizophrenic clients in the family group session of psychoeducation to avoid client's guilt to family [43].

The setting of the previous studies about culturally adapted psychoeducation for family caregivers on schizophrenic clients mostly was done in the outpatient department of hospital. It is a part of hospital that provides treatment and care for patients without stay overnight. Outpatient department was a place which was frequently visited by client and their relatives. Many clients with schizophrenia and their relatives come to this place for routine follow-up treatment. Thus, respondents who eligible with criteria were easier to be found.

Most of output for family caregiver was burden followed by coping and stigma. It is one important output because coping is effort to overcome excess stressor. Stigma also is a one of the important thing to evaluate because stigma might make depression feeling. Limitation of this review was lack of the databases. Therefore, possibility of the related articles has not been reviewed. However, these databases provide huge data from primary studies on health and nursing.

Conclusion

Studies on culturally adapted psychoeducation were still limited. Although most of studies were RCT done in the outpatient department of hospital of developing countries in Asia, few of studies did follow up. Therefore, long-term effect could not be found. Studies were mostly developed from multifamily family group psychoeducation adapted to culture from some culture theories by modifying language and content through cultural specific norm and belief. Intervention was offered with various content, session, duration, and media. Most of intervention was delivered by face to face. Most of output for family caregiver was burden followed by coping and stigma.

Future studies need to conduct in other ethnics. Furthermore, the culturally adapted psychoeducation should be more effective, simple, practical, and easy to conduct. Therefore, it is necessary to test the effectiveness of the intervention related to content, media, ways to deliver, and long-term effect.

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