

A literature review: The Effectiveness Psychoeducation Therapy To Treatment Psychological Disorder In Patients Chronic Diseases

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ABSTRACT

Background: The treatment process of chronic diseases that lasts a long time can cause psychological problems because of the boredom they cause. Psychological disorders can cause patients won't continue treatment, so that an intervention is needed to treatment the disorder. Psychoeducation therapy is a relevant therapy for dealing with psychological disorders because it directly affects the patient's psychology.

Objective: To review the journals that explain the effectiveness of psychoeducation interventions to treatment psychological disorders in patients with chronic diseases.

Methods: The database used in this review are studies published in PubMed, EBSCOhost, Scopus, and Google Scholar. Critical appraisal in research that appropriate the inclusion criteria will be conducted dependently by the author and adviser using the JBI Critical Appraisal Checklist for Quantitative Research.

Results: A total of ten articles were reviewed. The majority of the ten articles reviewed proved that psychoeducation therapy was effective in treatment psychological disorders with $p < 0,05$, but there was 1 variable from the articles that was not proven effective with $p > 0,05$.

Conclusion: Psychoeducation therapy is effective in treating psychological disorders in patients with chronic diseases although with different duration and non-uniform follow-up.

Keywords: *Anxiety, Chronic diseases, Depression, Psychoeducation, Stress*

INTRODUCTION

Chronic disease is a disease that occurs for more than 6 months and lasts continuously with the healing process of the disease taking a long time.¹ One of the health challenges currently being experienced by the world is the existence of chronic diseases that cause death by 50% in all WHO regions, except in Africa where it occurs less at 25%.²

Indonesia is one of the developing countries that has experienced an increase in disease prevalence since 2013. The top three of the 10 causes of death in Indonesia are dominated by chronic non-communicable diseases with details of stroke 21.1%, cardiovascular disease 12.9%, as well as diabetes and its complications 6.7%.³

Chronic diseases are permanent, tend to be prolonged, and are not easily cured.⁴ The treatment process for chronic diseases that lasts a long time can cause feelings of hopelessness, boredom, and increased financial burdens that must be borne. This problem is closely related to the psychological disorders experienced by the patient.⁵ Psychological disorders that are experienced continuously will make a person feel that his life is useless, lazy to undergo therapy, and there is no enthusiasm for life so that it can reduce the quality of life and self-efficacy in people with chronic diseases.⁶

One of the efforts that can be done to treatment psychological disorders is psychoeducation therapy. Psychoeducation

therapy is an activity of providing education, helping individuals to be able to develop existing sources of support, to helping individuals to improve their coping skills by using the concept of a group, family, or individual approach.⁷

Based on these problems, the reviewers formulated the following review questions: how is the effectiveness of psychoeducation nursing interventions compared to standard intervention for treating psychological disorders in patients with chronic diseases. The aim is to determine the effectiveness of psychoeducation nursing interventions to treatment psychological disorders in patients with chronic diseases.

METHOD

Relevant articles were obtained from PubMed, EBSCOhost, Scopus, and Google Scholar databases using main keywords “psychological distress”, “chronic disease”, and “psychoeducation” as well as additional keywords. The inclusion criteria for this literature review are: it is an experimental and quantitative study, the treatment given is nursing intervention in the form of psychoeducation therapy, the dependent variable is psychological disorders (stress, anxiety, and depression), respondents in research journals are patients with chronic diseases, published results the research was published in the 2015-2020 range, and used English and Indonesian. The exclusion criteria used were psychoeducation therapy in the

family. The results of the selection of articles are presented in Figure 1.

RESULTS AND DISCUSSION

Active Psychoeducation Therapy

Active psychoeducation therapy approach is reported to have a significant relationship to treatment psychological disorders in patients with chronic diseases. Research conducted in dialysis units from five hospitals in Jordan involving 105 hemodialysis patients found that 51 respondents who were given psychoeducation therapy were shown to be significantly able to manage depression more effectively than Cognitive Behavioral Therapy (CBT) ($p=0.00$).⁸

Similarly, a multicenter Non-Randomize Control Trial (Non-RCT) study in breast cancer patients conducted at three German outpatient cancer centers (Freiburg, Leipzig, and Mainz) found that there was a significant reduction in fear/anxiety about progression/recurrence ($p=0.003$).⁹

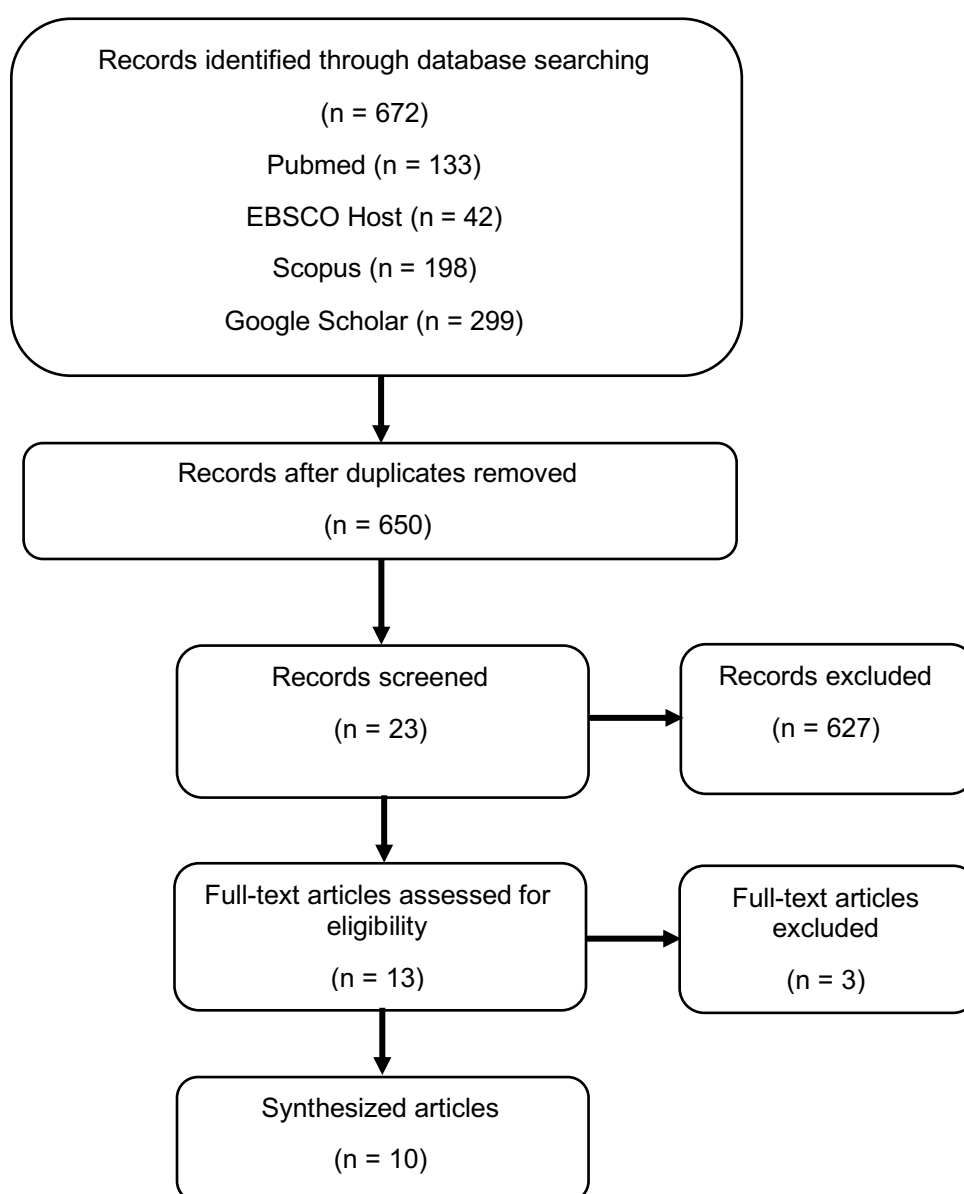


Figure 1. PRISMA Flow Diagram

These results are not in accordance with research conducted at the Imam Khomeini Hospital in Iran. The result of this study is that psychoeducation therapy did not significantly reduce the patient's anxiety score ($p= 0.185$). However, the decrease was significant for depression scores ($p<0.001$) and HADS ($p=0.008$).¹⁰

Active psychoeducation therapy is carried out in various settings (places). The place of implementation does not significantly affect the outcome of the effectiveness of the therapy. A study involving hepatitis C patients in an outpatient clinic and lasting for 6 months proved to be effective in treating depression ($p=0.003$).¹¹ These results are

not much different from a non-RCT study conducted at an Iran Hospital on Type 2 Diabetes Mellitus patients which explained that psychoeducation therapy was effective in increasing knowledge and management of mental health ($p = 0.001$).¹² Likewise, psychoeducation therapy is also quite effective when done online at home. However, the Randomized Control Trial (RCT) study in Chronic Obstructive Pulmonary Disease (COPD) patients did not include the results of different trials.¹³

Combination Psychoeducation Therapy (Active and Passive)

A therapeutic approach that uses a combination of active and passive psychoeducation can reduce depression, stress, and anxiety in Chronic Kidney Disease (CKD) patients with significant results that are not much different from active psychoeducation therapy. The study took place at the Hajj Surabaya Hospital in 60 respondents with 30 respondents in the intervention group and 30 respondents in the control group. The results showed that psychoeducation therapy for 2 weeks was effective ($p = 0.010$).¹⁴ These results are in line with the non-RCT study in Bandung involving the Garuda and Babakan Sari Health Centers on 74 tuberculosis patients with 37 respondents in the intervention group and 37 respondents in the control group. The result of combination psychoeducation therapy for 1 week has a significant effectiveness in

overcoming levels of stress, depression, and anxiety (mean=27.05405405).¹⁵

Based on Table 1, the results of this literature review have described the effectiveness of psychoeducation therapy to treat psychological disorders in chronic disease patients. The majority of the articles found said that there was an effectiveness of psychoeducation therapy to treatment psychological disorders. From a total of 10 articles reviewed, there is 1 article where the results of measuring anxiety scores are not significant, but the results of measuring depression scores and the total scores of depression and anxiety scores are significant. The majority of articles state that psychoeducation is effective in dealing with psychological disorders.

Psychoeducation therapy is a therapeutic program that focuses on active communication of information and can provide coping skills.¹⁶ Psychoeducation therapy contains elements such as increasing knowledge about the disease, teaching techniques to understand symptoms, increasing support, and meeting other patients who can provide the feeling of sharing is related to what he feels.¹⁷

There is no significant difference between the results of research conducted offline and online.

Table 1. Article Reviewed

Title	Research Design	Setting	Characteristics of Respondents	Intervention	Result
Efficacy of Minimal Home-Based Psychoeducative Intervention Versus Usual Care for Managing Anxiety and Dyspnoea in Patients with Severe Chronic Obstructive Pulmonary Disease: A Randomised Controlled Trial Protocol.	North Zealand, Denmark (Department of Pulmonary Disease at Nordsjællands Hospital, Hillerød Hospital or Frederiksund or Helsingør Health Centre).	There are control and intervention groups. Week 0 there is a pre-test for all respondents. In the intervention group, the 1st & 2nd week of psychoeducation therapy was carried out then followed by telephone booster sessions at the 3rd to 6th week. The control group was not given any intervention from the 1st to the 6th week. In the 7th week of the second group, the first follow-up (post-test) will be carried out by filling out a questionnaire. On the 15th week, both groups underwent a second follow-up (post-test) by filling out a questionnaire.	Inclusion criteria: 1. COPD patients 2. Hospital and Anxiety and Depression Scale-Anxiety (HADS-A) subscale score < 8. Exclusion criteria: 1. HADS-A subscale score < 8. 2. Psychiatric diagnosis and lung cancer.	Psychoeducation therapy given to the intervention group resulted in a decrease in the HADS-A score in individuals between the initial stage and the 2nd follow-up stage.	
Exploring Effectiveness of Crisis Counseling and Psychoeducation in Relation to Improving Mental Well-Being, Quality of Life and Treatment Compliance of Breast Cancer Patients in Qatar.	The RCT. National Center of Cancer Care and Research, NCCCR (Main Hospital in Qatar).	Inclusion criteria: 1. Breast cancer (stage I, II, and III) and local advanced diseases ranging from ages 20 to 65 years. 2. Metastatic breast cancer. Exclusion criteria: 1. Having physical or psychiatric flaws.	There are control groups, crisis counseling intervention groups, and psychoeducation interventions. Before being given intervention, the three groups will complete the Depression Questionnaire Anxiety and Stress Scale (DASS-21) and Cancer Quality of Life Scale (QLQ-C30). Intervention group will be given intervention. Each of the two intervention groups consisted of a total of 6 sessions in 60-90 minutes given in 12 weeks. The control group is not given any intervention. After being given intervention, the three groups will complete the questionnaire. In 18 months, follow-up was carried out by filling the two questionnaires.	The results of the Wilcoxon Signed Rank Test pre-test post-test from the psychoeducation intervention group obtained results (P < 0.001). When Post Hoc analysis using Bonferroni was obtained in the psychoeducation intervention group more effectively reducing the DASS-21 score for all items than the crisis counseling intervention group, and the control group (P < 0.001).	

Table 1. Continued

Effect of Psycho Education on Depression and Anxiety Symptoms in Patients on Hemodialysis.	Non-RCT.	RS Khomeini at Sari (Iran).	Imam	Exclusion criteria 1. Experience new stress. 2. Change of dialysis schedule. 3. Other psychiatric treatments. 4. History of previous psychiatric disorders. 5. Has a new stressor for the previous six months except those related to kidney disease. 6. Not present in all educational sessions.	There are control groups and interventions. Before the intervention, the two groups did a pre-test by filling out the Hads questionnaire. The intervention group will be given psychoeducation therapy. The control group is not given any intervention. The two groups did post-test by filling out the Hads questionnaire.	Psychoeducation therapy reduces depression scores ($p < 0.001$) and HADS ($p = 0.008$) significantly. This decrease is not significant for the patient's anxiety score ($p = 0.185$).
Psikoedukasi Menurunkan Tingkat Depresi, Stres, dan Kecemasan pada Pasien Tuberkulosis Paru.	Non-RCT.	Public Health Center Garuda and Babakan Sari.		Inclusion criteria 1. Lung tuberculosis. 2. Adults. 3. Can read and write.	There are control groups and interventions. Before intervention, all respondents filled the Depression Anxiety Stress Scale (DASS) questionnaire. The intervention group will be given psychoeducation therapy. The control group is not given any intervention. After 1 week of intervention, respondents filled out the questionnaire (post-test).	The results of the analysis using the T-Test: Paired Two Sample for Means, the mean value of the stress level of the intervention group was 27.05405405 while the control group was 47.72972973.
Research Paper: Psychoeducation on Improving Mental Health Literacy and Adjustment to Illness in Patients With Type 2 Diabetes: An Experimental Study.	Non-RCT.	Iranian Hospital		Inclusion criteria: 1. Type 2 DM patients for at least 3 years. 2. Minimum high school diploma. 3. Maximum age of 65 years.	There are control and intervention groups. Prior to therapy, all respondents will do a (pre-test) by filling out The Mental Health Scale (MHLS) and Psychosocial Adjustment to Medical Illnesses questionnaires. After the pre-test, the intervention group was given an intervention with a total of 11 sessions for 1 hour. The control group was not given any intervention. Then, one month later, a post-test was conducted on both groups by filling out a questionnaire.	The results showed that the psychoeducation intervention significantly improved mental health literacy and adaptability in patients with type 2 diabetes ($p=0.001$).

Table 1. Continued

Efektivitas Psikoedukasi Menurunkan Tingkat Depresi, Kecemasan Dan Stres Pada Pasien Baru Ckd Menjalani Hemodialisis.	Non-RCT.	Haji Surabaya Hospital.	Inclusion criteria: 1. Hemodialysis patients < 3 months. 2. Patients aged 18-60 years.	There are control and intervention groups. Before starting the intervention, both groups filled out the Depression Anxiety Stress Scale (DASS) questionnaire. In the intervention group, the psychoeducation provided was in the form of active and passive psychoeducation. The control group only received a standard explanation from the hospital. After 2 weeks of intervention, both groups will fill out the DASS questionnaire.	The results of the statistical test of the pre-test and post-test scores of the DASS questionnaire in the intervention group using the Wilcoxon Signed Rank Test obtained a p value of 0.000. While the results of the statistical test of the post-test value of the DASS questionnaire for the intervention and control groups using the Mann-Whitney U Test, the value of p = 0.010 was obtained.
Psikoedukasi untuk Meningkatkan Manajemen Diri Pasien Diabetes Mellitus Tipe 2 di Puskesmas Kebon Jeruk.	Non-RCT.	Public health center Kebon Jeruk, West Jakarta.	Inclusion criteria: 1. Patients with type 2 diabetes mellitus. 2. Minimum education of junior high school or equivalent. 3. Still actively check with the health center doctor. 4. Age between 35-80 years.	There is 1 intervention group Prior to the intervention, respondents were given a pre-test by filling out the Diabetes Self-Management Scale (SMDD) questionnaire. There are 3 psychoeducation interventions, namely the first session in the form of psychoeducation about the psychological aspects of Diabetes Mellitus. The second session is in the form of data transfer and Cognitive Behavioral Therapy (CBT), and the third session is mindfulness. Then a post-test was conducted by completing the SMDD questionnaire.	The results of the different Wilcoxon Signed Ranks Test showed that there was a difference between the pre-test and post-test groups as indicated by a significance value of p=0.42. This shows that psychoeducation is effective for improving self-management in people with type 2 diabetes mellitus.
An Effectiveness Study of Group Psychoeducation for Hepatitis C Patients in Community Clinics.	RCT.	Hepatitis C outpatient clinics at two major Texas university medical centers.	Inclusion criteria: 1. Hepatitis C Virus (HCV) patients. 2. Age 18 years. Exclusion criteria: 1. Current homicide/suicide. 2. Active psychosis.	There is an intervention group and a control group. In the intervention group, received psychoeducation where all group members gathered for 90 minutes twice a month for 6 months (12 meetings). The control group was not given any intervention.	Outcome the proportion of all patients with major depression had decreased (p = 0.003).

Table 1. Continued

<p><i>Psychoeducational Intervention for Breast Cancer Survivors: A Non-Randomized Multi-Center Pilot Study.</i></p>	<p>Non-RCT.</p> <p>Three outpatient cancer center sites in Germany (Freiburg, Leipzig, and Mainz).</p>	<p>Inclusion criteria: 1. Women with breast cancer or recurrence of the disease. 2. Mastectomy surgery</p> <p>Exclusion criteria: 1. Cancer diagnosis in the last 2 years. 2. Severe psychiatric or cognitive impairment.</p>	<p>There are intervention and control groups. All respondents will complete each of the PHQ-9 questionnaires for depression, CBI-D for self-efficacy, FoP-Q-SF for fear, SUK for social support, and QLH C30 for quality of life. After all respondents have filled in, the intervention group will be given a psychoeducation therapy intervention. The control group was not given any intervention. After 6 weeks, both groups will fill out the questionnaire again. Then 6 weeks after that, follow-up will be done.</p>	<p>The results showed a significant reduction in fear/anxiety about progression/relapse (p=0.003) On depressive symptoms, the significance value obtained was (P=0.04).</p>
<p>The Effectiveness of Cognitive Behavioral Therapy versus Psychoeducation on the Management of Depression among Patients Undergoing Haemodialysis.</p>	<p>RCT</p> <p>Renal dialysis units of five Jordanian hospitals.</p>	<p>Inclusion criteria: 1. Not receiving antidepressants. 2. Having a diagnosis of chronic renal failure and being on chronic dialysis for at least 1 year before the study.</p>	<p>There are psychoeducation groups and Cognitive Behavioral Therapy (CBT). In both groups, a pre-test was conducted by filling out the Hamilton Depression Rating Scale questionnaire. Then given therapy according to the group obtained. After that, the two groups will do a post-test by filling out a questionnaire.</p>	<p>The results using the independent sample t test showed a significant difference (p = 0.00).</p>

Source: Secondary Data 2015-2020

Based on research conducted offline, understanding psychological health and how to adapt to psychological disorders affects psychological health, especially depression in type 2 DM patients, this is due to low levels of mental health literacy and limited adaptation. So that with psychoeducation therapy can guarantee participation in the management of their own condition ($p = 0.001$).¹² Health Literacy (HL) itself as a potential facilitator or barrier to improving health outcomes.¹⁸ HL refers to more advanced skills to critically analyze and reflect on the information or means received so that it can be used to provide greater control over situations and events at hand.¹⁹

Other studies conducted offline also get significant results in overcoming psychological disorders. The results of each of these studies include ($p=0.00$, $p<0.001$, $p=0.003$, $\text{mean}=27.05405405$, $p=0.010$, & $p=0.04$).^(8·9·11·14·15·20) There is a study that only lists the results of the mean = 27.05405405, but there is no test of difference in the mean in the intervention group with the mean in the control group after being given the intervention. It is only informed that the smaller the mean value obtained, the better the patient's psychological condition.¹⁵ The mean difference test was carried out to determine the difference between the average values of one sample, two independent samples, and two paired samples, and also to determine the mean of independent multivariate.²¹

Another study found that psychoeducation therapy was also proven to be effective in improving psychological self-management in type 2 DM patients ($p=0.042$). This is because there are several stages in the research process that combine various aspects such as aspects of psychology, CBT, extracting information, and mindfulness.²² Mindfulness seeks to change an individual's relationship to stressful thoughts and events by reducing emotional reactivity and increasing cognitive judgment. Mindfulness also teaches individuals to be accepting, non-judgmental, and non-reactive when observing situations and thoughts.²³

In this review, there are journals that do not include the results of data analysis. This makes reviewers unable to prove whether online psychoeducation interventions are effective or not in overcoming psychological disorders. So that reviewers cannot know whether there is a difference in results between psychoeducation therapy that is carried out offline and online.¹³ There are differences between the two methods, but it is not clear which method is more effective. In offline therapy, there are aspects of the patient's physical presence that cannot be found online. This physical absence can be a fundamental problem online if the therapy given is therapy that uses the patient's body. While the advantage of online therapy is that it can create images of memory data so that if

the image of memory data related to the therapy process is lost, it can be returned again due to assistance with technology.²⁴

Differences in research results from one another can be caused by several factors such as the duration of therapy and short follow-up. This can be seen in one study that measured anxiety, HADS ($p=0.008$), and depression ($p<0.001$). Only in the anxiety score did not get significant results ($p = 0.185$).¹⁰ Duration affects the effectiveness of a therapy. This is evidenced by the results of research that long-term and long-term psychoeducation therapy are equally effective, but short-term psychoeducation effects are smaller than long-term ones.²⁵ The benefit of follow-up is to find out the recurrence as early as possible and see the patient's progress.²⁶ The intervention should be followed by a follow-up in order to know the follow-up to the success of the intervention.²⁷

CONCLUSION

The results obtained from this literature review indicate that the majority of psychoeducation therapy outcomes are effective in treating psychological disorders in chronic disease patients despite differences in duration and non-uniformity of follow-up. So it is hoped that medical personnel in conducting psychoeducation therapy can consider using a long duration and by doing follow-up. These efforts are expected to reduce psychological disorders in chronic disease patients more optimally.

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