

DOI:
10.22301/IJHMCR.2528-3189.878

Article can be accessed online on:
<http://www.ijhmcr.com>

ORIGINAL ARTICLE

**INTERNATIONAL JOURNAL
OF HEALTH MEDICINE AND
CURRENT RESEARCH**

INFLUENCE OF CONSUMPTION OF DRY CHICKEN BREAKFAST LEAF (*Musa Paradisiaca* L.) ON DOWNLOADING OF BLOOD SUGAR TO DIABETES MELITUS IN NORTH HALMAHERA

Nora L. Sondakh^{1,2*}, Alif Putra Andriyani¹, S. Pangkey Mangare^{1,2}

¹ *Medika Mandiri Foundation, North Halmahera, North Moluccas, Indonesia.*

² *Sekolah Tinggi Ilmu Kesehatan (STIKES) Halmahera, Study Program S-1.*

ARTICLE INFO

Article History:

Received 26th March, 2018
Received in revised form
25th April, 2018
Accepted 10th Mei, 2018
Published online 30th June, 2018

Key words:

Banana Leaf Kepok Dry, Diabetes Mellitus.

***Correspondence to Author:**

Nora L. Sondakh
*Sekolah Tinggi Ilmu Kesehatan
(STIKES) Halmahera, Study
Program S-1*

E-mail:

norasondakh@yahoo.com

ABSTRACT

Diabetes mellitus (DM) is a metabolic disorder diseases caused by abnormalities of insulin secretion, the imbalance between the supply and the needs of insulin, characterized by hyperglycemia. Banana leaf plant includes dried kepok type *m. paradisiaca* Sapiantum var, *m. nana* or also known as *m. cavendishii*, *m. sinensis*. banana kepok plants types of herbs are multi-functional. in indonesia. This type of research is research Kuantitaif research design with a Quasi alphabets experiment Design With Pre-Post Control Group, to analyze the effect of consumption of water decoction of dried banana leaves kepok against decrease in blood sugar levels in people with diabetes mellitus. The population in this study are the sufferers of diabetes mellitus in the village of Lina ino. The sample used as many as 10 people are taken with a simple random techniques. Data taken using a questionnaire with respondents directly through interviews and the examination of blood sugar levels. Once tabulated data and in the analysis of the test using the T-Test with significant results is $0.002 < 0.05$. And $df = n-k (= 4; 5-1)$ where $n =$ the number of respondents and $k = 1$. Test result SPSS statistics in getting significant value = $0.000 < 0.05$, or value T calculate $(7,082) > T$ table $(2,776)$, meaning it can be concluded that there is an influence of dried banana leaves kepok against the decline in blood sugar levels and the control group ($\alpha = 0.201$) > 0.05 . Based on the results of the research have been

Copyright © 2018, **Nora L. Sondakh**. This is an open access article distributed under the creative commons attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Nora L. Sondakh^{1,2*}, Alif Putra Andriyani¹, S. Pangkey Mangare^{1,2}, 2018 "Influence Of Consumption Of Dry Chicken Breakfast Leaf (*Musa Paradisiaca* L.) On Downloading Of Blood Sugar To Diabetes Melitus In North Halmahera", *International Journal of Health Medicine and Current Research*, 3, (02), 878-881.

demonstrating there is influence the consumption of dried banana leaves kepok decoction against decrease in blood sugar levels in the Group of alphabets experiment.

INTRODUCTION

Diabetes mellitus (DM) is a metabolic disorder disease caused by insulin secretion disorder, an imbalance between supply and insulin requirement, characterized by hyperglycemia (according to American Diabetes Association) (ADA), DM can be classified into several types namely, DM type 1, DM type 2, DM Gestational and other DM type. Several types are present, type 2 DM is one of the most common types found in more than 90-95% (ADA, 2015).

Data World Health Organization (WHO), currently there are 366 million people with DM in the world, in Indonesia in 2000 as many as 8.4 million people and will increase to 21.8 million in 2030, so that Indonesia occupied the fourth rank after the United States, China and India among countries with the highest number of people with diabetes, with the largest population population in the world (Aditama, 2011).

Along with the development of the era, the pattern of disease suffered by the community has shifted from infectious diseases and malnutrition to degenerative diseases, one of which is diabetes mellitus (Suyono, 2011).

According to the Ministry of Health of the Republic of Indonesia (KEMENKES RI) 2014 The latest Estimation of the International Diabetes Federation (IDF), there are 382 million people living with diabetes in the world by 2013. Estimated from the 382 million people, 175 million are undiagnosed, progressively progressing into unconscious and unconscionable complications (Ministry of Health, RI 2014)

North Halmahera with the highest preference of my northern head. data obtained from the Health Office of North Halmahera Regency the number of people with diabetes mellitus (DM) in 2016 is 219 people (Halut Health Service, 2016).

Patients with diabetes mellitus (DM) in the village of Lina ino recorded 10 people consisting of 2 men, men and women 8 people. With the age criteria of 42 years as many as 2 people, 46 years as many as 1 person, 61 years as many as 1 person, 53 years as many as 1 person, 63 years as many as 1 person, 45 years as many as 1 person, 69 years as many as 1 person, 78 year 1 person and 67 years as many as 1 person.

Benefits of banana leaves kepok is a natural remedy for fever. The type of banana leaf used is young.

how easy enough. Banana leaves are still young or commonly also called pupus (ompos). The amount is just one midrib. Next, clean the banana leaves and apply coconut oil on the surface. Then, stick the leaf on the forehead, stomach neck and also the back of the sick. Wait some time until the fever disappears. This recipe is a hereditary heritage of our ancestors. Although not medically studied but based on the hereditary experience, this way is powerful enough to overcome the fever, especially in children.

Bubbled banana leaves are used to treat cold poultice on swollen skin or abrasions, dysentery, too many menses, nosebleeds and other bleeding, sore throat, epidemic encephalitis, leucorrhoea, cough or chest pain such as bronchitis, and thin hair. Fruit is used to overcome dysentery or cough blood, diarrhea or dysentery, stomach ulcers (young fruit), lack of blood (anemia), heat accompanied by exhaust, thirst, and weak, celiac disease, allergic to rice powder, dry, sprue, smooth the skin of the hands or feet, constipation, hemorrhoids, high blood pressure (hypertension), and chronic alcohol poisoning (alcoholism). (Abdul R, 2016).

METHODS

Research design is a model or method used by researcher to conduct a research to give direction to research nets (Darma.2011). The design used in this research is "Quasy experiment design with pre-post control group" involving intervention group and control group.

The aim of this research is to know the change of blood sugar level before and after given dry banana leaf. Assessment using design twice, ie before and after experiment (pre and post test), pre and post test differences are considered to be the effect of treatments (Arikunto, 2005).

RESULTS

Respondents in the intervention group were female as many as 3 people and men as many as 2 people and the control group was female 5 person. Regarding the influence of the work of the respondents seen a decrease in blood sugar levels need to be further research for example between farmers and civil servants both intervened but the improved is farmers.

The existence of influence from the consumption of boiled water of dried banana leaves to lower blood sugar levels in patients with diabetes

mellitus because boiled water of dried banana leaves contain compounds: Hexadecanoic acid, Beta - sitorerol, Vitamin E and Stigmasterol. Which plays a role in lowering blood sugar levels Investigation on leaf ethanol extract and Kelor pods has resulted in the isolation and structure of the active compounds.

Analysis of the Effect of Water Consumption of Boiled Banana Leaf Stones on Blood Sugar Drop on Diabetes Mellitus Patients

In this penelitian note that there is significant influence with the intervention of water consumption of dried banana leaves kepok decoction on sufferers of diabetes mellitus. It is known from the analysis results of the SPSS 2.3 T-test with Test results obtained, i.e. the value of $\alpha = 0.002$.

Based on comparison test of T and T count table

a. the results of statistical tests SPSS obtained significant = $0.000 < 0,05$, atau=" nilai=" t=" hitung=" (7.082)=" > T table (2,776), means that it can be concluded that there is influence the consumption of dried banana leaves kepok against decrease in blood sugar levels.

b. test statistic analysis results (SPSS) using a T-test (T T table and count) demonstrating that the banana leaf kepok lkering has an impact on decreasing blood sugar levels.

</0,05,>

CONCLUSION

Based on the results of research and discussion can be put forward the following conclusions:

1. Experiment Group showed that the result of percentage of blood sugar level in diabetics mellitus after being given the consumption of boiled banana dried leaves is: good 60%, moderate 40% height 0%.
2. In the control group showed that there was no difference between the pre-post in the control group, the group that was not given boiled banana leaves of dried banana mean blood sugar levels in the control group remained the same without the decoction of dried banana leaves where blood sugar levels in the control group are: both 0%, moderate 0% high 100%.
3. At the percentage of the results indicate that blood sugar levels of diabetics after consuming a decoction of dried banana leaves kepok good 60%, moderate 40% height 0% this indicates that there

is influence after consuming decoction of dried banana leaves.

4. Then Ho is rejected and Ha accepted if the probability value > 0.05. dalam this research is known there is influence of decoction of dried banana leaf.

REFERENCES

1. ADA. Faktor Resiko Kendali Glikemik Buruk DM Tipe 2. Akses pada tahun 2017 bulan Mei Tanggal 15 (Internet). (Cited tahun 2017 bulan juni tanggal 7), www.ndei.org.
2. Aditama. Diabetes Terbanyak Di Dunia, Akses pada tahun 2016 bulan mei tanggal 1 (internet). (Cited tahun 2017 bulan juni tanggal 6), <http://www.pdpersi.co.id>
3. Suyono. Peningkatan Jumlah diabetes mellitus, Edisi 2. Jakarta, 2011.
4. Kementrian kesehatan RI. Pusat Data Dan Informasi, Jakarta 2014.
5. Dinas Kesehatan Kabupaten Halmahera Utara. profil kesehatan dinas Kabupaten Halmahera utara. 2016.
6. Sounth dkk. Hasil Penelitian Tanaman Gedi WHO Sounth-East Asia Journal Of Public Health End Current, 2017 ; *Research Vol. 6 (Issue 1) : Hal. 1-98*.
7. Arend Mapanawang dkk. Ekstra Daun Gedi Terhadap Penderita Diabetes Mellitus, International Journal of Current, 2016 ; *Research Vol. 1, (Issue 01): Hal .39-43, DOI: 10.22301/CR .2528-3189.39*.
8. Abdul.R. Pemanfaatan Sari Daun Kleres (daun pisang kering), Akses pada tahun 2016 bulan maret tanggal 16 (internet).(Cited tahun 2017 bulan juni tanggal7).<http://abdulrasid76blogspot.co.id>.
9. Shugang Li dkk. Prevalence Of Diabetes Mellitus And Impaired Fasting Glucose Associated With Risk Factors In Rural Kazakh Adults In Xinjiang China, Internasionl Journal Environmental Research And Public Health, 2015; *Research Vol. 12, (issue 1): Hal: 554-565 DOI:10.3390/Ijerp120100554*.
10. Aditama. Kemitraan Pemerintah Dan Swasta Dalam Pengendalian Diabetes Mellitus, Akses pada pada tahun 2016 bulan mei (internet). (Cited tahun 2017 bulan mei tanggal 6). <http://www.depkes.go.id/index>.

11. PERKENI. Konsensus Pengelolaan Dan Pencegahan Diabetes Mellitus tipe 2 Jakarta, 2011.
12. Todang. Pemanfaatan Daun Pisang Kepok Sebagai Penurun Hipertensi, Akses pada tahun 2011 bulan april tanggal 13 (internet). (Cited tahun 2017 bulan juni tanggal 7). <http://ancha.kampong.djawa.blogspot.co.id/html>.
13. Roro. D. Manfaat Daun Kelor Untuk Diabetes Melitus, Akses pada tahun 2016 bulan agustus tanggal 25. (internet). (Cited tahun 2017 bulan juni tanggal 7). <http://manfaat.co.id/manfaat-daun-kelor-untuk-diabetes>.
14. Irma M. Kandungan kimia Tanaman Kelor, Akses pada tahun 2015 bulan mei tanggal 14. (internet). (Cited tahun 2017 bulan juni tanggal 7). <http://nimadeirmamariani.blogspot.co.id>.
15. Dorland dkk. Kamus Kedokteran Dorland, Edisi 31. Jakarta, 2010.
16. Noverina. Diabetes Di Usia Muda, Gramedia Widiasarana. Jakarta, 2011.
17. Fox & Kilvert. Bersahabat Dengan Diabetes tipe 2 Penebar Plus. Jakarta, 2010.
18. Arend Mapanawang , Riset Di Bidang Kesehatan Tobelo: Medika Mandiri Halmahera 2016.
19. Dharma. Metodologi Penelitian Keperawatan, TIM. Jakarta, 2011.
20. Arikunto. Manejemen Penelitian, Rineke cipta Jakarta, 2005
21. Arikunto. Prosedur Penelitian Pendekatan Suatu Praktek, Edisi 5. Jakarta, 2010.
22. Hidayat. Metode Penelitian Keperawatan, Salemba Medika. Jakarta, 2007
23. Notoatmodjo. Metodologi Penelitian Kesehatan, Rineka Cipta. Jakarta, 2007.
24. Sumber-sumber lain: Data Yang Diambil Dari Puskesmas Pitu Kec Tobelo Tengah, Kab Halmahera Utara 2016. Pravelensi Diabetes mellitus.
