



## EMPOWERMENT OF THE HEALTH CADER IN IMPROVING THE QUALITY OF LIVING DIABETESI THROUGH PSYCHOEDUCATION

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### **Abstrak**

A preliminary study at the West Bogor Health Center revealed that diabetics had difficulty controlling their blood sugar even though they had taken medication. They also sometimes feel frustrated because various efforts have been made but blood sugar does not drop. Saturation is sometimes felt because of long and continuous treatment. One effort to reduce the psychological impact is psychoeducation which is expected to improve the quality of life for people with diabetes. Psychoeducation is a strategy to provide information about the disease and how to treat it, exercise behaviors in dealing with problems, how to control tension and stress, and strategies to overcome patient behavior problems (Andren, 2005). Psychoeducation in diabetics includes 1) education about DM management; 2) counseling about solving problems related to the impact of DM disease; 3) exercises about stress management and problem-solving. Psychoeducation: 1) Providing training to health cadres; 2) cadre mentoring conducts training with the same stages to DM clients; 3) monitoring diabetics through Posbindu. Community Service activities can make health cadre knowledge 100% good, diabetics experience a good increase in knowledge (25% to 56.3%), good attitude (43.7% to 56.3%) and good quality of life (62.5% to 93.8%), maintaining good behavior (77.8%). This is supported by the level of education of health cadres 80% graduating from high school and high commitment from diabetics to adhere to management.

Keywords: psychoeducation, diabetes, quality of life

Reference : 11 pieces (2004-2013)

## A. Background

According to the MOH, (2010) The higher the life expectancy of Indonesian society, the greater the disease epidemiological transition. As a result of their transition greater disease epidemiology, the health problems switching from infectious diseases to degenerative diseases. Based on the results of health research (Riskesdas) in 2007, a degenerative disease increased from 41.7% in 1995 to 59.5% in 2007.

According to Brunner & Suddarth, (2001), a chronic degenerative disease is a chronic disease that most affect the health and productivity of a person where the progression of the disease will increase with increasing age of the patient. other than that lifestyle changes also affect health status. These changes, among others in terms of food choices and unhealthy living habits. Degenerative diseases, among others, cardiovascular (heart and blood vessels) as well as hypertension, diabetes mellitus, and cancer. Of some existing degenerative diseases, diabetes

mellitus is a disease increased the number of patients is quite high.<sup>1</sup>Slamet Suyono, 2002.

Currently the number of people with Diabetes Mellitus (hereinafter referred to as DM) is globally continues to increase every year. In 2009 there were approximately 230 million cases of diabetes in the world and is expected to continue to increase every year. Indonesia ranks 4th in the world. Number of patients with Type II Diabetes Mellitus in Indonesia according to data from the WHO in 2010, reaching 21.3 million. <sup>2</sup>MOH, 2011

The incidence of DM in West Java province in 2012 was 32.1 / 10,000 inhabitants and in 2013 was 23.5 / 10,000 population. Despite the relative tendency to decline, but the incidence of diabetes in the city of Bogor on the incidence of DM provincial average is 41.4 / 10,000 population in 2012 and in 2013 reached 47 / 10,000 population. In the city of Bogor, the incidence of diabetes in Puskesmas Bogor Barat is in Puskesmas Merdeka as much as 27% and existing health centers Kelor Gang 30%.

PHC Merdeka and Gang Moringa has made every effort to provide health services to the clients of DM, including health checks, blood sugar checks, and counseling services in Posbindu program. However, preliminary studies were performed on some patients with DM revealed that DM client is difficult to control their blood sugar taking medication. They also sometimes feel frustrated because various attempts have been made but the blood sugar does not fall down. Saturation is sometimes perceived as a long treatment and continuously.

Diabetes mellitus if not treated properly can cause various complications in organs such as the eyes, kidneys, heart, blood vessels and nerves. These complications may result in short span of life, disability and increasing economic burden for the client and his family<sup>3</sup>Lukman& Sorensen's, 2000.

Psychological effects in people with diabetes include the patient will feel anxious about their illness. While the social and environmental impacts usually occur when people experience the physical

complications of Diabetes Mellitus the social environment will be disturbed and unable to participate in social activities or withdraw from social interactions and the patient will experience low self-esteem. For patients with Diabetes Mellitus, good diabetes control is needed to be able to improve the quality of life and prevent complications that can disturb the comfort of his life.

<sup>4</sup>Nurrahmani, 2012

The quality of life of patients with Diabetes Mellitus is feeling satisfied and happy to be living in general, especially living with diabetes. Each individual has a different quality of life depends on each individual in addressing the problems that occur in him. If you deal with it positively it will better the quality of life, but it is different if negative to deal with it will be bad anyway the quality of life<sup>5</sup>Midgley, 2005.

Several programs to improve quality of life for DM clients have been implemented such as health education, DM gymnastic activities, seminars, healthy way and so on. However, psycho-education efforts

have not been done to reduce the psychological impact that quality of life can be improved DM client. Psychoeducation is the provision of information about the psychological aspects of the disease management and patient <sup>6</sup>Hasanat, 2010. Psychoeducation intervention program is a strategy providing information about the disease and how to treat them, exercise behavior in dealing with the problem, how to control the tension and stress, as well as coping strategies patient behavior <sup>7</sup>Andren, 2005

Lukens and Mcfariane cites several studies that show that psychoeducation intervention can reduce the symptoms of mental health problems, in particular to reduce anxiety, depression. Additionally psychoeducation can reduce the time course of acute disease, can improve quality of life, knowledge, self-esteem, the atmosphere in the family, or marriage, and can improve adherence and satisfaction with treatment <sup>6</sup>Hasanat, 2010

After participating in the program psychoeducation client

expects to be disciplined in following the steps management of Diabetes Mellitus such as a balanced diet, regular exercise according to the conditions, monitoring blood sugar, oral medications and insulin, and control doctor regularly <sup>8</sup>Nabyl, 2009.

## B. Aim

1. Cadre; Expected health cadres have the ability to provide psycho-education and training with the approach of monitoring the behavior of the DM client periodically, resulting in a permanent change in the DM client behavior in maintaining health.
2. DM client; After the activity is carried out psychoeducation can presumably shows a picture:
  - a. DM client knowledge regarding management programs such as taking medication, diet and exercise
  - b. DM client attitudes about management programs such as taking medication, diet and exercise
  - c. Stress level of type II DM client

- d. Implementation of effective stress management
- e. Compliance DM client perform management programs such as taking medication, diet and exercise
- f. Quality of life of type II DM client in Bogor

### C. Method

Characteristics of type II DM client can join psychoeducation program are:

1. Age 20-59 years
2. Lack of understanding about the management of DM
3. Less able to perform stress management
4. Has a tendency to increase blood sugar when experiencing stress

### Stages of Implementation of psychoeducation

This activity involves two partners are partners I was Kebon Kalapa RW 06 and RW 12 Sub II partners Cilendek West. Posbindu health cadres in RW 06 Kebon Kalapa there are five cadres and six cadres in RW 12 Sub Cilendek West. The stage is based psychoeducation applied previously by **Dwi Putri Parendrawati (2009)**. This community

service activities beginning with the training of health workers on psychoeducation in the DM client. Before training begins, measurement of knowledge related to the management cadre DM client. After training for three days, health volunteers were given the opportunity of 2-3 weeks to establish mastery of the material. Then do the mentoring by our team of Nursing faculty Prodi Bogor, in preparation for the cadres do outreach to the DM client in the working area. After cadres do outreach to the DM client, measurements were taken back about the knowledge of the management of DM. The second measurement results regarding knowledge management cadre of DM showed an increase compared to the first.

The next stage, following the DM Client health education carried out by health workers and accompanied by a team of lecturers Prodi Nursing Bogor for 2 days. Extension materials include knowledge about penatalaksanaan DM, relaxation techniques and troubleshooting methods. Before the extension was measured knowledge, attitudes, behavior, quality of life and blood sugar when the DM client in RW 6 Kebon Kalapa and RW 12 Sub

Cilendek West. On the first day of health education, the DM client was asked to implement a variety of things to do and avoid in the management of diabetes. Monitoring sustainability management is also done by the team of Nursing Prodi Bogor through Posbindu activities according to the schedule set by the Health Center. Education about healthy lifestyles for DM client also performed either individuals or groups. DM client by 1-2 to apply knowledge about its management of DM in their everyday lives. In the next month to evaluate the training program goal achievement. The second measurement is done for the knowledge, attitude, behavior, quality of life and blood sugar when the DM client in RW 6 Kebon Kalapa and RW 12 Sub Cilendek West.

Knowledge (Pre Test):				
Well	0	0	2	33.3
Enough	4	80	4	66.7
Less	1	20	0	15
Knowledge (Post Test):				
Well	0	0	6	100
Enough	5	100	0	0
Less	0	0	0	0

## RESULT AND DISCUSSION

Table 4.1 Overview Characteristics of Health Cadre in Partners I and II 2015

characteristic s	partners I		partners II	
	n	%	n	%
Gender :				
Man	0	0	0	0
woman	5	100	6	100
Level of education				
SMP	1	20	1	16.7
High School	4	80	5	83.3

Table 4.2 Overview Characteristics Age, Height, Weight, Blood Sugar When (Pre-

characteristic s	n	mean	median	modus
<b>Partners I, RW 06:</b>				
Age	16	53	51	50
Height	16	153	154	150
Weight	16	59	54	50
GDS (Pre)	16	233	230	180
GDS (Post)	16	183	182	140
<b>Partners I, RW 12:</b>				
Age	9	58	60	60
Height	9	155	155	155
Weight	9	62	58	52
GDS (Pre)	9	350	364	280
GDS (Post)	9	219	200	140
Post) on the DM Client Partners I and II 2015				

Table 4.3 Overview Characteristics of Gender, education level, living together, history of diabetes, family income, health insurance on the DM Client Partners I and II 2015

characteristics	partners I		partners II	
	n	%	n	%
Gender :				
Man	2	12.5	2	22.2
woman	14	87.5	7	77.8
Level of education				
SD	4	25	3	33.3
SMP	5	31.3	5	88.9
High School	7	16	0	0
College	0	0	1	11.1
Living together :				
Own	2	12.5	0	0
Grandchild	14	87.5	9	100
DM history:				
There is	7	43.8	4	44.4
There is no	9	56.2	5	55.6
income:				
Less than UMR	13	81.3	5	55.6
More than UMR	3	18.7	4	44.4

Table 4.4 Overview of Knowledge, Attitude, Behavior and Quality of Life in the DM Client Partners I and II 2015

characteristic s	n	mean	median	modus
<b>Partners I, RW 06:</b>				
Age	16	53	51	50
Height	16	153	154	150
Weight	16	59	54	50
GDS (Pre)	16	233	230	180
GDS (Post)	16	183	182	140
<b>Partners I, RW 12:</b>				
Age	9	58	60	60
Height	9	155	155	155
Weight	9	62	58	52
GDS (Pre)	9	350	364	280
GDS (Post)	9	219	200	140

## DISCUSSION

### A. Health Cadre Training and Mentoring

The measurement results knowledge of health cadres in RW 6 Kebon Kalapa the first (pre-test) showed enough knowledge that four people (80%), while for health workers with less knowledge that one person (20%). After being given the training, all health workers have good knowledge that is 5 people (100%). Similarly, in RW 12 Cilendek West Village, Before the training and mentoring, health cadres with a good

knowledge ie 3 (33.3%), while for cadres with sufficient knowledge that four people (66.7%). After being given the training, all health cadres have good knowledge ie 6 (100%).

This gives an idea that knowledge can increase health worker after following the training and mentoring activities. Increasing this knowledge can also be supported by the educational background of health cadres. Of 5 people in Kebon Kalapa health volunteers, mostly 80% (4) had high school and 1 (20%) junior



high school education. From 6 Cilendek health cadres in the West, the majority of 83.3% (5) and one high school educated people (16.7%) junior high school education.

#### B. DM Client Knowledge

DM client in the village of Kebon Kalapa RW 6 of 16 people, initially having a good knowledge of 8 (50%), while the knowledge of good and less of each four people (25%) and (25%). At the end of the activity, knowledge of DM client has a good knowledge increases, ie 9 (56.3%), whereas insufficient knowledge that 7 (43.7%). At the end of the activity, there is no DM client that has less pengetahuan as at the initial stage. This suggests that counseling, mentoring, monitoring and evaluation was conducted in the DM client in the village of Kebon Kalapa DM can increase the client's knowledge. DM client in RW 12 Village West Cilendek totaling 9 at the initial stage has a good knowledge of which 7 (77.8%), while with enough knowledge that two people (22.2%). After the activity ends, the DM client that has a good knowledge of which 7 (77.8%), while with enough knowledge that two people (22.2%). This indicates that the

activities of the team of Nursing Bogor Prodi able to maintain the DM client knowledge that knowledge on the management of diabetes is sufficient. This is supported by the DM client education level in RW 12 Cilendek West Village more than half SMP ie 5 (55.6%) and college 1 (11.1%).

#### C. DM Client Attitudes and Behavior

At the beginning of the event, in RW 6 Kebon Kalapa good attitude DM client that is 9 (56.3%), while the attitude of less that 7 (43.8%). After the end of the activity, 9 (56.3%) continued to have a good attitude, and 43.7% (7) still behave poorly. Similarly happened in RW 12 Sub Cilendek West. At the beginning until the end of the activity, the DM client that has a good attitude, namely 7 (77.8%), while with a bad attitude that is 2 people (22%).

RW 6 Kebon Kalapa, at the initial stage good attitude DM client that is 9 (56.3%), while the attitude of less that 7 (43.8%). At the end of the activity, 9 (56.3%) had a good attitude, and 43.7% (7) still behave poorly. In RW 12 Sub Cilendek West at the beginning until the end of the activity, a good DM client behavior that 7 (77.8%), while for the bad behavior that is 2 people (22.2%).

This shows that the activities carried out to maintain the attitude and behavior of the DM client that has both remain to be good until the end of the activities, although it has not been able to change the attitudes and behavior of the DM client is not good to be good. This phenomenon can occur due to many factors that influence attitudes and behavior. A good knowledge alone is not able to change the attitudes and behavior of people within 1-3 months. Need to do a follow up in the form of even more interactive activities to be able to change the attitudes and behavior of such DM client DM client involved in gymnastics activities or the creation of a special group DM DM as a forum to exchange experiences on the DM client's lifestyle

#### D. DM Client Quality of Life

At the beginning of activities of the quality of life in the DM client RW 6 Kebon Kalapa in good physical dimensions are 9 people (56.3%), while for the bad that 7 (43.8%). In the psychological dimension, better quality of life for as many as 10 people (62.5%). As for the bad social dimension, namely 7 (43.8%), both are 9 people (56.3%). For both environmental dimensions are 10 (62.5%), good environmental

categorically that 6 (37.5%). Quality of life is a good overall DM client 10 (62.5%) and 6 persons (37.5%).

At the end of the activity, the majority of the DM client quality of life seen from the physical dimensions of 15 (93.8%) good, good psychological dimensions of 14 (87%), the social dimension of either 15 (93.8%), good environmental dimension 15 (93.8%). Overall, 93.8% (15 people) DM client at the end of the activity kualita have a good life.

In general, for 3 months this activity is done DM client's quality of life in villages Kebon Kelapa RW 6 can be increased from 10 (62.5%) to 93.8% (15 people) DM client at the end of the activity kualita have a good life. This happens because most of the DM client felt his life kualitan improvement of the physical, psychological, social and environmental. From the physical dimensions, the DM client feel better quality of life increased from 9 (56.3%) at the initial stage to 15 (93.8%). In the psychological dimension, most of the DM client feel better quality of life increased from 10 (62.5%) to 14 (87%). Most of the DM client who feel there is an increased quality of life of both the social dimension at the initial stage as

many as 9 people (56.3%). To 15 (93.8%).

As for the DM client that is located in RW 12 Cilendek West Village, at the initial stage, most of the DM client quality of life seen from the physical dimensions of 8 (88.9%) good, good psychological dimensions of 7 (77.8%), good social dimension 7 (77.8%), good environmental dimension 9 (100%). Overall, 100% (9) DM client at the initial stage have a good life kualita

At the end of the activity, the majority of the DM client quality of life seen from the physical dimensions of 9 (100%) good, good psychological dimensions of 8 (88.9%), the social dimension of either 9 (100%), good environmental dimension 9 (100%). Overall, 100% (9) DM client at the end of the activity kualita have a good life.

Community service activities in the form of psychoeducation on a DM client that is done for 3-4 months an impact on improving the quality of life in the DM client RW 12 Sub Cilendek West. This is reflected in improved quality of life perceived by the DM client both from the physical, psychological, social and

environmental. At the beginning of the event, the DM client who felt the quality of life both from the psychological dimensions of 7 people (77.8%), and at the end of the activity increased to 8 people (88.9%). At the end of the activity, the entire client DM 9 (100%) feel the quality of life to be good on the physical, social and environmental.

#### FOLLOW UP PLAN

Based on the results of the activities of psychoeducation on the client DM in RW 6 Kebon Kalapa and RW 12 Sub Cilendek West, our team of lecturers Prodi Nursing Bogor Poltekkes MoH duo sees the need to do the follow-up of activities that are more interactive in order to change the attitudes and behavior of the client DM as DM client engage in exercise activities or the establishment of a special group DM DM as a forum to exchange experiences on the DM client's lifestyle. It is our hope this activity in the future dating be continued and improved so that the attitude and behavior of the DM client can be even better.

## CONCLUSIONS AND RECOMMENDATIONS

### A. Conclusion

1. DM client psycho-education activities have been carried out for 3-4 bulanmeliputi cadre training and assistance, health education, monitoring and evaluation of the management of diabetes mellitus.
2. Training of cadres have been able to increase the knowledge of health cadres in RW 6 Kebon Kalapa and RW 12 Sub Cilendek West. Once trained, the entire cadre kesehatandi RW 6 Kebon Kalapa having good knowledge ie 5 (100%). Similarly, in the West Cilendek Village RW 12, after being given the training, all health cadres have good knowledge ie 6 (100%).
3. Health counseling, monitoring and evaluation of the management of diabetes have been able to increase the knowledge of the DM client. Of the 16 people in the DM client RW 6 Kebon Kalapa, at the end of the activity has a good knowledge increased from 8 people (50%) to 9 (56.3%), whereas insufficient knowledge that 7 (43.7%) , After the

activity ends in RW 12 Sub Cilendek West, DM clients who have a good knowledge of which 7 (77.8%), while with enough knowledge that two people (22.2%).

4. This psycho-education activities have not been able to change the attitudes and behaviors related to healthy lifestyles premises DM client. At the beginning and end of the activity, in RW 6 Kebon Kalapa good attitude DM client fixed at 9 (56.3%), while the attitude of less than 7 (43.8%). In RW 12 Sub Cilendek West at the beginning until the end of the activity, the behavior of both fixed DM client that is 7 people (77.8%), while for the bad behavior that is 2 people (22.2%).
5. Psycho-education activities can improve the quality of life of the DM client. Overall, in RW 12 Kebon Kalapa, 93.8% (15 people) DM client at the end of the activity has a good quality of life. As for the DM client that is located in RW 12 Cilendek West Village, 100% (9) DM client at the end of the activity kualita have a good life.

## B. Suggestion

Based on the results of psycho-education activities at DM client in RW 6 Kebon Kalapa and RW 12 Cilendek West Village, our team Bogor polytechnic lecturers Prodi MoH Nursing duo gave some advice to the DM client attitudes and behavior can be even better, among others:

1. Motivating the DM client to walk at least 30 minutes every day.
2. Opt-in activities include gymnastics DM client DM
3. DM form a special group as a forum to exchange experiences on the DM client's lifestyle.
4. Problem Solving provide consulting services to help overcome health problems, psychological and other problem

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