

## **EFFECTIVENESS OF USING THE SMART ENERGY METHOD (REIKI) AS AN ALTERNATIVE PREVENTIVE PATIENT HYPERGLYCEMIA DIABETES MELLITUS TYPE 2**

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### **Abstract**

DM affects many people in the world and is one of the biggest problems for the nation. Some treatments ranging from medical to non-medical (alternative actions) have been carried out by each individual to be able to recover from the disease. Alternative and complementary therapies are therapies that are in great demand by people throughout the world, not least in Indonesia because they are relatively cheap and safe. One alternative therapy that can be done is by the "Smart Energy" Method. Therefore, research on the use of the "Smart Energy" Method as a preventive alternative for reducing blood sugar levels in DM patients is very important. The purpose of this study was to find out and evaluate the effectiveness of using the "Smart Energy" Method as a preventive alternative for reducing blood sugar levels in DM patients. The design used in this study used a pre-experimental method with the one-group pretest-posttest design (before and after) approach. Each research subject becomes control of himself. The research was conducted at the DM Rehab Club. Taking blood samples as well as carrying out the therapy and evaluation is done on the same day. The duration of therapy is  $\pm 20-30$  minutes and carried out for 30 days with 2 methods namely direct therapy (therapist and respondent are in the same place) and long distance (therapist and respondent are not in the same place) but the principle of therapy remains the same. The implementation of Reiki therapy is assisted by a certified Reiki therapist. There was a significant difference between the examination of blood sugar levels before and after Reiki therapy. The average value of blood sugar levels before therapy is 294 mg / dl while after 30 days of therapy 266,635 mg / dl is obtained. There is effective use of the "Smart Energy" Method as a preventive alternative for reducing blood sugar levels in DM patients.

**Keywords: DM, Smart Energy, REIKI**

### **1. INTRODUCTION**

Diabetes mellitus (DM) or many people call it diabetes alone or sugar pain, is one of the chronic diseases, where disruption of the chronic metabolic system due to the pancreas does not produce enough insulin or the body cannot use insulin produced effectively (1). DM is a common disease and affects many people in the world and is one of the biggest problems for the nation. The results of the Riskesdas (Basic Health Research) study from the Indonesian Ministry of Health in 2013, more than 12 million Indonesians suffer from type 2 diabetes. Type 2 diabetes usually occurs in people who have excess weight, lack of physical movement and inactive lifestyle. Usually in adults but now also in children. DM is also the cause of 4.6 million deaths. In Indonesia, the incidence of DM is expected to experience a twofold increase in 2030 (1). According to the 2001 Household Health Survey (SKRT), there was a prevalence of DM at 15 years of age of 1.5-2.3% with prevalence in rural areas is lower than urban areas and the proportion in Java and Bali is 7.5%. Based on global study data, it shows that the number of people with DM has reached 366 million in 2011, and because of many factors including one treatment or certain conditions, this disease is

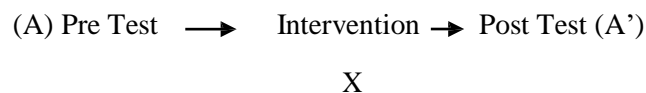
expected to increase to 522 million by 2030 (2). Some treatments ranging from medical to non-medical (alternative actions) have been carried out by each individual to be able to recover from the disease. Based on the International Diabetes Federation in 2011, Health expenditure for DM patients has reached a fantastic number of

465 billion USD, or around 6.3 trillion rupiah. Alternative and complementary therapies are therapies that are in great demand by people throughout the world, including in Indonesia. Besides the medical costs. issued not much, also felt very not cause side effects. One alternative therapy that can be done is by Method “Smart Energy”. “Smart Energy” is the latest reiki method created by Reiki Masters from research results. Smart Energy offers a concept of energy that is easier, more practical and effective, so there is no need to bother getting reiki energy from nature. Smart Energy is then implemented by a new reiki technique called Universal Reiki. Reiki therapy had existed in the mid 90's and was later developed by the Indonesian Reiki Association which was founded in 2010. Based on several studies, there are benefits of Smart Energy (Reiki) which can provide wound healing effects, increase repitalization of dermis tissue, reduce sensation of pain and anxiety , the mood becomes good and comfortable and the length of stay is shorter. However, in Indonesia, research related to these therapies against DM is still very little, thus providing a rationale for researchers to prove whether there is effectiveness in the use of smart energy methods (Reiki) as an alternative treatment for DM which is to reduce blood sugar especially in patients with DM Type 2.

## 2. MATERIALS AND METHODS

The design used in this study uses a pre-experimental method with the one-group pretest-posttest design (before and after) approach. Every research subject become control of himself.

Scheme 1 : Research Design



### **Information:**

A = Blood glucose levels of type 2 DM patients with standard therapy before being given Reiki

A' = Blood glucose levels of type 2 DM patients with standard therapy after being given Reiki

X = Changes in blood glucose levels before and after intervention

The research was conducted at the DM Rehab Club. Taking blood samples and implementing them. Therapy and evaluation are carried out on the same day. The duration of therapy is ± 20-30 minutes and carried out for 30 days with 2 methods namely direct therapy (therapist and respondent are in the same place) and long distance (therapist and respondent are not in the same place) but the principle of therapy remains the same. The implementation time is adjusted to the day of activity at the DM club. Therapy is guided by Reiki therapists who are experienced and certified. Direct therapy is carried out on Mondays, Wednesdays and Fridays while in addition to these days therapy is carried out remotely. Evaluation of blood sugar levels during, general conditions and body weight was carried out at each direct therapy visit. The tools

in this study, namely a blood glucose level examination tool with Glucotest, and a filler sheet (The questionnaire is filled out by the researcher through interview and observation techniques).

The questionnaire consists of patient data about the characteristics of the respondent (weight), type of treatment from the hospital (giving OHO), the type of complementary therapy used besides Reiki, the value of blood glucose levels before and after the intervention  
 Technical procedures: The room used is given aromatherapy and music that shows, introduces itself to the respondent, explains the subject matter of the research, procedures / implementation, time, benefits of research, and the rights of respondents. All respondents still get standard therapy from the hospital. Reiki therapy is carried out for 30 days, starting from the first meeting with the respondent, Asking for the willingness of the patient to be the research respondent and signing the concent informed consent. Interviews and measurements are carried out to obtain the necessary data as stated in the research data. Blood glucose levels when examined using glucotest were carried out before and after therapy while paying attention to the hours of breakfast and the type of food consumed. Weight was weighed using a fixed weighing instrument provided and then carried out with Reiki therapy.

### 3. RESULT AND DISCUSSION

Complementary therapy can be used as an alternative treatment / cure for an illness. Complementary therapy when linked to nursing is defined as a solution to healing problems that are selected and used in nursing practice to improve health, obtain healing and quality of life, life balance, and the scope of holistic care <sup>(4)</sup>. One of the complementary therapies as "Smart energy" therapy is Reiki. The way smart energy / Reiki therapy works is because there is life energy flowing into the body. Life energy nourishes the cells and organs of the body so that they function properly. When the flow of life energy is damaged, the function of one organ decreases. Life energy is damaged if there are negative feelings or thoughts about ourselves and things cause a disease <sup>(9)</sup>. In a relaxed state, energy will flow maximally into the body and stimulate the organs of the body to make a balance <sup>(10)</sup>. Reiki energy is intelligent, "smart" and subtle energy <sup>(6)</sup>. Healing occurs through a process of stimulating damaged cells and tissues to return to their normal function <sup>(6)</sup>. Based on the results of the study, Reiki is useful for treating chronic pain (11), accelerating wound healing <sup>(12)</sup>, increasing hemoglobin levels.

Table 1. Distribution of Characteristics of Respondents at DM Rehabilitation Club (April-May 2018 (n = 40))

No	Characteristics of Respondents	total	%
1	OHO used		
	Triggers insulin secretion	19	45.0
	Insulin sensitivity enhancer	18	47.5
	Combination	3	7.5
2	Weight		
	Non obesity	23	57.5
	Obesity	17	42.5
3	Stress level		
	Not Stressed	32	57.5
	Stressed	8	42.5

Based on table 1. distribution of characteristics of respondents in the DM Rehabilitation Club showed that respondents who used OHO types triggered more insulin secretion, namely 19 respondents (45.0%). Distribution based on the weight status of respondents who were not obese was also relatively more, namely 23 respondents (57.5%), while the stress level of respondents almost dominated the respondents with a non-stressful condition as many as 23 respondents (57.5,9%).

Table 2. Distribution of Blood Glucose Levels at Pre and Post Respondents at DM Rehabilitation Installation Club (April-May 2018 (n = 40))

No	Variable	Mean	SD	Minimal-Maximum	95%CI
1	KGDS Pre	294.40	59,29	200 - 400	274.80 – 312.74
2	KGDS Post	132.72	23.29	100 – 200	246.44 – 285.00

In table 2. Distribution of pre and Post blood glucose levels (KGDS) pre-type 2 DM patients showed that the mean KGDS Pre on examination I was 294.40 mg / dL (95% CI: 274.80 - 312.74 mg / dL), with standard deviation of 59.29 mg / dL. KGDS Pre as low as 200 mg / dL and the highest 400 mg / dL. While the mean KGDS Post on examination II was 266.35mg / dL (95% CI: 246.44 - 285.00mg / dL), with a standard deviation of 60.27 mg / dL. KGDS Post has the lowest 170 mg / dL and highest 380 mg / dL.

Table 3. Mean differences in Pre and Post KGDS given standard therapy and Reiki therapy for 30 days

Variable	Mean	SD	Standar Error	p Value
KGDS Pre	294.40	59.29	9.37535	0.000
KGDS Post	132.72	23.29	9.53096	
Selisih	161.68	36.0	1,421	

Table 3. shows that the mean KGDS of respondents before being given Reiki therapy is 294.40 mg / dL with a standard deviation of 59.29 mg / dL. Whereas after being given Reiki therapy for 30 days, the respondent's KGDS decreased to 132.72 mg / dL with a standard deviation of 23.29 mg / dL. It can be seen that the difference in the mean KGDS between the first and second measurements is 161.68 mg / dL with a standard deviation of 36.0 mg / dL. Further analysis showed that there was a significant difference between pre KGDS and KGDS Post (p = 0,000,  $\alpha = 0.05$ ).

Table 4. Decreasing mean KGDS occurs at all levels of stress at DM Rehabilitation Installation Club

(April-May 2018 (n = 40))

Variabel stres	Pre			Post			Average difference KGDS Pre & Post	Difference SD KGDS Pre & Post
	Mean	SD	p Value	Mean	SD	p Value		
Not Stress	291.19	60.19	0.000	264.00	58.98	0.000	27.19	1.21
Stress	307.25	57.51		275.75	68.61		31.50	- 11.10

Table 4. shows a decrease in the mean KGDS occurring at all stress levels. The highest decrease in the mean KGDS occurred in respondents who experienced moderate to severe stress, from 307.25 mg / dL to 275.75 mg / dL (a decrease of 31.50 mg / dL). While respondents who did not experience stress to mild stress were from 291.19mg / dL to 264.00mg / dL (a decrease of 27.19mg / dL) Further analysis showed both the mean pre and post KGDS in respondents who experienced stress or not stress. There is a significant difference (p = 0.000 and p = 0.000,  $\alpha = 0.05$ ).

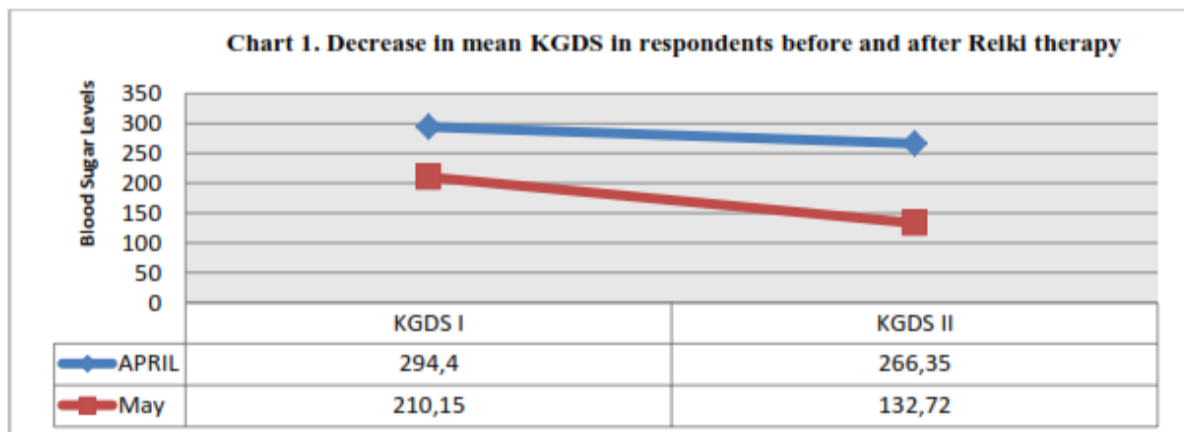


Table 5. Decreasing mean KGDS occurs in respondents based on body weight at DM Rehabilitation Installation Club (April-May 2018 (n = 40))

Variable	Pre			Post			The average difference in KGDS Pre & Post	KGDS Elementary Difference Pre & Post
	Mean	SD	p Value	Mean	SD	p Value		
No Obesity	302.17	51.73	0,025	269.30	56.94	0,015	32.87	- 5.21
Obesity	283.88	68.45		262.35	66.09		21.53	2.36

Table 5. shows a decrease in the mean KGDS in obese and non-obese respondents. The decrease in the mean KGDS of obese respondents from 283.88 mg / dL to 262.35 mg / dL. Whereas in respondents who were not obese from 302.17 mg / dL to 269.30 mg / dL. The difference in the mean decrease in KGDS in respondents who were obese and not obese experienced relatively far differences, namely 32.87 mg / dL and 21.53 mg / dL. Further analysis showed that both the Pre and Post KGDS rates in respondents with obesity or not obesity were significantly different ( $p = 0.025$  and  $p = 0.015$ ,  $\alpha = 0.05$ ).

#### 4. CONCLUSION

Our results show that the mean results of Pre and Post KGDS measurements are 294.40 - 132.72 with  $p$  value 0.000 ( $\alpha = 0.05$ ), this can be interpreted as meaningful differences between Pre and Post KGDS Reiki therapy. Reiki therapy given and carried out regularly can be an alternative to reduce blood sugar levels in people with Type 2 Diabetes Mellitus

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