

The Effect Of Group Supportive Therapy Toward Stress Levels Of Diabetes Melitus Patients In Puskesmas (Public Health Center) Lerep, West Ungaran , Semarang

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Abstract

Diabetes Mellitus (DM) ranks 6th as the cause of death. About 1.3 million people die from diabetes and 4 percent die before age 70. One of the psychological effects on patients suffering from DM is stress. The purpose of this study was to determine the effect of group supportive therapy on stress levels in patients with Diabetes Mellitus in the working area of Puskesmas Lerep. This study used a quantitative approach in a quasi experiment control group design, the research method used quasi-experimental. The type of design in this study was in the form of non-equivalent pre-test and post-test control group design. The population in this study was 40 patients with diabetes mellitus in Puskesmas Lerep. The number of respondents in the treatment group and the control group were 15 people respectively. The results of the study were analyzed by univariate and bivariate. The results showed that the stress level at the pretest in the control group and the intervention was mostly mild category, respectively 43.3% and 26.7%. Patients who experienced severe stress in the intervention group were 3.3%. The level of stress at post test in the intervention group was in normal category of 30%, while in the control group, the category was the light stress level of 40%. There were differences in stress levels before and after group supportive therapy given in the intervention group ($p: 0.001$). There were differences in stress levels before and after group supportive therapy given in the control group ($p: 0.066$). There is an influence of group supportive therapy on stress levels in patients with Diabetes Mellitus at Puskesmas Lerep ($p: 0.025$). It expects that group supportive therapy can be used as an alternative to decrease stress in people with diabetes mellitus.

Keywords: Group supportive therapy, Diabetes mellitus, Stress Level

Introduction

Diabetes Mellitus (DM) ranks 6th as the cause of death. About 1.3 million people die from diabetes and 4 percent die before age 70. Increased prevalence of Diabetes Mellitus (DM) is influenced by risk factors that can be modified /changed specifically due to lack of physical activity, excess weight and obesity (WHO, 2014).

Diabetes Mellitus (DM) if not treated accordingly can cause damage to various body systems, especially nerves and blood vessels, including increasing the risk of heart disease and stroke, neuropathy (nerve damage) in the feet which increases the incidence of foot ulcers, diabetic retinopathy, kidney failure, and the risk of death is twice that of non-diabetics, so good metabolic control is needed and keeping blood sugar levels normal.

Various conditions experienced by people with Diabetes mellitus can cause stress. Stress experienced by a person does not escape from the trigger factors of stress. According to Dwiyanti (2009), in general the factors that cause stress include the absence of social support for a person, lack of opportunity to participate in making decisions, environmental

conditions, unhealthy management, social interaction, personality type and experience. if the individual is exposed to these factors, moreover the individual does not have a good defense mechanism so that the individual is very vulnerable to stress

Supportive therapy is a therapy for psychotherapy in dealing with stress. This therapy uses psychological techniques that are tailored to one's needs. This therapy provides motivation for support so that patients are confident and provide education repeatedly to deal with the stress experienced by these people (Hidayat, 2013).

Methods

This study uses a quantitative approach in a quasi experiment control group design, the research method used is quasi-experimental. The type of design in this study is non-equivalent pre-test and post-test control group design. Respondents in this study were 30 DM patients in Lerep Health Center, divided into 2 groups: 15 people as members of the intervention group and 15 people as control groups with the following conditions:

The procedure for data collection is carried out in the following stages:

Measurement of stress levels (pretest) in both the control and intervention groups. After the pre-test, the intervention group was given supportive therapy for session 1 and session 2 groups, whereas in the control group any intervention was not given. 2. Provision of group support therapy in sessions 3 and 4, followed by measurement of stress levels (post test) in both the intervention group and the control group.

The results of the normality test as given are known that the results of the p-value for the quality of sleep pretest intervention and control were 0.030 and 0,000 respectively, and for posttest sleep quality the intervention and control were 0.463 and 0,000 respectively. Because p-value is not all greater than a (0.05), it is concluded that all data are declared to be abnormally distributed. Based on the results of the normality test data above to determine the difference in stress levels before and after group supportive therapy in the intervention and control groups using the Wilcoxon test, and to determine the effect of group supportive therapy on stress levels in people with diabetes mellitus in Lerep Village, the Mann Whitney test was used.

Results

1. Stress Level Overview before being given supportive therapy groups in the Intervention and control groups

Tabel 1. Frequency Distribution of Stress Levels before being given supportive group therapy in the Intervention group and the control group

Level of Stress	Intervention		Control	
	Freq	(%)	Freq	(%)
Mild	8	26,7	13	43,3
Moderate	6	20	2	6,7
Severe	1	3,3	0	0
Total	15	100	15	100

Based on table 1. it is known that the stress level at the pretest in the control group and the intervention group, mostly in the mild category.

2. Stress Level Description after being given supportive therapy groups in the Intervention and control groups

Tabel 2. Frequency Distribution of Stress Levels after being given supportive therapy groups in the Intervention group and control group

Based on table 3. it is known that the stress level at the post-test in the intervention group was the most normal (30%) and in the mild control

Level of Stress	Intervention		Control	
	Frequency	(%)	Frequency	(%)
Normal	9	30	1	3,3
Mild	4	13,3	12	40
Moderate	2	6,7	1	3,3
Severe	0	0	1	3,3
Total	15	100	15	100

group (40%)

3. Differences in Stress Levels Before and After Given Group Supportive Therapy in the Intervention Group

Tabel 3. Differences in Stress Levels Before and After Given Supportive Therapy in the Intervention Group

Group	Variabel	N	Z	p-value
Intervention Group	Pretest-Posttest	15	-3,424	0,001

Based on table 3, it can be seen that the Wilcoxon test results obtained $p = 0.001$ means less than the value of $\alpha = 0.05$ so it can be concluded that there are differences in stress levels before and after group supportive therapy was given in the intervention group.

4. Differences in Pre-Posttest Stress Levels in the Control Group

Tabel 4. Differences in Pre-Posttest Stress Levels in the Control Group

Group	Variabel	N	Z	p-value
Control Group	Pretest-Posttest	15	-1,841	0,066

Based on table 4, it can be seen that the Wilcoxon test results obtained $p = 0.066$ means less than the value of $\alpha = 0.05$ so it can be concluded there is no difference in stress levels before and after group supportive therapy in the control group.

5. Effect of Group Supportive Therapy on Stress Levels in Diabetes Mellitus Patients at Lerep Health Center 1

Tabel 5. Effect of Group Supportive Therapy on Stress Levels in Diabetes Mellitus Patients at Lerep Health Center 1

Group	Variabel	n	Z	p-value
Control- intervention Group	Posttest- Posttest	15	- 2,239	0,025

Based on table 5, it can be seen that the Wilcoxon test results obtained a value of $p = 0.066$ meaning less than the value of $\alpha = 0.05$ so it can be concluded that there is influence of group supportive therapy on stress levels in patients with Diabetes Mellitus at LerepPublic Health Center.

Discussion

Group supportive therapy is divided into 4 sessions with the objectives for each session as follows, namely session 1 with the aim of identifying family problems and support systems. Session 2 with the aim of utilizing a support system in the family. Session 3 uses the support system outside the family such as health workers and community leaders. Session 4 with the aim of evaluating sessions 2 and 3 whether or not each respondent can use the support system.

Family support and care from the people closest to people with diabetes mellitus provide comfort, attention, affection, and motivation to achieve healing by accepting his condition. Things that need to be considered in examining the effects of stress, which must be considered are the two factors that can offset the effects of stress. The first factor is the level of individual adjustment before experiencing stress or what is often called the ego power. Individuals who can adjust well and who have effective defense will handle stress better and are less likely to fall ill. The second factor is the social support that an individual has (ie family or individuals have good friends and that will help ease the burden of stress). Individuals who have more social support will not fall ill and will recover quickly if they fall ill (Yustinus, 2006).

Social support affects health and protects that person from the negative effects of severe stress. This protective function is only or especially effective if the person is experiencing

strong stress. In low stress there is little or no buffer working with two people. People with high social support may be less likely to judge stressful situations (they will know that there might be someone who can help them). People with high social support will change their response to sources of stress such as going to a friend to discuss the problem (Nursalam&Kurniawati, 2013).

Group therapy is a psychotherapy that is carried out by a group of patients together by discussing with one another led or directed by a therapist or trained mental health officer (Yosep and Sutini, 2016).

According to Heller, et al. 1997 in (Chin, Chan and Thomson 2006) research shows that group support is related to improving psychological functions where beneficial support is a process of active participation sharing various experiences, situations and problems focused on the principle of giving and receiving, applying skills, helping each other and developing individual knowledge (Hidayati, 2012).

The main goal of supportive group therapy is to support someone so that they can solve the problems they face by building relationships that are mutually supportive with others, increasing strength and skills in using coping resources, increasing one's ability to achieve independence as optimal as possible and increasing the ability to reduce distress subjective.

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